

Research into all aspects necessary for the design of the Scottish Pavilion for Expo 2010

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Research into other pavilions at Expo 2010

Research to help develop a design for the Scotland Pavilion, reflecting on how other nations have addressed the brief, 'Better City, Better Life'.

Though I have looked at all the pavilions for many of the world expos, this is just a small section of the research.

USA 2010

The USA Pavilion is a mammoth gray steel structure meant to resemble an eagle stretching its wings in welcome. The pavilion presents a dynamic and emotional story that conveys four core concepts: sustainability, teamwork, health and the spirit of striving for success. The USA Pavilion is a mammoth gray steel structure meant to resemble an eagle stretching its wings in welcome. The exhibition tells the story of the American spirit of perseverance, innovation, and community-building in a multi-dimensional, hi-tech presentation. It presents the US as a place of opportunity and diversity where people come together to change their communities for the better.

The overall theme of the pavilion is "Rise to the Challenge." In keeping with the Expo's theme of "Better City, Better Life," the challenges depicted will be creating environmentally sustainable communities, engaging in a healthy lifestyle and using technology to improve people's lives. The pavilion showcases American business and technology, as well as culture and values, to foster stronger friendship between the American and Chinese peoples.

Highlight 1: Visual Parable without Dialogue The USA Pavilion features a show entitled "The Garden" - the story of a 10-year-old girl who envisages turning a vacant city lot into an urban oasis, working with her neighbors to make that happen. The movie - a visual parable without dialogue - includes plenty of computer-generated imagery and 4-D effects, like vibrating seats, mist and lightning. The girl's passion and resolution has inspired her neighbors to work together to turn a dilapidated city into a fascinating place with the spirits of optimism, innovation and cooperation.

Highlight 2: Three Acts The program begins with the "Spirit of America," a call to collaboration, and a celebration of freedom, diversity, innovation, and opportunity. "The Garden" is the centerpiece of the second part, while the last section is "Opportunities and Innovation," a themed area that highlights the use of technology and innovation to achieve more sustainable communities.



Highlight 3: Live Shows and Multimedia In addition to a daily "Dance-America!" outdoor show, the USA Pavilion will stage a wide range of performances including jazz, pop, ska and classical music, university marching bands, theater and dance, and "Salutes" the American city and state partners.



Ireland



Pavilion Features

The architecture of the translucent lantern-like Ireland Pavilion at Expo 2010 is intended to symbolize the relationship between urban and rural, manmade and natural. The exhibition inside sets the creativity of the Irish, their ancient history, vibrant modern culture, educational traditions and technical innovation into the context of a small, but surprisingly varied and beautiful, island. Visitors will be surprised to discover a cultural continuity that goes back to the Stone Age, whilst enjoying a whole range of contemporary audiovisuals, exhibits, displays, readings, music and performances.

Pavilion Display

The exhibition in the Pavilion attempts to mix the various key elements into a coherent entity: landscape, history, settlement pattern, urbanization, population, economy, music and culture. These elements all will be woven together in the climactic 'Celtic Dreams' immersive audiovisual space and help the audience to well experience the "Ireland Dream."



Highlight 1: Five Enclosed Galleries

The Ireland Pavilion has five enclosed galleries which are linked by slight inclines. It combines the art, music exhibiting graceful and mysterious elements. There is a quasi-circle large screen, introducing the Irish people and their changing cityscape to visitors.

Highlight 2: A Courtyard Plaza

The Courtyard Plaza is used to host events highlighting the cultural heritage of Ireland.

Highlight 3: Special Designs and Landmarks

The Ireland Pavilion highlight and enable visitors to understand the rich Irish achievements in arts and literature through the development of architecture and building through the ages. Visitors will also get a feel Liffey River and walk down a re-creation of O'Connell Street, another landmark of the Irish capital

Australia Pavilion



Theme: ImagiNation

Highlights: Sculptured Curving Walls and a Red Ochre Exterior

National Pavilion Day: June 8

Pavilion Area: Around 4,800 Square Meters

Location: Within Zone B of the Expo Site

Featuring sculptured curving walls and a red ochre exterior, the Australia Pavilion's appearance is inspired by the world-famous Ayer's Rock. The color of the pavilion's red facade is made from the use of a special kind of steel, which is commonly used in Australia cities. It will change colors

responding to the temperature and humidity of Shanghai.



Pavilion Display

The pavilion is a fun and relaxed place for people of all ages. Divided into three distinct but inter-related sections labelled "Journey," "Discover" and "Enjoy," the pavilion incorporates almost every aspect of Australian life. These include spectacular landscape, a strong and vibrant economy, rich culture, technological expertise and innovation, outstanding research and education, and Australia's commitment to sustainable development.



Highlight 1: A Fun Journey

Australia Pavilion takes visitors on a journey of almost every aspect of Australian life. The first part called "Journey" allows visitors to leave behind the bustle of the Expo site as they are drawn into a story depicting Australia's history with interactive and sophisticated exhibits and pictures. The second part features a 1,000-seat theatre, while with the theme of "Enjoy," the final section in the pavilion will provide visitors with a taste of some of Australia's landscape from red deserts to the lush rainforests of the tropical north.

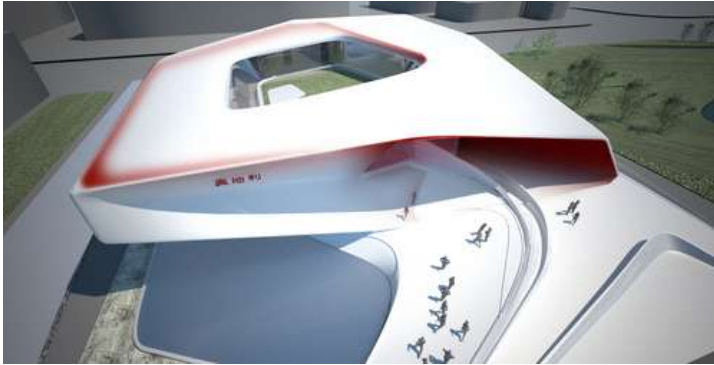
Highlight 2: Mini-documentaries "Sisters"

"Sisters," a series of strong, emotive and personal mini- documentaries, is the heart of Australia's display. It reveals the success stories of 21 inspirational women from Australia and China. It has been designed to display the achievements of individual women, and bring to life the connections, similarities and shared stories between the two countries. These strong, emotive and personal stories demonstrate the ways Australian and Chinese women try to make the world a better place and how individual efforts can make a difference.

Highlight 3: Cultural Performances

Visitors are able to enjoy Australian food and drinks and attend cultural performances featuring the best of Australian art. A range of art forms will be incorporated, including visual arts, performance theatre, multimedia, music, literature and film.

Austria Pavilion



Theme: Austria – Feel the Harmony

Highlights: Red & White Porcelain

National Pavilion Day: May 21

Pavilion Area: Around 2,000 Square Meters

Location: Within Zone C of the Expo Site

The Austria Pavilion showcases itself by means of dynamic-abstract architecture with a porcelain outer skin in red and white colors. Porcelain is also found in the pavilion's interior design. The porcelain surface elegantly alludes to the century-long tradition of "Chinaware" once exported from China to Europe. In a symbolic way, Austria transports this architectural object back to China with its pavilion, giving expression to the friendship between Austria and China. The color combination of red and white not only displays the colors of the Austrian flag, but also integrates the traditional Chinese color "red" for luck and happiness.



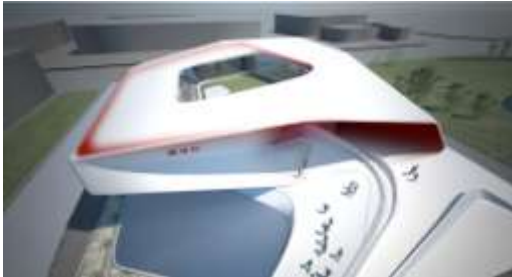
Pavilion Display



Composed of five exhibition zones, the Austria Pavilion will take visitors on a pleasant journey through spectacular snow-capped mountains, fragrant forests, green grassland, flowing rivers and urban landscapes. Alongside the entire path leading from the mountain to the city, visitors will come into contact with Austrian culture and economy through animated installations. The pavilion promises an extraordinary "Tour of Austria" for visitors, with its sensory-coupled video and audio presentations.

Highlight 1: Interactive Multimedia

Austria's world-famous music will be a must at the pavilion. The familiar melody of the "Blue Danube," composed by Johann Strauss, Jr., and other classical music composed by Wolfgang Amadeus Mozart will be played from time to time at the exhibit. Avant-garde "Music Shows" and musical parties will also be presented.



Highlight 2: Home of Music

The Austrian visual artist group has equipped the exhibition hall with 64 projectors and over a million slides to present a 3D "Interaction between urban and rural habitats." Visitors start at the first stage, the "mountain area," where they feel a cold sensation and touch "real snow." They then continue down to the Austrian "woods." Acoustic elements like the chirping of "birds" amplify the experience. While strolling through the forest, a curious "squirrel" may sniff at their feet.



Highlight 3: Pavilion Ambassadors

Besides the musical treat, visitors will also meet three pavilion ambassadors. The first one is Mozart, who will tell stories of music in Austria. The second is "Princess Sissi," a famous figure among Chinese spectators. Mozart and Sissi represent the long history of Austria, while the third ambassador, Chinese football star Sun Xiang, who plays for Austria Vienna in the Austrian League, will be the ambassador for a modern and liberal Austria.



Highlight 4: Open-air Restaurant

The open-air restaurant "Schanigarten" on the second floor of the pavilion will serve all kinds of delicious food from various states in Austria. After enjoying the food and hospitality from Austria, you can go into the gift shop and buy some souvenirs for friends and family, including fine Austrian crystal.

Germany

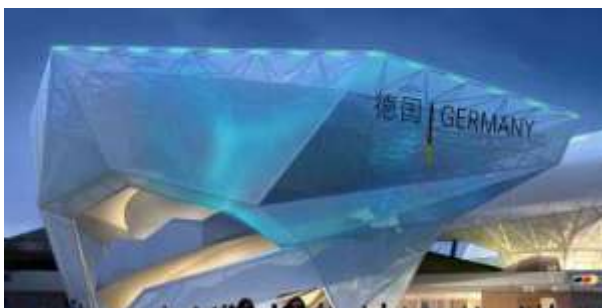
Pavilion Features

It is the epitome of a city, boasting the creation of a "harbor image" and a "dynamic tunnel" with urban scenes from Germany. This is the "Balancity," a magnificent crystallization of Germanic originality and technology. The structure is wrapped in silver membrane. A terraced landscape stretches from the ground level up to the third floor of the pavilion. Four exhibition structures appear to hover, creating a perfect roof for visitors.



Pavilion Display

The theme of the pavilion is "Balancity." It demonstrates the importance of balance between modernization and preservation, innovation and tradition, community and the individual, work and leisure, and between globalization and national identity. Visitors will gradually explore various places typical of a city -- a harbor, a factory, a garden, a park and a depot where exhibits and urban projects from Germany will be on show.



Highlight 1: Metal Sphere

Metal Sphere The highlight of the pavilion is a cone-shaped structure housing a revolving metal sphere, three meters in diameter and covered with LEDs, which will be activated by the noise and movement of spectators.



Highlight 2: Virtual Narrators

Virtual Narrators Germany Pavilion's virtual narrators Jens and Yan Yan will guide visitors to tour the pavilion. According to the plot, Jens, a male mechanics student in a German university, met female Chinese architect student Yan Yan in China. During the following parts of the exhibition, Yan Yan went to German and Jens introduced his lifestyle and the country to her. Visitor will follow the tour of the "narrators" to complete the visit of the pavilion.



Highlight 3: Performance

Performance Berlin Hip-hop Base may come to Expo 2010. Visitors will be able to experience the youth culture of Germany. The hip-hop culture is so vigorous that it has gone beyond the national and language barriers, spreading around the world and coming into the Germany Pavilion. Visitors will see the street dance, a type of "graffiti art" based on the urban culture and the "Open Air Jame" show empowered by the electrical source of street lights. Another great show is the vocal percussion, relying on nothing but artists' mouths and microphones in creating wonderful rhythms.

Italy Pavilion



Theme: City of Man

Highlights: 20 Functional Modules

Designer: A design Team Led by Giampaolo Imbrighi

National Pavilion Day: June 2

Pavilion Area: Around 6,000 Square Meters

Location: Within Zone C of the Expo Site

The design of the Italy Pavilion is inspired by the children's game "pick-up sticks," which is known as "Shanghai" in Italy. The rectangular pavilion has been laced with intersecting lines - representing pick-up sticks. It comprises 20 functional modules of different shapes, bounded by the "sticks." They represent Italy's 20 regions. The modules can be assembled into smaller structures.



Pavilion Display

The whole pavilion embodies a mini Italian city. Strolling in the pavilion, visitors may feel like walking in a city boasting narrow streets, plazas, courtyards and lanes with an Italian flavor. Luxury cars, fashion and famous paintings are featured. The country's achievements in technology and environmental protection will also be displayed.

Highlight 1: Transparent Concrete

The pavilion makes use of a cutting-edge construction material known as transparent concrete. The Italian construction company building the pavilion may promote the material in China after the Expo.



Highlight 2: Inventions

The country's latest innovations, including a paint that cleans the air by eating smog, will be displayed for two weeks this summer. About 300 winning inventions will be exhibited from late July to early August. The inventions were submitted by small businesses, groups of companies, universities, research centers, and science and technology parks in Italy.



Highlight 3: Craft Show

Italian tailors, blacksmiths and violinists will show off their craft at the pavilion.

Highlight 4: Energy Efficiency

The pavilion uses air purification and antibacterial ceramic tiles. The entire pavilion is conceived as a specific "mechanism" with ecoclimate functions and energy store devices. The integrated glass curtain wall with photoelectronic elements can isolate the emission; and the building's light beams can cover all areas within the pavilion, and achieve energy efficiency as well.

Spain Pavilion



Theme: From the City of Our Parents to the City of Our Children

Highlights: Basket

Designer: Benedetta Tagliabue

National Pavilion Day: August 30

Pavilion Area: Around 6,000 Square Meters

Location: Within Zone C of the Expo Site

The Spain Pavilion is designed to be a hand-woven wicker basket structure supported by the steel framework inside. "The Basket," as some have dubbed the pavilion, is "dressed" in more than 8,000 wicker panels in brown, beige, and black. Wicker weaving is a tradition in both Spain and China and the pavilion is like a bridge connecting the two nations. The panels were handmade by craftsmen in Shandong Province, each one unique in design.

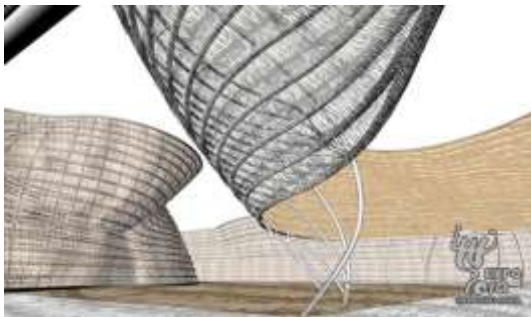


The pavilion contains three exhibition halls which will take visitors through the time and space of the development of the cities in Spain with the theme of "From the City of Our Parents to the City of Our Children." The three displays are created by famous Spanish film makers from three decades.



Highlight 1: Chinese Calligraphy

Chinese Calligraphy The design is so specific because the black panels form the shapes of Chinese characters - sun and moon, for instance. It adds more Chinese culture flavor to the pavilion and make the pavilion more artistic.



Highlight 2: Cultural Events

Cultural Events Performance buffs and gourmets will be delighted by the pavilion, where they can enjoy authentic flamenco dancing and taste Spanish delicacies. The Spain Pavilion will be turned into a gastronomic cabaret that offers a feast to visitors every night by serving authentic delicacies and sizzling shows. The Spanish cultural events include soap bubbles, flamenco dancing, Latin and Spanish music. The daily show will be staged twice, at 6pm and 8pm, in the pavilion's amphitheatre.



Highlight 3: Spanish Delicacies

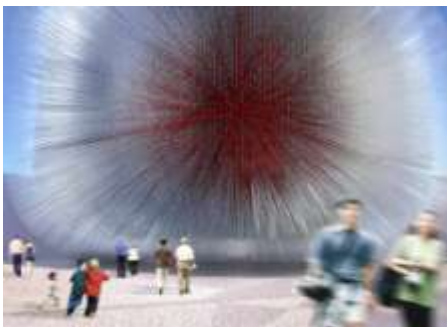
Spanish Delicacies The ground floor features a tapas bar where people can enjoy gourmet food made with the finest Spanish ingredients.

United Kingdom Pavilion



Theme: Building on the Past, Shaping Our Future
Highlights: Seed Cathedral, Wrapping Paper
National Pavilion Day: September 8
Pavilion Area: Around 6,000 Square Meters
Location: Within Zone C of the Expo Site

The first World Expo came about in the United Kingdom and was then known as the Great Exhibition, held in the Crystal Palace at Hyde Park. This majestic metal-and-glass edifice was not only home to the extravaganza display of products from all over the world, but was also the iconic symbol of the world fair, being considered one of the most beautiful structures in the world until a fire destroyed it half a century ago. Now, the United Kingdom has brought to Expo visitors a new version of the Crystal Palace – a dazzling cube formed by more than 60,000 slim and transparent acrylic rods containing seeds of different plants that were collected in a bio-diversity project.



Pavilion Display

Themed "Building on the Past, Shaping our future", the 6000-square-meter UK pavilion is also known as the "Seed Cathedral" and the area around it is designed like a wrapping paper, making it seem as if the wrappers have fallen open to reveal a sparkling jewel of life. Visitors can relax around the open space or enter the "Seed Cathedral" to admire the seeds in the spines, marveling how such tiny seeds can produce wonders of nature and life. The UK pavilion hopes to raise awareness for the Millennium Seed Bank Project, an international conservation project launched by the Royal Botanic Gardens in 2000.

Highlight 1: Green Cities

Visitors will travel through four UK's capital cities from west to east - Belfast, Cardiff, London and Edinburgh. Large "green maps" of the cities are on display. The best way to show how green British cities really are is to "erase" all the buildings and streets, leaving only the green spaces.



Highlight 2: Seed Cathedral

Visitors will be invited to watch, touch and recognize seeds of different plants as the core exhibition of the UK Pavilion. They will be surrounded by the seeds in a 20-meter-high hollow cube-like structure with the seeds embedded in the walls and ceilings. The "Seed Cathedral" is itself an object formed from 60,000-plus transparent acrylic rods containing seeds. The seeds demonstrate the concept of sustainability, the diversity of nature and the potential of life. During the daytime, each of these 7.5-meter-long rods will act like fibre optic filaments, drawing on daylight to illuminate the interior. At night, light sources embedded in each rod will allow the whole structure to glow.



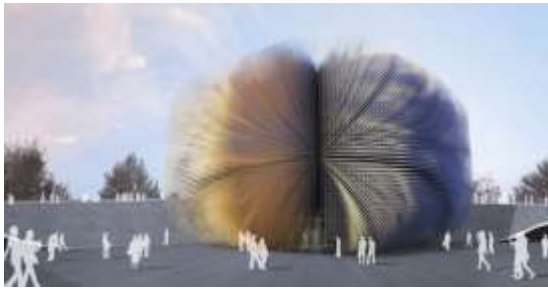
Highlight 3: Living City

In the "Living City," visitors will find a showcase for a rich variety of plants, a mix of living plants and imaginary future plants. They are encouraged to look closely to see which are real and which are modeled. These specific stories allow them to appreciate how science has used nature in areas as diverse as medicine and construction, and how plants of the future could offer solutions to climate change and

other global concerns.

Highlight 4: Olympic Corner

UK Pavilion offers a preview of the 2012 London Olympics by incorporating an "Olympic Corner" in its display. The area features a large "green map" of the 2.5-square-kilometer Olympic Park in Stratford in East London, which will be turned into the largest city park in Britain.



Highlight 5: City Park

The "paper" area is as large as a standard football pitch and will be a public area for performances and for children to play football, just like a city park. The square will have performances every day including ballet, drama, orchestra and dance. Some UK football stars may be on hand to teach soccer skills to children. Much of the daily programming will concentrate on original and inventive comedy performance which draw on the UK's great tradition of theatre - stretching back to William Shakespeare - and on the current international reputation of our artists and performers for original, inventive and crowd-pleasing work.

http://www.ukshanghaiexpo.com/en/about_the_uk/innovation_and_science/

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Experience the Pavilion

Entering the British Pavilion

On entering the British Pavilion, the visitor sets foot inside the UK's gift to China. The Seed Cathedral and its surrounding area show the gift in its unwrapped state, the creases forming the canopy over the walkways where the visitor embarks on their journey.

The journey consists of a series of walkways that take the visitor on an experience reflective of a visit to a UK public park – the first thing that makes it unique is its 'openness', there is no roof, there is an open space where people can sit, relax and take in a performance; or choose to walk through a series of walkways and visit the seed cathedral representative of an amazing sculpture. The components in the UK Pavilion park combined, illustrate the UK's past and present and vision for the future of city life.

The Journey

The journey through the UK Pavilion is separated into five parts:

Part 1: The Way Things Are: a Green and Pleasant Urban Landscape

Walkway 1 and 2: Green City and Open City

The first part explores the way things are in the UK, presenting the urban landscape – how it has evolved from the past to the present. The UK has a rich tradition of incorporating green spaces and water into its cities – from public parks and private gardens to lakes, fountains, rivers, canals and ponds. The UK's temperate climate nurtures this lush urban landscape.

Walkway 1: As you move along the walkway, you travel through the four UK capitals from west to east; Belfast, Cardiff, London and Edinburgh. London in particular is 40% green, making it the greenest city of its size in the world. The city's long historical link with nature and green spaces includes the creation of Victoria Park in 1842 to fight diseases and improve the health and well-being of East London's working class. Still at the heart of East London, the park now provides a place for meetings, concerts and festivals. The best way to show how green British cities really are was to erase all the buildings and streets leaving only the green spaces. Walkway 1 shows a series of 'green maps' which illustrate the green space in each of the four cities.

Walkway 2: After leaving the first walkway, you proceed into 'Open City', where you are met with luminous fluctuations of light spilling onto the passage floor. A typical British City is suspended from the ceiling. Acrylic buildings are arranged in groups of typical city districts: Suburban area, High street, Urban, Industrial and Business district. Amongst them 'Light Rain' engines arranged in the form of 'clouds' project animated drops of light onto the floor. The architecture represented includes department stores, high street shops, apartment mansions, factories, city blocks and detached houses, which have become iconic British designs in the world of architecture.

Walkway 2 illustrates that the architecture of UK cities embrace nature, and doesn't shed away from rain nor wind, as exemplified in the relative absence of covered areas or shopping malls. In the design of cities natural elements are transformed for the city dweller into elements of play (see children playing with puddles), life (the greenness of the parks) and contemplation (the numerous ponds). Cities have been designed encapsulating the openness of the natural elements. Traditionally UK cities are low built, attaching an importance to the sky, creating an airy-ness which does not often occur in high-rise world capitals.

Part 2: The Opportunity: Investing in Nature and Saving Seeds to Protect the Future

The Seed Cathedral

The Seed Cathedral itself is an object formed from 60,000 slender transparent rods, which will extend from the structure and quiver in the breeze. During the day, each of these 7.5 metre long rods will act like fibre optic filaments, drawing on daylight to illuminate the interior, thereby creating a contemplative awe-inspiring space. At night, light sources embedded in each rod will allow the whole structure to glow.

Your journey into the Seed Cathedral introduces you to the opportunity for change, growth and ideas embodied in seeds. Inside the Seed Cathedral is a unique visual representation of the UK's leading role in conservation worldwide – Kew Millennium Seed Bank partnership – the largest

collection of wild plant seeds in the world. By encasing tens of thousands of seeds into the ends of the transparent rods, you will be able to view examples of seeds of plant species that contribute to national and global conservation programmes. There is enormous potential for innovation and discovery held in the rich biodiversity of seeds: from new medicines and materials to construction techniques, communication systems and sustainable energy.

Part 3: Living City

As you leave the Seed Cathedral, you enter the final walkway 'Living City'. In the Living City a 'plant river' spills out from an enormous crack in the canopy, with plant life bursting through, into the walkway. The river is a showcase for a rich variety of plants protruding through a slit along the canopy; a mix of living plants and imaginary future plants. You are encouraged to look closely to see which are real and which are modeled.

Eight living stories and eight imaginary stories are mixed within the plant river. These specific stories allow you to appreciate what plants and nature are doing for us in the city, how they increase health and wellbeing and provide a more comfortable sustainable place to live, how we can harness their benefits with the use of technological research, innovation and forward thinking, and what that means for the future, e.g. providing better communal spaces, air conditioning, stress relief, food, fuel, phyto-remediation, new products etc.

The 'Living City' encourages you to imagine how things could be if we drew on the incredible resource of nature, generating new ideas to improve our cities and our lifestyles. It illustrates how science has used nature in areas as diverse as medicine and construction, and how plants of the future could offer solutions to climate change and other global concerns.

Part 4: The Urban Landscape

The Seed Cathedral sits on a landscape that gives the appearance of an unwrapped gift. This landscape represents the openness that the fabric of British society has been built. It provides an open space for public events which will demonstrate and Culture and provide you an insight into the past, present and cutting-edge performance art.

It will be a space where you can wander without any particular intent, yet at the same time you have the the ever-present possibility of experiencing a performance or an enjoyable spectacle large or small, or a view pleasing to the eye. Much of the daily programming, to be announced in March, will concentrate on original and inventive comedy performance designed to engage audiences of all ages, which draw on the UK's great tradition of theatre - stretching back to William Shakespeare - and on the current international reputation of our artists and performers for original, inventive and crowd-pleasing work. The performances throughout the six months of Expo will illustrate the traditional side of performance art and the most cutting edge and modern side of contemporary performance art.

Welcome to the Living City Walkway

Plants are essential to life. It's as simple as that. We need plants for food, fuel, clothing, shelter, medicine and much more. And not just the crops we use, but the biodiversity that supports their survival. We rely on the natural world, and there is still so much it can teach us and offer us in inspiration. The plants you see here today have been assembled with the support of [Kew's Millennium Seed Bank](#). They give a glimpse

of the amazing potential of plants to make our life on Earth more sustainable.

The fictitious plants were designed by [Troika](#) in collaboration with scientists, researchers and biologists working in the UK, whose research informed the stories and potential scenarios around these plants.

The real plants were selected by [Troika](#) with the support of the [Millennium Seed bank](#).

Welcome to the Green City Walkway

Welcome to the UK Pavilion, and to a country where there has always been room for nature in city life. In the UK, half of us live in busy, crowded urban centres. But, as you can see, cities such as Belfast, Cardiff, London and Edinburgh are greener than you might expect; some 40% of London's area is green space.

For those of us that live in these cities, their parks, squares, tree-lined streets and domestic gardens are close to our hearts. They give everyone somewhere to relax, socialise and enjoy nature. More than that, they also help bring communities together, reduce crime and restore us, mentally and physically.

Welcome to the Open City Walkway

After leaving the first walkway, you proceed into 'Open City', where you are met with luminous fluctuations of light spilling onto the passage floor. A typical British City is suspended from the ceiling. Acrylic buildings are arranged in groups of typical city districts: Suburban area, High street, Urban, Industrial and Business district. Amongst them 'Light Rain' engines arranged in the form of 'clouds' project animated drops of light onto the floor.

The architecture represented includes department stores, high street shops, apartment mansions, factories, city blocks and detached houses, which have become iconic British designs in the world of architecture. The Open City Walkway illustrates that the architecture of UK cities embraces nature and does not shy away from rain or wind, as exemplified in the relative absence of covered areas or shopping malls. In the design of cities

natural elements are transformed for the city dweller into elements of play (see children playing with puddles), life (the greenness of the parks) and contemplation (the numerous ponds). Cities have been designed encapsulating the openness of the natural elements. Traditionally UK cities are low built, attaching an importance to the sky, creating an airy-ness which does not often occur in high-rise world capitals.

Welcome to the Seed Cathedral



Each one of the 60,000 acrylic rods in this chamber holds seeds, provided by the **Kunming Institute of Botany (KIB)** in Yunnan. In this Cathedral, some of the incredible diversity and potential of life on Earth is within touching distance.

KIB is a member of the **Millennium Seed Bank Partnership (MSBP)**, an international conservation project founded and co-ordinated by the **Royal Botanic Gardens, Kew**. Together with its partners, the MSBP is working to save thousands of plants

worldwide from the risk of extinction posed by environmental threats including climate change, habitat loss, over-exploitation and invasive alien species.

The project itself is symbolic of a seed; a vital scheme that started small but has the potential to help save and restore our planet's unique biodiversity. It is this diversity of life that all living beings, including plants, animals and humans, depend upon.

The Legacy - A new district of London

The Olympic Park will lead London's growth this century; a new, dynamic, metropolitan hub of London, connected to the rest of the UK and Europe, that will become a catalyst for the regeneration of east London.

Alive with activity in its parklands, along its waterways and in its family neighbourhoods, the Olympic Park will become an unrivalled local, national and international destination of choice in which to live, work and enjoy the best of London.



Creating new neighbourhoods in London.



Revitalising waterways and open spaces.

London's Olympic Park

High-quality green spaces and parkland can breathe new life into a city district. Nowhere will this be clearer to see than in the east London over the next few years.

Vital to the city's successful bid to stage the 2012 Olympic and Paralympic Games was the legacy the Games would leave: the chance to revitalise the Lower Lea Valley, one of London's most historically deprived areas, by leaving a world-class, modern urban environment in which to live, work and play. This major piece of sustainable planning will create a completely new park for London - in fact, one of the largest parks built in Europe in the last 150 years. While remaining home to its diverse and vibrant population, this park will transform the area for future generations to enjoy.



Viewing the Olympic Stadium site from the air shows the light industrial buildings before they are cleared for construction to begin.

Alongside the world-class facilities for sports including athletics, cycling, hockey, swimming and tennis will be hundreds of new homes set in green spaces in and around the Olympic Park.

The Park at Games time

Planning the Games and their legacy together now will ensure that they are remembered - not only as a summer of fantastic sport, but also as the catalyst for the regeneration of one of the most underdeveloped areas of the UK. Before any building work could start, the physical environment in and around the park had to be cleared, cleaned and totally rehabilitated. A 'soil hospital' was set up to wash polluted earth on the site.



Waterways were also dredged and the banks lowered for better access to the waterfront. Overhead power cables were buried to improve sightlines and everywhere the ecology was enhanced, creating green and open spaces. The area's infrastructure, including public transport links, utilities and disabled access, will be transformed. The design for the different arenas meet the standards of the Olympic and Paralympic Games, but

all look beyond 2012. Permanent venues are only being built if they offer a long-term use, and a wealth of creativity is being brought to bear in the re-use of temporary venues and seating. There will be no white elephants here. The parklands, too, have been designed with the future in mind, to meet the needs of a flood of visitors during the Games, but also to delight the local population for generations afterwards.



The Urban Park

The undulating, 'wrapping paper' landscape around the Pavilion offers the perfect stage for public performances and events... as well as an unbeatable view of one of the most exciting pavilions at the Expo.

When the show is over, the nuts and bolts of the Pavilion will find new uses. More than three-quarters of the

materials used in its construction have been sourced locally (within 500 miles of the site). After the Expo, the steel in the building will be recycled and the concrete broken up and re-used as a base material in Chinese infrastructure projects. All the wiring, cabling and copper, even the aluminium in the 60,000 acrylic rods, will be melted down for re-use.

The Urban Park

As soon as you step into the 21st century urban park that cradles the UK Pavilion, you'll be captivated. Every day, performers from the UK will bring the site to life with an ever-changing programme of comedy, dance, music, drama, sport, art and fun. You never know what you might find: a pair of clowns, maybe, making the children laugh as they wait to enter the pavilion; a famous athlete stopping off on the way from Beijing to the London Olympics; or a troupe of dancers rehearsing the evening's performance.



National Theatre Company
Freeze Frame Photo: George Wright



Jane Claxton Dance Company
Dance in the Park Photographers: Roy Campbell, Alamy



New for People - Quacken Blue
Photo: Jason Mearns

Have your picture taken in front of the magical structure with its 65,000 transparent rods shimmering in the breeze. Say hello to one of our stony British hosts and hear about the Pavilion and life in our cities. Or stop and enjoy one of Shakespeare's great plays - the five-minute version!



National Youth Theatre Standing Tall at
Wellness Arts Day, 2009 Photo: James
Kempster

In the late afternoon and evenings you might like to rest on the riverbank, accompanied by music from one of our world-famous orchestras or jazz bands. Just like the parks and green spaces in UK cities, the UK Pavilion will offer the chance to rest, play, meet friends and see new, exciting things... and, above all, get to know us a little bit better.

[GO TO THE UK PAVILION EVENTS](#)

EXPO 2010

The UK was among one of the first countries to commit to taking part at the Shanghai Expo 2010 and has enjoyed embracing the Expo theme 'Better City Better Life'.

The Shanghai World Expo provides a unique opportunity to share knowledge, experience and aspirations and to pursue common solutions to shared problems. The Expo also provides a great opportunity to celebrate creativity and innovation that will be essential if we are all to achieve a truly better and better life throughout the world.

The overarching theme of the UK's participation is our commitment to working with China and with the international community to create and to shape that 'better life'.

The UK Pavilion is an iconic structure providing a dramatic demonstration of creativity and innovation in the UK and offers a unique visual representation of the UK's leading role in conservation world-wide as well as the role of nature in developing future, sustainable cities.

The UK's participation at Shanghai Expo 2010 is an important contribution to the continuing development of the UK-China relationship. At the same time, it shows that the UK is a powerfully creative nation. Above all, the UK is keen to contribute with China and the other international partners, towards sourcing appropriate solutions for major global issues like sustainability and climate security.

Introduction

The theme of Expo 2010: Shanghai, Better City – Better Life, is particularly apposite to the United Arab Emirates' own journey, both in the historical context and as it relates to the groundbreaking developments in sustainable living in which the UAE is playing a leading role.

As UAE cities evolve at a staggering pace, providing better living in future urban environments for the people of the UAE is a key focus. So much so that some of the world's most exciting and innovative city-building initiatives are to be found in the UAE.

Projects such as Masdar City, the home of the International Renewable Energy Agency, IRENA, challenge conventional patterns of urban development and set new benchmarks for sustainability and environmentally friendly design. The city is part of the Masdar Initiative, the UAE's multi-faceted investment in the exploration, development and commercialisation of future energy sources and clean technology solutions.

Many other developments in the UAE are equally as creative in their marriage of design, functionality and sustainability. Their common denominator is a people-centred approach to health and happiness, as well as the creation of living communities that are in tune with their environment and are based on the values and cultural essence of the Emirates.

We are a small country albeit with an age-old history of cultural and trading links extending from the Mediterranean to East Asia, but our influence extends far beyond our boundaries due to the power of our dreams. We want you to share these dreams with us as we bring the pearls of our experiences to you.

UAE – The Power of Dreams

The UAE has chosen 'The Power of Dreams' as the central thread of its participation in Expo 2010. We will expand on this unifying concept to show how the UAE has harnessed its dreams of a better

life and applied imaginative thinking to lead the twenty-first century urban agenda.

Exploration of the theme in the historical, social and contemporary context will focus on how economic prosperity assisted by innovations in science and technology transformed the UAE from a rural society to thriving urbanised communities where over 200 diverse cultures live and work in harmony.

The five sub-themes of Expo 2010 will be addressed and reflected throughout the exhibition, with particular focus on key concepts such as growth and sustainability, community and connectivity, culture and diversity, concepts that are central to UAE aspirations for better city living .

The Pavilion

Our message of sustainability begins with the physical structure of the UAE pavilion. Designed by world famous architectural practice Norman Foster + Partners, the striking structure is emblematic in nature with a sinuous undulating form inspired by a key feature of the environment of the UAE, the legendary sand dunes of the Empty Quarter. It is also unique in that the pavilion will be dismantled and re-erected in the UAE when Expo 2010 is concluded.

The large size of the plot (6000 square metres) enables us to create an impressive structure within landscaped surrounds that will optimise the visitor experience from the moment a queue starts to form.

The Exhibition

The UAE pavilion will provide an immersive environment that will unfold the country's unique personality, engage the visitor in a dialogue exploring the inherent tensions of city-living in the twenty-first century, and relate our inspiring story to the world using the latest technology. Pearls, with all their immense natural beauty and deep cultural significance for the Emirates, provide the link between the different sections of the exhibition.

In the Blink of an Eye

Meeting a grandfather and his grandson by a campfire in the desert, we experience the historical development and miraculous growth of the UAE as, fuelled by economic prosperity, cities rise from the sands bringing education, health facilities and job opportunities in fulfilment of the universal dream for a better life.

This exploration of historical urbanisation in the UAE highlights the innovative use of scarce natural resources, especially fabled Arabian pearls, and the unique rural-urban relationship that developed to suit harsh climatic conditions prevailing in the region before oil provided the means to build bigger and better cities.

Creative Energy

We follow the young boy into the UAE's evolving cities, experiencing the social and cultural context of urbanisation, meeting the people, the lifeblood and engine of the cities, seeing that they are living creative, diverse, connected lives as they grapple with the challenges of the modern world and turn their dreams of a better life into reality.

Dream Journey

Clutching our pearls, we depart on a dream journey with the young boy and his Chinese friend, experiencing the diversity, beauty and vibrancy of contemporary UAE, its dramatic urban centres, its cultural heritage and aspirations, courtesy and hospitality, as well as its connections to the wider world.

Lasting Impressions

As we depart from the pavilion, we encounter some of the many different nationalities that have made the UAE their home and wave goodbye to the numerous friends that we have made on our dream journey. A traditional tent will also allow the visitor to experience at firsthand our age-old customs.

Business and Friendship

VIP and business visitors to the UAE pavilion will have access to the mezzanine where there will be presentations on the UAE's business environment, and ample opportunity to meet with UAE companies.

Cultural Connections

The UAE Expo project will also include a wide range of special artistic and cultural exhibitions, academic seminars and events that will explore the UAE's role at the crossroads between east and west and the discourse between heritage, modernisation and globalisation, at the same time reflecting the cultural and artistic reality of the UAE as a 'living place and space'.

Hungarian Pavilion approaches the theme "Better City, Better Life" in a philosophical way. Referring to Hungarian wisdom and creativity, the pavilion is trying to entertain visitors by making them think rather than showering them with shows and hectic programs.

The architectural installation of the Hungarian Pavilion maps the growth of a city, the dynamics of changes, letting visitors experience its processes through sense organs. The structure of the pavilion consists of dynamically moving vertical wooden bars, with the famous Hungarian invention Gömböc in the centre, creating density similar to that of a city. Every single element of the wooden installation behaves like a musical instrument, creating a wavering sound space.

The hanging rods make visitors feel like walking in a forest, their rarefaction refers to glades, just like squares in the city. The inner space of the pavilion is illuminated by natural sunlight in the daytime, while at night it turns into a starlit sky through the lights built in the sound boxes.

The world's largest Gömböc will be displayed in the center area in the pavilion with three-meter high and three-meter width, said Andras Huszty, the Hungarian Prime Minister's commissioner for Hungarian-Chinese economic relations and coordination of participation in the Expo.

The Gömböc is one of the most important recent Hungarian scientific inventions. The new geometric shape, created by Prof. Gábor Domokos and Dr. Péter Várkonyi, is the first known homogenous object with just one stable and one unstable equilibrium point.

The Gömböc, which already found applications in biology, geology and astrophysics, stands as a symbol of dual harmony and equilibrium. The most interesting feature of the Gömböc is that it self-rights from any initial position spontaneously, just like the weeble toy, however, without added weight.

Designers of the Hungarian Pavilion compare this feature of the Gömböc to the country: just like the Gömböc, "Hungary always recovers." The Gömböc has a close philosophical relation with Yin Yang,

both symbolizing the pursuit for dual balance and harmony -- this is what Hungarians wish to realize in urban development as well.

The Hungarian Pavilion is soliciting a Chinese name for the "Gömböc" on its official Website (<http://www.expo2010china.hu/>). "I hope that the Chinese public would pay as much attention to Gömböc as 'Haibao' and find a cute Chinese name for it as well," Huszty said.

Hungary will participate in a celebration together with other members of the European Union in May. The giant mock-up of the Pécs Cathedral is presented, accompanied by Mecsek Folkdance Group and Busó-s from Mohács.

A special gala will be presented based on Hungarian music and the masterpieces of the country's greatest composers on August 22 --- the Hungarian National Day. The performance features today's worldwide famous solo artists (singers, musicians, other performers), orchestras and dance groups.

The country's Modern Art Orchestra, Szeged Contemporary Ballet and famous Hungarian singers, including opera singer Erika Miklosa and folk singer Bea Palya, will perform on that day.



Gömböc in the Hungarian Pavilion

A daytime concert will be held on August 22 at European Square in Expo site. Folk music be performed all day long to celebrate the Hungarian National Day and to introduce the greatness of the country's folk music traditions.

Between August 23 and September 5, Hungarian culture will be introduced outside of the Expo site, too. Programmes include a Robert Capa photo exhibition, an interactive Music Dome, animated film screenings, painted Gömböc exhibition and fashion exhibition.

On September 19, a Youth Brass Band's Concert will be welcoming visitors. Children between 10-14 years of age team up to form a special brass band, with its members from Pécs, European Capital of Culture.

Hungary will cherish the opportunity to introduce the country, including natural resources, people, economy and culture, Huszty said. Hungary is a good place and the country welcomed Chinese people to visit there, he added.

The objective of the competition is to create an entire visitor experience for the pavilion, combining design components to deliver a lasting impression of the British contribution to the Expo theme: **Better City, Better Life**. The Foreign and Commonwealth Office is overseeing the United Kingdom's presence for the Expo in Shanghai.

According to the United Nations, the pace of urbanisation across the world will remain very rapid over the next 20 years. Meeting the challenges of urbanisation will require a holistic approach, encompassing issues of quality of life, competitiveness, governance and environmental and financial sustainability.

Britain has extraordinary cultural and creative strengths, which infuse our industries and our national identity. The design industry will be central to British economic development in the 21st century. Expo 2010 provides a platform on which to engage hundreds of thousands of visitors in a conversation about contemporary British identity, the UK's relationship with China, the common global challenges that face us, and the opportunities they present for mutual growth and advancement.

Research into the effects of holding an Expo

Research to help develop a design for the Scotland Pavilion that will have some form of legacy and what the effects are on a host country of holding an Expo event.

Studying Expo's effect

By Cai Wenjun | 2010-5-29 |

THE Shanghai Science and Technology Commission is studying how to use pavilions after the World Expo ends on October 31 and the event's influence on local development, officials said yesterday. http://www.shanghaidaily.com/sp/article/2010/201005/20100529/article_438483.htm

Special projects will be launched to study how to promote the technologies used at the Expo. Officials said the solution as to what to do with the pavilions will be in line with international practice at Expos, agreements between China and owner countries and regions and on intellectual property rights and import and export issues.

"Leading technologies, especially new materials and environmental protection, showed at the Expo will gear up local research and industrialization of technologies such as light emitting diodes, or LED, and radio-frequency identification, or RFID," said Li Guangming, deputy director of the Expo Science Enhancement Center under the Shanghai Science and Technology Commission.

"A report on Expo's effect on Shanghai and local science will be issued later," Li said.

Using the research, the commission is making a local 12th five-year plan (2011 to 2015) to build a low-carbon and ecological city.

"The authorities will introduce programs and products from the aspects of energy, construction, environment, traffic and security," Li said.

He said Chongming Island's ecological conservation and development project, Hongqiao business area, new energy vehicles and intelligent power networks will all be included in the five-year plan to build a more environmentally friendly and advanced Shanghai.

Both the government and experts are discussing the post-Expo period and how to prolong the effects of Expo on the city and its development, officials said.

Read more:

http://www.shanghaidaily.com/sp/article/2010/201005/20100529/article_438483.htm#ixzz0rTVHxYmj

Critics Worry About Shanghai Expo's Legacy

by Louisa Lim

February 8, 2010

A trumpet-shaped structure at the Shanghai World Expo is designed to soak up the sun's rays to light galleries and catch rainwater for a green approach to the event. But critics say extravagant pavilions will be taken down in six months, with little planning for their disposal.



Philippe Lopez/AFP/Getty Images

A trumpet-shaped structure at the Shanghai World Expo is designed to soak up the sun's rays to light galleries and catch rainwater for a green approach to the event. But critics say extravagant pavilions will be taken down in six months, with little planning for their disposal.

February 8, 2010

<http://www.npr.org/templates/story/story.php?storyId=123496961>

Shanghai has spent \$45 billion on a face-lift for the upcoming 2010 World Expo, more than was spent on the Beijing Olympics. The makeover ahead of the international exposition's May 1 opening includes six new subway lines, a new riverside promenade and a coat of paint for just about every neighborhood.

But doubts are quietly being raised about the Expo's legacy.

On a huge tract of land beside the Huangpu River, 192 countries and 50 organizations will take part in the Expo, the contemporary equivalent of a world's fair. It is a massive construction site where an eye-catching array of pavilions is emerging.

Some of the pavilions are startlingly high-tech, such as the Finnish pavilion built out of a new high-tech recycled paper and plastic material.

Other exhibition areas are simply startling, such as Macau's giant bunny rabbit and the lilac dome that is Japan's "Purple Silkworm Island."

'Glory For Chinese People'

Shanghai is expecting 70 million visitors, most of them domestic, to the six-month-long extravaganza.

This will be Shanghai's moment in the sun. And many, like Expo construction worker Miao Yonggan, can't wait.

"The Shanghai Expo will be even better than the Olympics," he says, grinning. "It will win glory for Chinese people all round the world."

Chinese performers beat drums during a ceremony in January, marking the completion of the Chinese pavilion at the site of the 2010 World Expo in Shanghai.

Chinese performers beat drums during a ceremony in January, marking the completion of the Chinese pavilion at the site of the 2010 World Expo in Shanghai.

But concerns are being voiced about the Expo's environmental impact and sustainability.

In August, the United Nations Environment Program issued a report praising the Expo's green legacy.

But Richard Brubaker, who teaches a course on sustainability at China Europe International Business School, says the Expo, by its nature, is the very opposite of sustainable development.

"You're building 55 [or] 56 country pavilions, and at the end of the six months, only the four China pavilions will remain. So 52 will be taken off, which would be to many a huge anti-sustainability campaign."

Environmental Cost

A team of his MBA students has spent the past three months trying to find out what will happen to the thousands of tons of steel, concrete and glass used in the pavilions after they are pulled down at the end of the Expo.

There are no clear figures for the total amount of building materials being used, especially given the variety of structures being built.

But one construction company involved told the students that one single pavilion needed 1,800 tons of steel. And when it comes to the disposal of the pavilions, it appears that, so far, nobody knows what will happen after they're torn down.

"When we dig into the details, we are so surprised that if you look at individual pavilions, they don't have a plan as to how they'll get rid of the materials they're using in their temporary structures," says student Liu Ming.

Altering Shanghai's Character?

Local artists, meanwhile, are focusing on how the Expo has transformed the character of Shanghai in an exhibition called "Makeover" at a local gallery.

Chen Hanfeng's work on display at OV Gallery is a bubble machine hooked up to an IV tube, belching bubbles into a cage. He's taking a sly poke at the Expo slogan "Better City, Better Life" by titling his work "Bubble City, Bubble Life."

"I think the concept of Expo starts from utopia, utopian-style architecture, futuristic imagination. It's kind of like a bubble," the artist says. He points out that, like a bubble popping "after the Expo is gone, everything's going to be gone, right?"

The work of another artist, Ji Wenyu, has 100 official propaganda slogans pasted on top of each other. He calls his work "The History of the People's Republic of China." Fittingly, the topmost slogan is: "Wonderful Expo; Civilization first. The world is in front of you, we are by your side."

Ji is conflicted about the Expo. He likes the idea, but dislikes the destruction wrought on his city in the Expo's name.

"Before every big event, the authorities are always painting the walls and covering things up. China's history is very long, but every time something new happens, they just erase history. For example, even though I'm Shanghainese born and bred, nowadays I sometimes get lost in my own city," Ji says.

Muzzling Critics

China's history is very long, but every time something new happens, they just erase history.

- Shanghai artist Ji Wenyu

A punk band in Shanghai has written a song that touches upon how Expo-related demolitions are affecting young musicians and the local cultural scene.

It's a cynical parody of the Beijing Olympic song, which was called "Beijing Welcomes You." But the lyrics to the song by Top Floor Circus state: "Shanghai doesn't welcome you, unless you've come to buy something." The song claims the Expo will bring only the world's rich people to Shanghai.

"It's not like that," says Expo spokesman Xu Wei. "Ordinary people can go; last year, the tickets were discounted to \$20 each. Objectively speaking, 9 out of every 10 Shanghainese is extremely concerned with the Expo and really welcomes it. And for any individuals who are opposed to it, well, they're free to do that."

While the majority of Shanghainese welcome the Expo, the voices of criticism are hardly free. In fact, they're being actively muzzled.

Top Floor Circus' song has been deleted from the Chinese Internet, and band members declined to be interviewed. A local English-language magazine, *City Weekend*, was forced to tone down a story about the Expo that was deemed "too negative."

With only 82 days to go before the opening, Shanghai is determined that nobody will spoil its party.

<http://www.radio86.co.uk/shanghai-world-expo-2010/radio86-shanghai-exclusive/14142/shanghai-expo-more-than-chinas-showcase#>

Shanghai Expo – More than China's showcase

1st May 2010, 03:00 GMT

Just two years after the Olympic Games, China is hosting another big event. The 2010 Expo will open in the coastal city of Shanghai on 1 May, lasting until the end of October. It is already expected to become the biggest world fair ever with over 240 participants and 70 million visitors.

With the theme “Better City, Better Life”, the Expo 2010 in Shanghai is trying to find answers to some of the problems caused by urbanisation. But setting the official theme aside, what does the event mean for China and for Shanghai? After the Beijing Olympics, many people – especially outside China - are anticipating another big spectacle that shows China transformation into a modern global power.

“Many foreigners think that the Expo is a way for China to put on a show for the rest of the world but it's not like that,” says Xu Wei, who is the Director of Communication and promotion department of the Bureau of Shanghai World Expo Coordination. “The most important thing about the Expo is that it will show the Chinese how the rest of the world is and help them to understand other countries and cultures.”

As the spokesperson for the Expo Bureau, Xu is quick to explain that it is of course important that foreigners learn something about China when touring the Expo site. But as happened with the Beijing Olympics, most people travelling to Shanghai to see the event will be Chinese.

“Maybe 60 million of 70 million visitors that we expect will be Chinese. What they get out of the Expo will have a very big influence on China's future,” adds Xu.



Shanghai Expo Director of Communication, Xu Wei (Image: Radio86)The Bureau of Shanghai World Expo Coordination is responsible for preparation and organization of Expo 2010. As one of the organisers of the event, Xu says that he doesn't really think too much about how the Expo will benefit Shanghai's economy. Although the city's economic development certainly won't slow down because of the Expo, there are more important things to consider.

“The Expo is an international event that will increase awareness of and knowledge about other cultures, and that is something worth mentioning,” explains Xu. “So it's not just about material consequences. First and foremost it's about a qualitative change and a change in the way people are thinking.”

According to Xu, every visitor to the Expo will be sort of taking an excursion. Nearly all the countries in the world will be present on the banks of the Huangpu River in Shanghai, where the Expo site is located. Visitors will have the chance to visit pavilions or catch some of the 100-plus cultural events organized each day. And there will just as many events and happening takings place all over Shanghai.

This is the kind of qualitative change that Xu is talking about.

“There is no use just telling people that the world consists of many cultures,” argues Xu. “When people are visiting the Expo they will draw this conclusion based on what they have seen. Africa, America, Europe, China, Japan, Korea...all these have their own unique characteristics. Shanghai Expo presents possibilities for people to learn about things on their own and draw their own conclusions, and I think this will have big impact on the future development of Shanghai, and China as a whole.”

Weighing the Costs and Benefits

Even if Xu downplays the importance of economic benefits of the Shanghai Expo, they are surely there. Historically, world fairs have given a boost to their host cities and sometimes changed their appearance. The Chinese pavilion built for the Shanghai Expo may not be as high as the Eiffel Tower but it will remain in place to impress people even after the Expo.



Expo construction (Image: Radio86)“If we on the other hand consider the concrete effects of the Expo, then of course they can be seen on many levels: there will be material things, innovations and economic wellbeing,” states Xu. “The event will affect the whole service sector of Shanghai and even beyond, because there is not enough workforce available here for the Expo. All the people involved with the Expo will get training and work experience and that will show in the future, even on the operational level.”

More than 300 billion yuan have been invested in building infrastructure for the Expo. That is roughly the same amount of money that was spent on preparations for the Beijing Olympics. Shanghai has been busy making streets wider and building a new airport terminal, subway lines, roads and bridges.

“For the time being, the total length of Shanghai's subways is more than 200 kilometres,” tells Xu. “Before the opening of the Shanghai Expo in May there will be more than 400 kilometres of subways. So you can see how we are improving the public transportation system in Shanghai. Actually, I believe that thanks to the Expo, Shanghai is improving its public transportation between 5 to 10 years ahead of schedule.”

Xu says that most of the citizens in Shanghai support the Expo. But the benefits that big events bring are not obvious to all. When Beijing was preparing for the Olympics, many traditional houses – hutongs – were torn down and many people were not happy about that.

The Expo organisers in Shanghai have also received critique from the local residents.

“Of course,” asserts Xu. “Here in this area which is near the Expo Shanghai site, you can see that we are doing a lot of construction work and it has an influence on people's daily lives. Of course they can see a lot more dust and the air quality is not that good.”

But according to Xu, the Expo organisers are trying to stay in contact and have a better communication with the people living next to the Expo site.

“Sometimes we try to arrange events together and sometimes we invite the local residents to pay a visit the Expo site,” says Xu. “When they come here, they say that “Oh, it's such a big project. It looks great!”. And they can maybe understand that sometimes some kind of cost may be inevitable.”

Challenges to overcome

While the Beijing Olympics lasted for just 17 days, the Expo 2010 will run for six months. This presents numerous challenges for the organisers of the event.



China pavilion (Image: Radio86) “I believe that the Shanghai Expo will have an even bigger effect than the Beijing Olympics,” enthuses Xu. “The Olympic Games lasted for a shorter time, and organising sports competitions is after all a quite straightforward process. Visiting the Expo is a very personal experience - you cannot just tell the visitors what to do and then guide them to the exit. Individual needs are varied and that presents operational challenges for us.”

During the Expo, the city of Shanghai will be more than crowded – 400,000 visitors on normal days and on peak days up to 800,000 visitors are expected to visit the Expo site. Even if that means big revenues for Shanghai’s tourism industry, finding enough hotel rooms is a challenge.

“In Shanghai there are not enough hotel rooms to accommodate that many visitors,” reports Xu. “But in the neighboring provinces of Jiangsu and Zhejiang there are a lot of hotels available. We are trying to find the best use for these hotels which are not so far away from Shanghai, 1-2 hours by car. With this kind of network we do believe we have enough hotel rooms, and it’s also good business for the neighbouring provinces.”

The Bureau of Expo Coordination has 700 people on its payroll – a small number for an event on this scale. But as with the 2008 Olympics, there will be tens of thousands of volunteers giving a helping hand.

“We have a target of 70,000 Expo volunteers on site,” adds Xu. “During the Expo period we will also set up Expo service stations across Shanghai and for these service stations we would like to have more than 100,000 volunteers. I'm not worried about that because on the first day we started this programme, 1 May 2009, more than 67,000 people filled in their application form.”

Foreigners are also welcome to volunteer for the Expo, especially if they are already living in Shanghai.

“A lot of foreigners who live here are very eager to be volunteers here and they are very welcome,” exclaims Xu. “I think it's more practical to have them as volunteers because they live in Shanghai and they know the city. Also they don't need a hotel room and these kind of things, and they speak very good English and other foreign languages.”

<http://wwf.panda.org/?uNewsID=193370>

Shanghai, China: Sweden is working towards a lasting legacy from its participation in the Shanghai Exp 2010, with Swedish companies and organisations to tie contributions to projects in China with visits to the Swedish pavilion.

The pavilion itself is a temporary fixture in Shanghai – but the planting of 5,000 trees made possible through the contribution of industrial products manufacturer Alfa Laval will be helping restore earthquake damaged areas of Szechuan Province for years to come.

The trees will be planted at the WWF China project in the Minshan Mountains where the Chinese giant panda lives. The trees are vital for restoring this area, which was severely damaged during the May 2008 earthquake.

The scheme, organised by the Swedish Committee for Expo 2010 and WWF Sweden, aims to raise RMB0.05 (about €5 cents or US 7 cents for each visitor to the country's striking two piece geometric pavilion

It is estimated that the Swedish pavilion will receive an average of 15,000 visitors per day during the six months of World Expo.

The WWF China project area consists of coniferous forest with a diverse ground vegetation of bamboo, which is important for many animal species. The mountainsides are covered with deciduous forest and in the valleys the rhododendron grows and colours the landscape in a palette of blue, red and pink when it flowers in the spring.

Apart from the giant panda, other animals occurring in the area include black bear, brown bear, lynx, clouded leopard, thaki, mountain sheep and the fantastic golden monkey – a species that only exists in the panda's habitat.

http://www.chinadaily.com.cn/china/2009worldexpo/2010-03/01/content_9518055.htm

Expo 86 still shines after 24 years

By Urso Chappell (China Daily)

Updated: 2010-03-01 10:26

With the world's eyes on Vancouver, Canada the past two weeks during the 2010 Winter Olympics, it's seen a thriving multicultural metropolis with gleaming skyscrapers and excellent infrastructure - a city studied by urban planners worldwide.

Viewers can be forgiven for not realizing that much of what they're seeing is the proud legacy of Expo 86. The city that hometown author Douglas Coupland dubbed "The City of Glass" owes much of its legacy to five and half months in the summer of 1986, when it hosted a world's fair under the theme "World in Motion, World in Touch".

As a 19-year-old in 1986, this is how I first experienced Vancouver, a city I immediately fell in love with. As a college student in Atlanta (another city that would see its own Olympics), I'd saved my money and found the cheapest flight and hotel I could. There was no way I was going to miss an Expo that would feature the United States, the People's Republic of China, and the Soviet Union together for the first time in North America.

Twenty-four years later, there are many examples of the Expo's infrastructure legacy. Viewers of the Winter Olympics' opening ceremonies at BC Place Stadium were also seeing the site of Expo 86's opening ceremonies. The adjacent area along False Creek hosted the bulk of Expo 86 where the British Columbia Pavilion and the geodesic Expo Center still stand. Most of the site is now home to thousands who live in glass towers with magnificent views.

Vancouver's innovative SkyTrain system was built in conjunction with Expo 86. In that year, it linked the main site to the Canada Pavilion on Burrard Inlet. SkyTrain is now a vital part of the city's transportation infrastructure. The Canada Pavilion, part of a complex known as Canada Place, is now the city's most iconic structure. Built on a pier, it features large white sails, which, during the Olympics, provided a huge canvas for colorful Olympic images.

Apparently, I wasn't the only one who discovered Vancouver in 1986. It is said by many that Expo 86 "put Vancouver on the map". Few outside Canada or the Pacific Northwest knew much about this city before 1986. Twenty-four years later, everyone knows this metro area of over 2 million people. Ted Allan, then president of the Bureau International des Expositions (BIE) said at the time that "Expo had reversed the feeling in some in Europe that Canada stopped at Toronto". Vancouver's thriving tourism industry is a testament to those changed perceptions.

China and Vancouver share a long history. After San Francisco, Vancouver has the largest Chinatown in North America. A Chinese language is spoken in 30 percent of Vancouver homes. It came as no surprise then, that the China Pavilion at Expo 86 was one of the most popular among locals.

Even Shanghai's maglev train has connections to Vancouver and Expo 86 as the Transrapid's technology was introduced to the public in the Germany Pavilion.

The most lasting legacy of Expo 86, though, has nothing to do with infrastructure or tourism, but in the many ways it inspired the over 22 million visitors to the site that summer. Nearly everyone in

Vancouver who was around that year has stories of how Expo 86 touched their lives. I know because I was one of them.

As we count down the days to Shanghai's own turn to host a world's fair, we rightly anticipate the wonders that lie behind those entrance gates, but it will surely transform those that are lucky enough to attend. And, I'll be right there with my ticket in hand.

The author is an American who has attended seven World Expos. He is also the founder of ExpoMuseum.com, an online museum dedicated to World's Fairs.

<http://aragonguide.com/534/aragon-guide-about-legacy-of-expo-zaragoza-2008.html>

Legacy of Expo Zaragoza 2008



Expo Zaragoza 2008 was an international exposition held from 14 June to 14 September 2008 held in Zaragoza, Spain, with the topic of "Water and sustainable development".

Expo 2008 Zaragoza opened new parks, buildings, bridges and museums. The exhibition left the city with many new cultural landmarks, such as Zaha Hadid's Pavilion Bridge, which spans the Ebro, Spain's longest river or the Water Tower, a 80-metre-high transparent building designed by Enrique de Teresa to evoke a drop of water. Some of these beautiful places can be visited.



Pavilion Bridge - Zaha Hadid and Arup projected the Pavilion Bridge for the Zaragoza Expo 2008, one of the central features of the Zaragoza Exhibition in 2008. The theme of the concept was 'Water for Development'. It is an 'aesthetic and emotional' bridge for pedestrians crossing the River Ebro. The Pavilion ...



Pavilion of Spain - The Pavilion of Spain during the Expo Zaragoza is committed to ethical architecture in pursuit of environmental protection and sustainable development. It is an artificial forest made of columns and glass. The pavilion is designed to save energy and to use environmentally friendly materials and ...



Water Tower - Constructed on a base in the form of a drop of water, this building became one of the symbols of the International Exposition Expo Zaragoza 2008. It was a singular pavilion dedicated to the theme of water for life, pure fun, full of surprises and activities involving the spectator: vapour mazes, ...



Rivers Aquarium - This Aquarium dedicated to waterscapes proposes a natural trip round the great rivers of the planet: Ebro, Nile, St. Lawrence, Amazon, Mekong and Darwin. Europe's largest freshwater Aquarium will contains 5000 specimens representing 300 species and allow visitors to tour the ecosystems of ...



Country Pavilions - The Pavilions of the countries participating in the Expo Zaragoza 2008 were grouped around the major ecogeographic regions of the world. Many of the pavilions have been moved or ...



Metropolitan Water Park And Beach - A 296-acre urban park provides sporting and recreational facilities and includes: Los Sotos Natural Park, a wetlands area, a Botanical Garden and network of lagoons with a white water channel, pools, children's play areas and a beach (known as "Las Playas" and very popular in ...



Themed Squares - Located between the pavilion bridge and the Spain pavilion, the themed squares wanted to intensify the message of the vital link with water, from various perspectives. The Themed Squares provided some of the essential messages of the Expo. The Six independent themed squares had 1,000 square ...



Convention Center - The Convention Centre on the former Expo Zaragoza 2008 site, by Nieto Sobejano has a wave-like roof with skylights to allow sunlight to enter illuminate foyers and common spaces.

http://en.wikipedia.org/wiki/World_Expo_88

Expo 88 –

High Definition TV received its Australian premiere at the Japan Pavilion, and the text-based Internet at the Swiss Pavilion.

Expo 05 –

Toyota showcased its clean transportation with the IMTS (Intelligent Multimode Transit System). Its FCHV (Fuel Cell Hybrid Vehicle) bus was used to shuttle people between the Nagakute and Seto areas of the expo.

Research into Scottish research and innovations

Research to help develop a design for the Scotland Pavilion to highlight the innovations that have been made and that are being made currently across all fields. This could be used as an area within the pavilion.

http://www.talentscotland.com/jobs.aspx?item_id=77194

01 February 10

Scotland has maintained its world-leading position on science and research quality, according to a new report.



Researchers around the world cite work carried out in Scotland more often than work done in any other country, relative to GDP.

The report commissioned by chief scientific adviser Professor Anne Glover looked at research in universities, institutes, industry and the NHS, and compared Scotland's record with other countries.

Professor Glover said: "This report confirms that Scotland is one of the best places in the world to do science. Our research base has the potential to offer our young people a very rewarding career, carrying out high-quality work that has a global impact.

"Being able to demonstrate the strength of Scottish research will also help us to attract the best scientists from around the world to work here, as well as acting as a magnet for international investment."

Scotland had 1.8% of world citations in 2008, where work is referenced by other research. This is up from an average rate of 1.6% in 2003-07, with a population share of less than 0.1%.

Areas of particular strength are biological sciences (2.4%), the environment (2.2%) and health and medical research (1.8%).

The impact of Scottish research, as measured by citations per paper, has been well above the world average in recent years and rose by a further 21% in 2008, with only Switzerland ranked higher.

Scotland is ranked third in the world for citations per researcher, after Switzerland and The Netherlands, ahead of all the G8 countries.

First Minister Alex Salmond said the Government will continue to work with universities and industry to ensure Scotland remains a "hotbed of ideas and innovation."

He said: "Scientists in Scotland have been responsible for innovations such as Dolly the sheep, keyhole surgery and renewable energy technologies, and this new report shows how we have maintained our world-leading position on research quality.

"This Government is working to capitalise on Scotland's competitive advantages to increase sustainable economic growth and create a smarter, greener, wealthier country.

"This report outlines the great opportunities that exist for Scottish businesses to collaborate with our research community to exchange knowledge and design the products of the future."

Researchers in Scotland publish more papers than in any other country the world and the rate is more than twice the average of other nations.

The report used data up to 2008.

Source: Reproduced with the permission of [The Herald](#), Glasgow © Newsquest (Herald & Times) Ltd.

<http://www.guardian.co.uk/environment/2009/aug/23/mount-rushmore-conservation-historic-scotland>

Scottish laser pioneers lead way in preserving world heritage treasures

Mount Rushmore carvings will be first test of plan to guard historic sites from ravages of weather and pollution by creating accurate 3D models

- [Paul Gallagher](#)
- [The Observer](#), Sunday 23 August 2009



Mount Rushmore. Photograph: Doug Dreyer/AP

British scientists are to begin work on a revolutionary project to record three-dimensional models of world heritage sites so that they can be re-created if they fall victim to climate change, natural disaster, war or terrorism.

The team of six – from Historic Scotland and the Glasgow School of Art – will team up next month with an American company, CyArk, to shoot laser beams at Mount Rushmore in South Dakota, creating a 3D model accurate to within 3mm, digitally preserving the carved faces of former presidents George Washington, Thomas Jefferson, Theodore Roosevelt and Abraham Lincoln should archaeologists need to repair them.

Funding for the project was rushed through because of concerns over the deterioration of the granite rockface.

CyArk has identified several other "at-risk" sites, including the Acropolis in Athens, threatened by acid rain, and Machu Picchu in Peru, which suffers from excessive tourism. Pollution, over-expansion and deforestation may have already permanently damaged Tikal National Park in Guatemala, one of the largest archaeological remains of the pre-Columbian Maya civilisation.

CyArk's ultimate aim is to create 3D models of 500 sites around the world. Work began this year on scanning the underworld of Rome, 170km of winding catacombs dating back two millennia, and the Zapotec capital of Monte Albán, in Mexico. Other sites proposed for digital mapping include Angkor Wat in Cambodia, the Khmer temple complex built for King Suryavarman II in the early 12th century, Thebes in Egypt and Pompeii, the Roman town buried by the eruption of Mount Vesuvius.

Digital scanning might have saved some of the historic buildings destroyed in the L'Aquila earthquake in Italy in April. They include Santa Maria di Collemaggio, the church that was the site of the coronation of Pope Celestine V in 1294, and Porta Napoli, Naples's oldest gate, built in 1548 in honour of the Holy Roman Emperor Charles V. David Mitchell, director of the technical conservation group at Historic Scotland, cites the Buddhas of Bamiyan in Afghanistan – blown up by the Taliban in 2001 – as another example of what could have been saved by the new technology.

Although the Japanese government has pledged to help rebuild the giant monuments, carved from sandstone cliffs, it will be difficult to replicate the originals. "If only they had been scanned, we could have helped rebuild them to their original state," said Mitchell.

CyArk, founded by Ben Kacyra, the "John Logie Baird" of laser technology, teamed up with Historic Scotland and Glasgow School of Art after witnessing the latter's pioneering work at digital documentation conferences in the United States and Scotland.

Mitchell said the Americans were amazed by the Scottish team's technical capabilities, which have been used to create 3D models of Stirling Castle and Rosslyn Chapel in Midlothian. "When Ben saw the work we were doing he said we were miles ahead of anyone else and was blown away," said Mitchell. "We have worked with Glasgow School of Art for a number of years on laser scanning and became the first group to use this technology on heritage sites. It can pick out millions of points on a monument down to an accuracy of 3mm, which has never been done before. It's cutting-edge stuff. Working on Mount Rushmore will give us the opportunity to put Scotland on the world stage."

Michael Russell, Scotland's minister of culture, said the link with CyArk was the beginning of what he hoped would become "a successful long-term international partnership".

Speaking from the US, Kacyra told the *Observer* he was delighted the Scottish team was on board for the five-year project. "I was amazed at their advanced work," he said. "I had never seen any government organisation acquiring this kind of scanner and then start experimenting with it in the heritage field. We are indebted to Historic Scotland for their very generous donation of resources and technology."

Scanning is almost complete on New Lanark's world heritage site, a restored 18th century cotton mill in southern Scotland. Once work is complete at Mount Rushmore in October, the team will move to Skara Brae, "the heart of Neolithic Orkney", which is under threat from coastal erosion. The Antonine Wall, St Kilda and the Old and New Towns of Edinburgh are the remaining Scottish world heritage sites to be scanned.

The remaining four international sites have yet to be decided, but the Taj Mahal in India and the Longmen Grottoes in China, 2,345 niches carved from rock that house more than 100,000 statues, have been suggested as possibilities.

Several European companies have already expressed "huge interest" and have said that they are eager to utilise Historic Scotland's scanning equipment for the preservation of other world heritage sites.

Kacyra added: "I hope we can continue our collaboration beyond the Scotland 10 and CyArk 500 and eventually transfer our technology to developing countries."

<http://www.sdi.co.uk/Invest/Why%20Scotland/Innovation%20and%20Research%20in%20Scotland.aspx>

Innovation and research in Scotland

Excellence, achievement, innovation and research are features for which Scotland is renowned. With a supportive government, excellent university facilities and a centuries-old culture of inventiveness, Scotland can provide the world-class expertise in research and development that your business needs.

Today, Scotland's reputation for innovation and research is particularly strong in the electronics, life sciences and software development industries.

Scotland's innovation and research expertise

Scotland's colleges, universities and other institutions produce thousands of graduates each year and carry out world-leading research. This builds on Scotland's tradition of innovation, which over the years has seen our talented minds responsible for many inventions, including:

- Television.
- Telephone.
- Penicillin.
- Radar.

- Antiseptic.
- Anaesthetic.

Scotland has become a major global player in business development and industrial innovation. Some of the biggest companies in the world have bases in Scotland, carrying out cutting-edge research and developing new business practices.

In recent years, Scottish companies have created the Grand Theft Auto series of video games, developed the first successfully cloned mammal and been at the forefront of research into nanotechnology.

Research and innovation in Scotland's universities

Scotland is world-renowned for the excellence of its universities, which attract students from across the globe. Glasgow and Dundee have been named as being among the top five locations in the world for life sciences research, largely down to the quality of universities in both cities, which are world-famous for their contribution to biotechnology.

Excellent links between government, industry and academia in Scotland help promote ground-breaking research, innovation and development. Government schemes designed to support innovation in industry and encourage the development of new products and business practices include:

- R&D Plus.
- Research & Development Assistance.
- Regional Selective Awards.
- SCORE Grants.

Scotland's universities have experience of working with the commercial sector and are committed to seeing new breakthroughs emerge from the laboratory and into the market. Innovation at these world-leading universities creates many commercial and research opportunities in Scotland that cross several industries.

Contact us for more information about the opportunities presented by research and innovation in Scotland and how your company can capitalise on them.

<http://www.scotlandistheplace.com/stitp/1863.1.1644.html>

Top 5: World-Changing Inventions

We set Marissa Lippiatt from NESTA (the National Endowment for Science, Technology and the Arts) Scotland the unenviable task of choosing her top five world-changing Scottish inventions. The hardest task was narrowing it down to just five...

"As I was thinking about this," says Marissa, "it occurred to me just how diverse the range of inventions and innovations emanating from Scotland has been over the centuries.

"I looked at Scottish innovations of the past and contrasted them with some of our more recent ones. As we move forward, I think Scotland is very well placed to continue to develop world-leading innovations, be they technological, social or developments within our public services."

The Telephone – Alexander Graham Bell

Both Bell's mother and wife were profoundly deaf, and it was while working on hearing devices that he made his incredible discovery. "It would be impossible not to acknowledge the importance of the invention of the telephone by Alexander Graham Bell, which I think ultimately, must be one of the greatest of all world changing technologies to be developed by a Scotsman."

Penicillin – Alexander Fleming

"There can be no doubt about the global impact of the discovery of penicillin, the world's first antibiotic, thanks to Alexander Fleming." says Marissa.

Penicillin is something we take for granted, but it is almost impossible to imagine how different modern medicine would be without it. The accidental discovery of this natural fungus radically changed the treatment of almost all bacterial infections forever.

The Bicycle – Kirkpatrick MacMillan

"The pedal bicycle must surely rank as one of the top 5! Although he was not credited with patenting the idea, Kirkpatrick MacMillan invented and designed the very first pedal bike," says Marissa.

As we witness the incredible pace of disappearing fuel resources, could this be a key solution to our transport needs in the future?

Financial Services

"From developing the first bank overdraft (credited to the Royal Bank of Scotland in 1728) to the latest in contactless payment technology (you don't even need to get your card out to make a payment) it's clear that innovation in financial services industry is one of Scotland's key strengths and has indeed changed the world."

Some credit the invention of the cash machine to a Scot named John Shepherd Barron in the sixties.

Genetic Cloning – Roslin Institute, Professor Wilmot

"Dolly the Sheep, the first successfully cloned mammal, was a spectacular innovation that put Scotland at the forefront of therapeutic cloning and led to improvements in the development of regenerative medicine," says Marissa.

While there remains a great deal of ethical debate surrounding genetic cloning there is no debate about the significance of this in the progression of science.

NESTA

Marissa Lippiatt is the Scotland and Northern Ireland Manager for NESTA. Chief Executive, Jonathan Kestenbaum outlines NESTA's aim – "The National Endowment for Science, Technology and the

Arts... is committed to stimulating and fostering innovation in the UK for both economic and social benefit."

NESTA runs a competition for innovative start-up companies in Scotland called Starter for 6. Successful new ventures will receive business training, mentoring and grants.

<http://www.scotland.gov.uk/News/Releases/2010/04/19112723>

Investment in research and innovation

19/04/2010

European funding of more than £9.3 million is being invested in new projects that will harness the economic potential of Scotland's world-leading research base and support the creation of 740 jobs, First Minister Alex Salmond announced today.

On a visit to the University of Aberdeen, Mr Salmond said that new allocations of the European Regional Development Fund (ERDF) will be invested in projects that strengthen links between Scotland's research base and business community by commercialising knowledge.

The University of Aberdeen has been awarded £2.6 million towards a new facility to accommodate Scotland's growing life sciences sector. The project will support the transfer of research from the laboratory to the commercial world.

Scotland has been named as one of the world's top five emerging locations for life sciences and this growing sector makes a major important contribution to Scotland's economy with an annual turnover which exceeds £3 billion.

A recent report on research bases in universities, institutes and industry puts Scotland's science and research base as among the best in the world. Scotland's research is cited by other researchers around the world more often than any other country in comparison to its GDP.

The projects receiving a share of the ERDF funding are:

- * University of Aberdeen: Life Science Innovation (£2.6 million)
- * University of Edinburgh: Scottish Environmental Technology Network Phase Two (£408,137)
- * Edinburgh Napier University: Institute for Wood Products (£665,387), the Edinburgh Climate Change Centre (ECCC) (£613,872), Business & Technology Hub (£1 million) and Construction Industry Advancement Centre (£761,129)
- * University of Abertay Dundee: Commercialisation and Enterprise Development (£321,399)

* University of Strathclyde: Executive Director Designate Programme 1 (£675,000) and Medical Devices Knowledge Exchange Initiative (£307,904)

* Fife Council: Fife Renewables Business Innovation & Incubation Hub (£125,377) and Fife Renewable Hub Capital (£750,000)

* Institute for System Level Integration: Development of Research and Innovation in Electronic Systems (£352,960)

* Bioscience Network Ltd: Biosciences Knowledge Transfer Network (£705,167)

First Minister Alex Salmond said:

"The Scottish Government is working tirelessly to create and safeguard jobs and to ensure Scotland has the right infrastructure and skills to support sustainable economic growth.

"Scotland continues to make an immense contribution to shaping the modern world through innovation and this £9.3 million investment will support research projects that aim to capitalise on Scotland's proud reputation for scientific excellence.

"This Government recognises the importance of capitalising on Scotland's competitive advantages and this funding will support projects that aim to strengthen links between Scotland's research base and business community through commercialising this valuable knowledge.

"Scotland is a world leader in technology, innovation and enterprise - our scientists have been at the forefront of innovations such as Dolly the sheep, keyhole surgery and renewable energy technologies.

"It's important that our academics and entrepreneurs have access to support, particularly in this challenging economic climate, so that they can stay at the forefront of their fields, realise their potential, seize opportunities, expand, invest and contribute to sustainable economic growth. This is why this Government continues to work closely with our universities, research institutes and industry to ensure Scotland has the right infrastructure and people to deliver success.

"The commercialisation of knowledge is a key to unlock Scotland's economic potential and I am confident that as well as supporting the creation of 740 jobs and investing in our research base, this funding will help deliver innovative solutions to problems affecting our modern world."

Senior Vice-Principal for the University of Aberdeen Professor, Stephen Logan, welcomed the funding announcement:

"The University of Aberdeen is absolutely delighted to learn of the announcement confirming financial backing for what will be Phase 2 of Life Science Innovation facility on the Foresterhill health campus.

"Our first Life Science Innovation building, developed in partnership with Scottish Enterprise Grampian, Aberdeen City Council and NHS Grampian, is now a base for one of the world's largest pharmaceutical companies, Pfizer, which is a tremendous coup for Aberdeen.

"This new Life Science Innovation facility will further support Aberdeen City and Shire's fast expanding life sciences sector by offering a base for young companies working on the commercialisation of life sciences research.

"Funding for the building is further evidence of the region's growing reputation as a centre of excellence for life sciences."

Information about projects receiving a share of the ERDF funding

Life Science Innovation project will support a new facility providing dedicated company space to support the area's growing life science sector. This new building is the second phase of dedicated infrastructure for the commercial life science sector.

The Scottish Environmental Technology Network (Phase One) was established 3-years-ago to help SMEs in the environmental and clean technologies sector (ECT) to become more competitive. SETN Phase two will develop and deliver new products and services to Scottish Industry and the public sector.

Biosciences Knowledge Transfer Network (BKTN) will enable knowledge transfer and the promotion of innovation in non-medical aspects of bioscience between SMEs and an established knowledge base. It will focus on four lead bioscience market sectors: industrial biotechnology, plant breeding and crop protection, food manufacture/processing and animal breeding/health.

Institute for Wood Products will provide research, training and development support for SMEs within the forestry and timber sectors in Scotland. The project will deliver a wide range of information and advice through its advisory, support and marketing to communicate knowledge about the potential of home-grown timber.

Commercialisation and Enterprise Development is a project to promote collaboration between SMEs and Abertay University on promotion of commercialisation and enterprise development. It will help the SMEs to seek out, acquire and utilise commercially viable innovations related to their products and processes.

Business and Technology Hub (BTH) is a joint venture between Edinburgh Napier, Queen Margaret and St Andrew's Universities to support SMEs in the process of innovation and exploitation of market opportunities to enable growth. The project will open up links with further education as required by SMEs, thus delivering a complete package of innovation at business-relevant levels.

Executive Director Designate Programme 1 aims to increase the number of spin-out companies from Universities and improve the chances of raising seed funding for these companies.

Fife Renewables Hub Capital will develop the Fife renewables Innovation and Incubation Centre at Methill Docks Business Park, Fife. This will create a low carbon facility to assist companies in making the transition and successful entry into the Renewable Energy Sector.

Fife Renewables Business Innovation and Incubation Hub will develop the Fife Renewables Innovation and Incubation Centre at Methill Docks Business Park, Fife. This is the revenue part of the capital project above and supports the staffing and premises costs of the build.

Medical Devices Knowledge Exchange Initiative will establish a knowledge transfer mechanism "Medical Devices Knowledge Exchange Initiative" (MDKI) that will drive and build a platform for MedTech technology growth in Scottish SMEs.

The Construction Industry Advancement Centre will provide expert support to SMEs in the delivery of low carbon system innovations.

Development of Research & Innovation in Electronic Systems will support Scottish SMEs in an intermediate position between academia and industry. The project will develop products, services and processes using electronics based enabling technologies.

Edinburgh Climate Change Centre will establish an innovation supply chain to bridge an identified gap between the region's research base, live projects and it's enterprise sector with specific focus on knowledge and innovation in carbon accounting, foot-printing and monitoring in the built environment, transport and infrastructure sectors.

<http://www.scottish-enterprise.com/investment-opportunities/invest-scottish-research/proofofconcept-completed-projects/Human-derived-repellents-against-midges.aspx>

Human derived repellents against midges

Contacts

- Commercial contact: Juliette Snow (j.e.snow@abdn.ac.uk)
- Principal investigator: Dr A Jennifer Mordue
- Institution: University of Aberdeen
- Press officer: Angela Ferguson

Midges in Scotland have an enormous impact in human terms, limiting maximal expansion and uptake in the tourist industry and affecting the quality of outdoor life for all. Midges prevent tourists from returning to Scotland in the summer and may also deter, by their reputation, first time summer visitors.

The vast majority of the 1,400 Culicoides species known worldwide are blood feeding (haematophagous) with only the females taking blood. The Scottish biting midge, Culicoides impunctatus, is the major blood feeding species in Scotland and has a direct nuisance value by causing acute discomfort and irritation on biting, which they can do in enormous numbers. Up to 40,000 landings/person/h have been estimated by ourselves from catches on human forearms by the Scottish biting midge.

Midges cause severe local skin reactions in sensitive hosts and irritate intensely by their proximity and entanglement in hair. Control of such tiny abundant insects is difficult. Larval habitats are highly dispersed and not fully described covering much of Western Scotland where birch and wet acid

grassland abounds. Changing the environment for their control would involve large-scale perturbations of the countryside. Control of adults with pesticides is untenable.

Our work at Aberdeen and research world-wide, is revealing details of midge biology and life cycles that could be applied to their control by behavioural means. An understanding of the chemical ecology of midges and the role of semiochemicals (behaviour modifying chemicals) in their biology is paving the way towards the use of newer technologies.

We are researching chemicals from people that may mask them from biting flies. Within the Proof of Concept project key semiochemicals have been identified and their efficacy in the field has been tested. Proof of Concept plus funding will now be used to establish and refine the best mixture of compounds for development as a new and effective human derived repellent.

The University of Aberdeen with Rothamsted Research, its collaborator, has many years of strong successful research links into behaviour modifying chemicals in blood feeding pests. Funded by Research Councils, EU and Industry they are at the cutting edge of science using the most advanced and state of art analytical equipment.

The proposal aims to use laboratory and field based behavioural, electrophysiological and coupled gas chromatography-electroantennography (GC-EAG) and gas chromatography-mass spectrometry (GC-MS) techniques to identify human derived host masking chemicals that will be used as a new class of novel, safe repellents.

Scotland is uniquely placed to provide innovative technologies and solutions for its own national (midge) problem that can also have added benefits on a world-wide basis to protect man and his domestic animals from the bites of other midges and mosquitoes. The repellents and their different formulations will be commercialised and manufactured in Scotland bringing high revenue in an industry of huge value to Scotland.



October 2007

Our greatest fear - never forget it!

According to a recent survey, more people fear developing dementia – Alzheimer's is the single biggest cause of senile dementia – in later life than any other disease. Yet according to Alzheimer Scotland, the world could be 'sleepwalking' into a dementia epidemic... .

Alzheimer's – first identified in 1901 by the German psychiatrist Dr. Alois Alzheimer – is a neurodegenerative disease that now claims over 24 million sufferers worldwide, including an estimated 40,000 in Scotland. Some of its more famous victims have included former US president Ronald Reagan, the writer Iris Murdoch and, closer to home, Scottish comic actor Rikki Fulton.

The disease is caused by the increasing presence of 'plaques' in the brain, which cause 'tangling' of the nerve endings, leading to confusion, disorientation and loss of memory. However, no one knows definitively what causes the onset of the condition and an absolute diagnosis can only be performed post-mortem, when the central brain tissue can be properly examined.

The early stages can be difficult to spot and may even go unnoticed by the sufferer's immediate family. Initial symptoms may be as slight as a loss of energy or spontaneity, but are likely to progress to include disorientation and a loss of inhibitions, as well as strange behavioural changes such as outbursts of violence from formerly passive people, or excessive passivity in people who were previously assertive.

By the late period of the disease constant supervision is required, with patients becoming unable to meet even their most basic needs such as feeding and clothing themselves. Neil Hunt, Chief Executive of the Alzheimer's Society, says, 'Alzheimer's is a devastating condition. It begins with memory problems but gradually robs people of their ability to do virtually anything for themselves. Sadly 1 in 3 older people will end their lives with dementia'.

Alarmingly over half the people polled in a recent survey thought that their lifestyle choices had no impact on their chances of developing Alzheimer's and other dementia-related conditions later in life. There are in fact simple practical steps everyone can take to reduce their chances of developing Alzheimer's. These have been outlined as part of the Alzheimer's Society's 'Be Headstrong' campaign:

1. Don't Smoke. Smoking, with its associated damage to the circulatory system can add to declining brain functions.
2. Eat less saturated fats. This again helps maintain a healthy heart and strong circulation.
3. Exercise regularly.
4. Lead an active social and intellectual life. Studies have found that people who lead lonely lifestyles, and who neglect intellectual stimulation like reading, crosswords and chess, are far more likely to develop diseases like Alzheimer's than those who remain mentally and socially active.
5. Ask your GP to regularly check your blood pressure and cholesterol levels.

Although many people do not understand the connection between leading healthy, active lives and avoiding degenerative brain diseases, many also labour under common misapprehensions like the notion that dementia may automatically be genetically inherited. Kate Fearnley says this is largely a myth. 'Most cases of the illness are not inherited. The illness is so common that even having two close relatives with the condition is not evidence of a family link. Although there are some rare forms of dementia which are caused by genetic faults ... having a close family member with the condition only increases your risk by a small amount.'

Alzheimer Scotland would like a publicity campaign to be launched to alert Scots to the fact that Alzheimer's can be delayed – or even avoided – by making lifestyle choices geared towards maintaining a healthy mind and body.

The importance of this was illustrated recently when 700 pensioners volunteered to take part in a study in Edinburgh called 'The Disconnected Mind'. The study will run until 2015 and is aimed at showing how lifestyle and diet can affect the onset of the mental ageing process. The research is being led by Professor Ian Deary of Edinburgh University who said, 'the people here are making a unique contribution to research into brain ageing'. The pensioners – who were mostly in their early seventies – had to sit a 75-question test. The best results were scored by those who enjoyed a busy, healthy lifestyle; like Mr Aitken of East Lothian who said, 'I have a great deal of interest in life. I like gardening and walk a lot!'

Scotland's universities are at the forefront of pioneering work on Alzheimer's. Researchers at Edinburgh University are working on a new study to identify a key protein that builds up in cat's brains and causes mental deterioration. Dr. Danielle Gunn-Moore from the University's Royal School of Veterinary Studies says that 'this study tells us that the cat's neural system is being compromised in a similar fashion to that which we see in Alzheimer's sufferers. The shorter life-span of the cat allows us to more rapidly assess the effects of diet, high blood pressure and prescribed drugs on the course of the disease'.

Further north, at St. Andrews University, Dr. Frank Gunn-Moore is leading a team of scientists who have developed a man-made compound capable of blocking and even reversing some of the symptoms of Alzheimer's disease. The team have produced an inhibitor which tests show can prevent amyloid attaching to living tissue. 'We have shown that it is possible to reverse some of the signs associated with Alzheimer's disease. Work is now being carried out to try and refine the inhibitor into a potential drug,' Dr. Gunn-Moore said recently. His team has been awarded a further three-year research grant to continue their work at St. Andrews.

Another unlikely ally in the battle against Alzheimer's recently emerged in the form of one Scotland's favourite foods – the curry! Scientists at the University of California have discovered that signs of under-activity in the immune system of people with Alzheimer's leads to problems with clearing the amyloid protein that causes the build-up of plaques in the brain. Studies are now showing that Curcumin – a major component of curries – may help to reverse this problem. Most Scots would not have a problem having to eat more curries as part of a healthy diet!

And now it looks like an 'early warning' test that can predict the onset of Alzheimer's up to six years ahead may soon become a reality. Scientists at the American biotech company conducting the research are cautious as more tests have yet to be done, however, over a period of two to six years, 91 per cent of people whose blood tested positive went on to develop the disease. Jim Jackson, Chief Executive of Alzheimer Scotland said, 'an early diagnosis test would potentially help a lot ... it would be somewhat easier (to come to terms with the disease) if you have got your full mental capacity when you are diagnosed'.

Scotland's schools too are now being mobilised in the battle against dementia. Last month, as part of World Alzheimer's Day the Scottish Minister for Public Health launched Alzheimer Scotland's groundbreaking new schools pack at Discovery Point in Dundee. The pack – which is aimed at educating children about how Alzheimer's affects people, and about making healthy lifestyle choices that will help them to avoid the condition as they grow older – is to be sent out to all Scottish primary schools in the coming months.

Alzheimer Scotland said, 'more and more children are affected by dementia: it could be someone in their local community, a neighbour or even a grandparent. Children tend to be extremely receptive to learning about dementia, which is important in helping to reduce the stigma surrounding the illness'.

Increasingly, as higher numbers of people live longer lives, dementia looks likely to become everyone's problem, but it may still be possible to educate a new generation enough to avert the looming crisis and ensure a brighter old age for all. Scientists and researchers based in Scotland's world-renowned universities and life sciences companies are playing a major part in ensuring that a longer life will also be a quality life.

Stem cell research in Scotland

Scotland is at the forefront of stem cell research and regenerative medicine. One of the defining scientific breakthroughs of the last century, the cloning of Dolly the sheep, took place in Scotland and this pioneering tradition is upheld by internationally acclaimed work in stem cells and regenerative medicine.



Scottish scientists continue to address the key medical challenges of the next century through groundbreaking stem cell research.

Scotland's stem cell research and development strengths

Scotland is in the unique position of being able to offer the know-how, facilities and infrastructure for the commercial development of stem cells, all in the one location.

- Scotland is home to Europe's largest and most highly regarded stem cell research community.
- World-leading centres for stem cell biology in Scotland include the Institute for Stem Cell Research and the Centre for Regenerative Medicine.
- 50 per cent of UK stem cell research licences are issued to organisations in Scotland.
- A supportive regulatory and funding environment, backed by the highest ethical standards, makes Scotland the ideal location to conduct stem cell research.
- The **Scottish Stem Cell Network** links all academic, clinical and industry-based research groups in Scotland with an interest in stem cell biology.

Further benefits of stem cell research in Scotland

In addition to the world-leading stem cell research carried out in Scotland, there is a growing commercial base. Several eminent stem cells companies have established commercial operations in central Scotland, attracted by a rich pool of research talent, specialised facilities and Government support.

- Key centres for stem cell research in Scotland are conveniently located within a 90 minute drive of each other.
- More medical research is conducted per capita in Scotland than anywhere else in Europe, easing the translation of stem cell research into clinical benefits.
- Significant investment in dedicated facilities and infrastructure, such as specialised laboratories and equipment, takes place.

Stem cell research opportunities in Scotland

Unlike other countries, there is considerable public acceptance of, and Government support for, stem cell research in Scotland. This creates many opportunities for stem cells research companies in Scotland to:

- Collaborate with a critical mass of world-leading stem cell scientists and clinicians in the field of regenerative medicine.
- Take advantage of significant opportunities in the development of stem cells for use in drug screening.
- Engage with a stem cell research community eager to carry out collaborative research.
- Carry out stem cell-related manufacturing activities in Scotland.

Contact SDI for more information about the support we offer for companies engaged in stem cell research in Scotland, and to other Scottish life sciences sectors

Stem Cells

Scotland's Stem Cell Industry

The cloning of Dolly the Sheep at the Roslin Institute in Edinburgh, Scotland is one of the defining scientific breakthroughs of the last century. This pioneering tradition continues in Scotland with ground-breaking, internationally-acclaimed work in stem cells and regenerative medicine.

As a global leader in stem cell research, Scotland can provide international partners with access to world-class researchers, government support, clinical research, a skilled workforce, and a bustling academic research community that is breaking new ground in stem cell biology every day.

A Foundation for Scientific Discovery

Scotland is the ideal location in which to conduct stem cell research. The Nation boasts a powerful life science research and technology base, which includes more than 500 organisations and more than 26,000 employees.

Scotland also hosts a significant multi-national presence in stem cell research and manufacturing, such as CXR Biosciences, Invitrogen, Angel Biotechnology and Geron Corporation. These companies are supported by globally recognised research, industrial technology and universities, all with well developed networks and links to industry.

- Scotland has established centres of excellence in medicine, genetics and cloning technology and a supportive legislative framework for the use of stem cells;
- Scotland houses approximately 21% of the UK's biotech companies and is the fastest growing region for start-ups;
- Edinburgh is home to Europe's largest and most highly-regarded stem cell research community, with two key centres of excellence. The Centre for Regenerative Medicine is based at the Centre for Biomedical Research and is headed by Prof. Ian Wilmut (creator of "Dolly"). The Institute for Stem Cell Research (ISCR) is currently the lead contractor for a €12 million FP6 project to create a European consortium for stem cell research;
- In August 2005, the ISCR researchers announced the creation of the world's first "pure" human brain stem cells in volume;

The support from government for stem cell research was underlined by the establishment in 2003 of the UK Stem Cell Bank (www.ukstemcellbank.org.uk) - a vital resource for stem cell research as well as developing important safeguards for handling and storing of cell lines. This is the world's first Stem Cell Bank of its type.

World Class Research

More medical research is conducted per capita in Scotland than anywhere else in Europe. Edinburgh, a major centre for genomics and bioinformatics research, has one of the largest concentrations of clinical scientists and researchers within the U.K. working on human stem cells and related clinical applications. Through advanced research led by these globally respected stem cell experts, Scotland is poised to lead the way in biomedical applications of cell biology.

Recently the Centre for Regenerative Medicine was formed at the new \$1bn Centre for Biomedical Research (CBR) in Edinburgh. The CBR combines an 870-bed, state-of-the-art teaching hospital, the University of Edinburgh's world-renowned Medical School and Research Institute and a 100-acre science park development. Professor Ian Wilmut, creator of Dolly the sheep and member of SSCN Advisory Group, will head this new centre, which has capabilities in both basic research and its translation into clinical reality.

Dr Paul De Sousa, formerly of Roslin Institute, has also relocated to the University of Edinburgh where he will be instrumental in developing good manufacturing practice (GMP) procedures for human embryonic stem cell derivation at the University of Edinburgh. In the autumn of 2005, Dr De Sousa was successful in creating human embryos through virgin conception (i.e. parthenotes). Dr De Sousa was also granted a human-cloning license along with Professor Wilmut by the Human Fertilization and Embryology Authority (HFEA).

Paving the Future of Stem Cell Science

Scotland has an excellent output of undergraduates and postgraduates who are trained in cell biology. This provides Scotland with a ready pool of skilled workers.

This fact, in combination with a supportive regulatory and funding environment, has helped Edinburgh become home to one of the largest concentrations of clinical scientists and researchers within the UK working on human stem cells and related clinical applications.

Eighty percent of the entire life sciences industry is within a 50-mile radius of three of Scotland's main cities – Edinburgh, Glasgow and Dundee - providing easy access to the country's major stem cell and life science laboratories.

- Edinburgh is highlighted in the Dec 2006 Report of the UK Stem Cell Initiative, which has been strongly supported by the Government, with \$80M extra research funding committed over the next two years.
- The Queens Institute for Medical Research, part of the University of Edinburgh, is one of the biggest inter-disciplinary research facilities in Europe. Housed at Edinburgh's new Centre for Biomedical Research, this \$100 million facility opened in July 2005 and houses 650 researchers in cell biology.



English: Head of Invention by Eduardo Paolozzi outside Design Museum in London

Research into Scottish culture and fashion

Research to help develop a design for the Scotland Pavilion to showcase the cultural organisations of Scotland. The pavilion, like others, will need a cultural programme of activities throughout the Expo.

<http://www.scotland.gov.uk/News/Releases/2010/04/01131908>

Scotland Week 2010

04/04/2010

Scotland's textiles and some of its leading fashion designers will be in the spotlight during Scotland Week 2010.

Minister for Culture and External Affairs Fiona Hyslop will champion the Scottish fashion, design and textiles industries at the Fashion Institute of Technology (FIT) awards reception and Dressed to Kilt tomorrow (April 5).

To celebrate and showcase Scottish fashion, the Minister will wear a Judy Clark jacket at the FIT awards, based on Miss Clark's forthcoming Harris Tweed Hebrides collection.

Visiting the Dressed to Kilt 'Pop-Up Shop' where she met with textile executives and designers, all Stateside to promote Scotland and the industry, Ms Hyslop said:

"Creative and culturally rich, Scottish textiles and design are truly versatile. Scotland's quality fabrics continue to capture the imagination of the fashion industry and demand remains high amongst leading designers in fashion and interiors.

"Scotland Week events will further promote our iconic fabrics, talented designers and fashion industry as a whole.

"The Dressed to Kilt runway show and 'Pop-Up Shop' provide a fantastic high profile platform for both up-and-coming and established Scottish fashion designers. They showcase Scotland's high quality textiles as well as designers' work to an influential international audience.

"Aspiring Scottish based designers such as Judy Clark and Alison Macleod are using their world class skills and talents to demonstrate the versatility of our country's unique textiles, such as Harris Tweed which celebrates its 100th Anniversary this year.

"The creative industries, including fashion, play a vital role in Scotland's economy, with turnover exceeding £5 billion, supporting 60,000 jobs and accounting for six per cent of Scottish exports. That is why we are committed to maintaining the economic conditions under which this key sector can flourish."

Judy R Clark said:

"Scotland Week is an excellent platform for Scottish designers to showcase work in front of an international audience and endorse our Scottish culture. Our garments are infused with Scottish heritage; we use the Gaelic language and Harris Tweed cloth to produce exclusive apparel handmade in Scotland.

"Showcasing the collection in New York City is an ideal way to interact with a global marketplace and develop contacts within the industry which will take our Scottish designs to new levels at the same time as promoting Scottish culture and the Harris Tweed industry."

Scotland Week 2010 runs from April 3 to 10. It is a programme of engagements undertaken by Scottish Ministers, VisitScotland and SDI across the U.S. and Canada. More information at: www.scotland.org/scotland-week/

SDI is a joint venture between the Scottish Government and Scottish Enterprise. Its role is to promote and secure inward investment.

The Scottish textiles industry employs more than 10,000 people in 665 companies, with a combined turnover of around £1 billion. The majority of companies are Scottish owned. Over 40 per cent of the companies export overseas accounting for £360 million in sales to key markets in Europe, the USA and the Far East.

Scaling up support for exports and attracting new investment is a key element of the Scottish Government's Economic Recovery Plan. Work is underway across the public sector to deliver that plan, accelerate recovery and improve the long term performance of Scotland's economy.

This is the first time in the history of Dressed to Kilt that Friends of Scotland has opened a 'Pop-Up Shop' in New York. It will share with the public some of Scotland's finest textiles and designs from March 22-April 13. Located at 13 East 69th Street, on the corner of Madison Avenue, select designs featured on the runway will be available to view from April 6 until April 11. It is also an opportunity for Scottish designers to meet with buyers from the US.

<http://www.scotland.gov.uk/News/Releases/2010/01/29150634>

Report on the traditional arts

31/01/2010

Young Scots seeking to improve their skills in traditional music or dance may get the opportunity to be mentored by a master exponent of the art.

That is one of the recommendations of the Traditional Arts Working Group report, published today (Sunday), that explores the cultural legacy of Scotland's past as reflected in traditional art forms.

A wide range of Scotland's traditional arts were represented on the working group, including song, dance, music, storytelling, poetry and drama. The report's recommendations to help preserve Scotland's traditional arts have been welcomed by Culture Minister, Fiona Hyslop.

Presenting the BBC Young Traditional Musician of the Year award on Sunday, in Glasgow's City Halls, Ms Hyslop said:

"Traditional arts play a unique role in Scotland's culture, heritage, economy, education and community life. This report brings together many achievable ideas that could help to ensure the continuity of these unique skills and traditions through generations of Scots to come.

"The idea that key individuals might pass on their skills and expertise to a younger generation via some kind of mentoring scheme is particularly attractive. I have asked the Scottish Arts Council and Creative Scotland to look at how this might work in practice and to make recommendations.

"The report also recognises that traditional arts make a significant contribution to Scotland's economy; I have already asked for an assessment of that contribution to be carried out.

"I would like to thank David Francis and the rest of the group for this thoughtful and practical report. I intend to respond fully in June, once the feasibility of its recommendations has been further explored with other public sector agencies."

David Francis, convener of the Working Group, said:

"The process of putting together the report for the minister has been really useful in giving us a snapshot of the traditional arts community's key concerns at this stage in its development. We found, by and large, a confident community in good heart.

"We hope that the recommendations in the report, if taken on board by the relevant authorities, and the traditional arts community itself, will help to increase the recognition of the importance of the traditional arts and help to build the esteem in which this important part of our culture should be held."

The Traditional Arts Working Group was formed in February 2009 to make recommendations to Ministers on how the traditional arts should be supported and their future secured:

<http://www.scotland.gov.uk/News/Releases/2010/04/22121552>

Report on national performing companies

22/04/2010

Scotland's five national companies performed to over a million people in their first two years of direct Scottish Government funding.

In 2007-08 and 2008-09, the National Theatre of Scotland, Royal Scottish National Orchestra, Scottish Ballet, Scottish Chamber Orchestra and Scottish Opera gave 1,939 performances, reaching a combined audience of 1,007,812 people.

Over the same period, the companies provided 5,425 education and outreach events, attracting and involving 202,370 participants.

The figures are contained in a report published today on the operation of the national performing companies.

Culture Minister Fiona Hyslop said:

"I congratulate all five companies on their tremendous achievements over the first two years of direct funding from Government.

"This report has been compiled as part of this Government's commitment to transparency, setting out our return on investment in the national companies.

"Individually and collectively, the companies make a huge contribution to Scotland's cultural life. Their performances and educational programmes are bringing the benefits of increased access to cultural activities to all parts of Scotland.

"The five companies are also excellent ambassadors for Scottish culture. Their overseas touring has introduced international audiences to the wealth and breadth of artistic talent that is nurtured and developed in modern Scotland."

Notable achievements include:

- * The National Theatre of Scotland has had international success with 'Black Watch', performed in Los Angeles, Toronto, Virginia, Sydney and London. The production won four Olivier Awards and the New York Drama Critics' Circle Award for Best Foreign Play.

- * The Royal Scottish National Orchestra broadened its appeal and brought a whole new audience to the Glasgow Royal Concert Hall, through imaginative collaborations with artists Elvis Costello, hip-hop DJ Beni G and leading video games composers.

- * In recognition of its impressive track-record for commissioning and programming, Scottish Ballet won the company prize for Outstanding Repertoire (Classical) at the Critics' Circle National Dance Awards, the Oscars of the dance world.

- * Through its skills development programme, the Scottish Chamber Orchestra developed a relationship with renowned Indian composer Amjad Ali Kahn, culminating in the creation of a new work - Samaagam - the centrepiece of a ground-breaking tour of India.

- * Scottish Opera's Music Director Francesco Corti made his debut with Smetana's The Two Widows, for which the company won a Herald Angel Award. Its production of Donizetti's Lucia di Lammermoor was one of the featured productions of the Marinsky Opera of St Petersburg's 2009 season.

Kings and queens of fashion

From London to Milan, Scotland's fashion designers are excelling.

International celebrities, Lady Gaga and Kylie Minogue, share a common appreciation – beautiful clothes made by Scotland's bright young fashion designers.

When New York vocalist, Lady Gaga – famous for her flamboyant dress sense – wore a silicone rubber dress created by Rachael Barrett in the video 'Telephone', it was another endorsement for Scotland's new generation of designers.

It also confirmed what many in the industry knew, Scotland is a breeding ground for fashion innovators.

Cool Scots

His first collection, a critical success, featured neon dresses and lace. Every one of his eight collections have sparked admiration and debate, with his edgy, unpredictable creations leading to appearances in Vogue and a consultancy with the Versace Versus label.

Actress Emma Watson and singer Rihanna wear clothes designed by the 27 year old, who fondly recalls window shopping in Glasgow with his sisters. Kylie Minogue hired him to create the costumes for the video to '2 Hearts' and Kane's London show this year proved his styles are what the ladies of taste will be craving to wear in 2010. Kate Moss, Lily Allen and Beth Ditto are already devotees.

"Chris won the Young Designer award at the Scottish Fashion Awards in 2006. Look where he is now," says Tessa Hartmann, founder of the awards and a leading industry voice who has worked with Ralph Lauren and crystal jewellery icons, Swarovski.

"He is up there alongside the leading figures in British fashion. He is incredibly innovative and you never really know what he is going to do, which keeps him ahead of the game. He has gone so far in such a short space of time."

Big In Milan and America

Another Scot at the top of his profession is Jonathan Saunders. The print designer from Glasgow School of Art has continued to shine since graduating in 1999. Following nine seasons showing in London, he wowed the New York crowds with his American debut in 2008, helping him land a commission for US High Street brand, Target.

His mix of graphic designs and prints saw him appointed Creative Director for Studio Pollini and his first collection for the Italian fashion house was shown in Milan two years ago to widespread acclaim. Stores from Moscow to Hong Kong are listed stockists for his clothes.

Building Reputation in Scotland

Not all Scots who are pioneering fresh ideas are having to leave Scotland to be recognised. Milliner William Chambers is a young designer sending ripples across the world from his homeland. Based in

Glasgow, the millinery graduate of Metropolitan University counts Moloko singer Roisin Murphy as an admirer of his bespoke, hand-made hats.

A regular in the high fashion press, he shows his collections at a studio boutique in Glasgow and also sells over the world wide web. His original headpieces include golden ram horns, feathers and metallic sculptures.

"I launched my online shop last year which has seen me receive orders from England, USA and the Middle East," says Chambers, who has been influenced by the work of master milliners Stephen Jones and Philip Treacy.

Our Fashionable Ladies

It isn't just Scottish men who are behind some of the fashion scene's most daring creations. Lady tailors are turning heads where it matters most.

Iona Crawford, like Chambers, pursues a highly promising career from Scotland. A first class Honours graduate in Fashion Design at Edinburgh College of Art, Crawford's elegant designs incorporate native fabrics such as cashmere and tweed. Combined with her unique designs, the effect is both contemporary and original. Described by Vogue as 'one to watch', she has recently showed in Tokyo and continues to win exclusive commissions.

Holly Fulton, a doyenne of the high fashion magazines, is another Scot lighting up the scene while Fraserburgh designer Louise Gray's masterful use of embroidery and silks have made her a catwalk favourite.

Celebrities might be rushing to buy garments by Scottish designers but where does Scotland stand, compared to the rest? Tessa Hartmann has no doubts.

"In terms of design credibility, we are one of the foremost in the world." That can only be encouraging for the next generation of designers.

The Scottish Fashion Awards takes place annually in June.

Business/Education links with Shanghai, China and Scotland

Research to help develop a design for the Scotland Pavilion to encourage further collaboration with Chinese businesses and to celebrate the links made so far. This research could help in creating exhibits within the pavilion that will be relevant to the host country.

<http://www.scotland.gov.uk/Topics/Government/International-Relations/china/Regional-Links/regionalfocus>

Regional Focus in China

Following analysis of China's regions, taking into consideration both a range of economic factors and existing links with Scotland, Scottish Ministers have decided to focus activities over the next five years on the following regions in China: Beijing; Shanghai; Shandong; Guangdong and Hong Kong.

Beijing is China's political capital, but is also important economically and financially. Shanghai is China's most important business and domestic financial centre. Guangdong is the manufacturing heartland while neighbouring Hong Kong is China's pre-eminent international financial centre. Shandong is another of the more advanced Chinese provinces with strong existing ties to Scotland. These regions cover each of China's three major economic zones: the Bohai Rim (Beijing and Shandong); the Pearl River Delta (Guangdong/Hong Kong); and the Yangtze River Delta (Shanghai).

In setting this regional focus we certainly do not preclude engagement with other regions as opportunities arise. For example, the Royal Botanic Gardens, Edinburgh will continue to be active in Yunnan province and elsewhere in South West China. In particular, where twinning and other arrangements exist outside of these regions particularly by local authorities, such as Edinburgh's link with Xi'an, Glasgow's link with Dalian, and Perth and Kinross Council's link with Haikou, we would encourage them to continue. Such twinnings, at the sub-provincial level, play an important role in broadening and deepening Scotland's relations with China.

Beijing:-

The Scottish Affairs Office is located within the British Embassy in Beijing.

The British Council have an office in Beijing

Scottish Development International's China HQ is located in Beijing.

Scottish companies/organisations with a presence in Beijing include:

- * Clyde Blowers
- * Edinburgh Petroleum Services
- * Edinburgh University
- * Global Connections

- * Howden Hua Engineering Co. Ltd
- * Interactive University
- * KAL
- * Logitech
- * Low and Bonar
- * Napier University
- * NCT (Beijing) Financial Equipment System
- * Picsel China Ltd
- * RMJM
- * Scottish Qualifications Authority
- * Standard Life Beijing Office
- * Standard Life Investments Beijing Office
- * Weir Group Beijing

The University of Glasgow have links with Qinghua University, the Chinese Academy of Sciences, the Central Academy of Fine Art in Beijing and Beijing Normal University. They also receive short term visits from students from the National Natural Science Foundation of China.

The University of Edinburgh have an office in Beijing with an official representative and will soon be launching an alumni group in China. They have a post graduate exchange programme with Beihang University and research links with Qinghua University, Peking University, Chinese University of Agriculture, and Chinese Academy of Sciences.

Glasgow Caledonian University have a memorandum of agreement for advanced entry to engineering programmes with Beijing Institute of Civil Engineering and Architecture.

The University of Dundee have a link with the Xiansheng Institute of Ecology and Geography, which is part of the Chinese Academy of Sciences.

Napier University have a China office in Beijing and have a joint research and staff-exchange programme with the University of International Business and Economics in Beijing.

The University of Paisley have various partnerships that allow Chinese students to complete their degrees in Scotland with Beijing Union University and Beijing Institute of Petrochemical Technology.

The University of Stirling have collaborated on a joint venture leading to awards in several BA Honour degrees with the Beijing-USA College of English.

The University of Aberdeen have research focussed memoranda of understanding with the Chinese University of Petroleum in Beijing and Beijing Institution of Technology.

Robert Gordon University have a memorandum of understanding covering increased scholarships with the College of Arts & Science of Beijing Union University.

Queen Margaret University have an SQA Chinese initiative with the Chinese Service Centre for Scholarly Exchange in Beijing.

Glasgow School of Art are working with the Chinese Central Academy of Fine Art to develop the first year of a GSA BA course which will be delivered to students in China.

Edinburgh College of Art have a partnership development with the Central Academy of Fine Art in Beijing. The programme involves around 40 students per year studying a year initially in Beijing before moving to Edinburgh

Heriot Watt University offer a Masters in Petroleum Engineering in partnership with the University of Petroleum in Beijing.

The University of St Andrews are in co-operation with Beijing Foreign Languages Institute.

The Royal Society of Edinburgh have a memorandum of understanding with the Chinese Academy of Sciences. This agreement includes a bilateral exchange programme for post-doctoral researchers.

The Royal Scottish Academy of Music and Drama (RSAMD) have well established links with the Beijing Conservatory.

The Royal Botanic Gardens in Edinburgh have a memorandum of understanding with the Chinese Academy of Sciences and the CAS Institute of Botany in Beijing

The Scottish Crop Research Institute and Mylnefield Research Services Ltd have academic collaborations with the Centre for Ecoenvironmental Science in Beijing

Elmwood College in Fife have a formal partnership agreement with China Agricultural University in Beijing and Beijing Sports University.

National Museums of Scotland have contact with The Palace Museum in Beijing

Elmwood College have a formal partnership agreement with Willow Golf Course in Beijing

Guangdong:-

There is a British Consulate-General and British Council office in Guangzhou.

The China-Britain Business Council have an office in Shenzhen.

Scottish companies with a presence in Shenzhen include:

- * Wilson & Garden

- * NCT

- * Wolfson Microelectronics

Glasgow Caledonian University have a Memorandum of Agreement aimed at delivering short programmes in computing and engineering with South China Normal University in Guangzhou.

The University of Edinburgh are in early discussions with South China University of Technology in Guangzhou to set up formal links.

Elmwood College from Fife have a formal partnership agreement with the Tourism College in Shenzhen, and Shenzhen University

National Museums of Scotland have links with Guangdong Museum and Shenzhen Museum.

Hong Kong:-

Brands and enterprises in Hong Kong with a Scottish heritage include:

Aberdeen International Fund Managers

Aggreko

Alexander Dennis (Far East) Limited

Balfour Beattie

Bank of Scotland

Baxters

Clyde Blowers

Coats plc

Edrington whiskies

Gingers

Highland Spring

Howden Burton Corblin Asia

Iron Bru

Jacobs Babbie

Loch Fyne Seafoods

Macsween

Marks and Clerk

Napier University

Presentation Products Ltd

Pringle (knitwear)

Pinneys

RMJM

Royal Bank of Scotland

Scottish and Eastern

Scottish Choice

Scott Wilson

Standard Life Asia

Teknek Ltd

The Alliance Trust Limited PLC

Todd & Duncan

Tunnocks

Walkers (biscuits)

William Grant & Son whiskies

Around 600 students from Hong Kong studied in Scotland's higher education institutions in 2004/05.

Napier University have around 1000 students studying a variety of undergraduate and postgraduate courses in partnership with Hong Kong University.

The University of Aberdeen have formal links with Hong Kong University.

The University of Edinburgh have very strong alumni links with Hong Kong.

Glasgow University have a memorandum of understanding with City University in Hong Kong and Hong Kong Polytechnic University

Glasgow Caledonian University have a franchise with Hong Kong Computer Institute.

Strathclyde University offers several courses in Hong Kong for the local market and several exchange agreements with Hong Kong Baptist University and Hong Kong Polytechnic.

The Robert Gordon University currently has around 70 students from Hong Kong at various stages of a Postgraduate Diploma in Clinical Pharmacy. The University also have 2 + 2 agreements with Hong Kong University (in Economics and in Accountancy, Finance and Law) and a student exchange agreement with the City University of Hong Kong.

Hong Kong has a thriving St Andrew's Society: www.standrewshk.org

The National Galleries of Scotland in partnership with the British Council hope to stage an exhibition in Hong Kong.

The National Museum of Scotland received a generous sponsorship from a Hong Kong business man which led to the opening of the Ivy Wu gallery.

Shanghai:-

There is a British Consulate in Shanghai and a British Council office.

SDI's Asia-Pacific regional office is located in Shanghai.

The China Britain Business Council have an office in Shanghai.

Scottish companies with a presence in Shanghai include:

- * Edrington Group
- * RBS
- * Shanghai Clyde Bergmann
- * Frank Sammeroff
- * IDC Cleanroom
- * Martin Currie
- * NABS
- * Prosper Engineering
- * Scottish and New Castle
- * Weir Group Shanghai
- * Whyte and Mackie

Elmwood College from Fife have a partnership agreement with Tongji University.

Glasgow University and Edinburgh University have a formal link with Fudan University.

Napier University have research collaborations with Shanghai Normal University

The University of Stirling have an agreement with Jiaotong and Shanghai Univeristy where students spend the first 2 years of a degree in China and the final two in Stirling.

Heriot Watt University have an agreement in collaborative teaching with Shanghai University of Finance and Management.

The Royal Scottish Academy of Music and Drama and the Shanghai East Century School are developing in partnership a Specialist Foundation Music School.

Elmwood College have a formal partnership agreement with Yin Tao Golf Club in Shanghai.

Shandong:-

Angus is twinned with Yantai in Shangdong

The China Britain Business Council have on office in Qingdao

The University of Glasgow have a general collaboration agreement with Yantai University in Shandong

Napier University have an agreement with Shandong Finance Institute which allows students study 3 years in China and 1 year in Edinburgh, leading to a degree from Napier. The University also have an agreement encouraging joint research and staff exchanges with the Shandong Finance Institute.

The University of Aberdeen have a research focused memorandum of understanding with Yantai Normal University

Legendary Scottish athlete and Christian missionary, Eric Liddell, is buried at Weifang in Shandong Province.

<http://www.scotland.org/about/innovation-and-creativity/features/education/china.html>

Scotland in China

For every one Scot there are some 260 Chinese people – so a Scottish eightsome reel would involve more than two thousand dancers in China! It doesn't take a great mathematician to work out that there is vast potential for trade in commodities and ideas between the two countries (including, perhaps, dancing shoes?).

Scotland was quick to build on historical contacts and links when China began to open up to foreign visitors and businesses back in the 1980s, and with China contributing more growth to the global economy over the past few years than the whole of the G8 put together, the importance of 'The Dragon' has been fully acknowledged by the Scottish Executive and a new official is being appointed to Beijing. The official, working closely with Scottish Development International, the Foreign and Commonwealth Office and the British Council will promote Scotland as a dynamic partner and will work to expand Scotland's Chinese business, educational and cultural links on a two-way basis.

A significant number of Scottish companies and organisations are already doing business directly in China through partnerships, joint ventures and wholly-owned foreign enterprises. Financial giants Royal Bank of Scotland and Standard Life are in Shanghai and Tianjin respectively. Leading distillers, The Edrington Group, opened an office in Shanghai in July 2003 taking their brands, The Famous Grouse, The Macallan and Highland Park, to an eager market where demand for malts has grown by 23%. Other Scottish companies making inroads into China include Scottish & Newcastle, Babbie, Clyde Blowers, Picisel Technologies and the Weir Group.

Today's educational links between Scotland and China are very strong and growing stronger. A number of Scottish schools have active exchange links with schools in China, encouraging two-way student and teacher language exchanges and the Scottish Qualifications Authority (SQA) delivers a number of Scottish qualifications such as Higher National Diplomas (HNDs) at Chinese universities. But probably one of the most exciting areas of development is the exporting of courses and the franchising of degrees in China by Scottish universities. Napier University is developing the first Scottish campus in a Chinese university in a joint venture with Zhengzhou University in Henan Province. Napier also has a contract to deliver an MSc in Insurance Accounting to the Southwest University of Finance and Economics in Chengdu.

Research into Climate Change Policy in Scotland

Research to help develop a design for the Scotland Pavilion to highlight the commitment to reducing the effects of climate change in Scotland. This includes government targets and innovations being made in industry and universities in Scotland. This will help to answer the brief 'better city, better life'.

<http://www.stopclimatechaos.org/09/jun/scotland-leads-world-fight-against-climate-change>

Scotland 'Leads the World' in the Fight Against Climate Change

The Scottish Parliament today (Wednesday 24 June) led the world by passing the strongest climate change legislation of any industrialised nation.



Stop Climate Chaos Scotland lobbying at Holyrood - image Maverick Photo Agency

MSPs voted in favour of legislation that commits Scotland to:

- at least 80% cuts of all greenhouse gases (on 1990 levels) by 2050
- a 2020 target of at least 42% reduction in greenhouse gases
- include the full effects of emissions from international aviation and shipping from the start
- a strong duty on all public bodies to make a full contribution to tackling climate change
- strong energy efficiency measures to tackle fuel poverty and save energy

Stop Climate Chaos Scotland (SCCS) has been campaigning for three years to see these key elements included in the Bill.



Mike Robinson of SCC Scotland outside Holyrood - by Maverick Photo Agency

Mike Robinson, Chair of Stop Climate Chaos Scotland, said

This is a truly momentous day. The Scottish Parliament has voted for legislation that will be held up as a positive example to the world ahead of climate talks in Copenhagen in December. An emissions reduction target of at least 42% and the inclusion of aviation and shipping from the start sets Scotland's Bill apart from the UK Act. We hope other developed nations will hear this call for action and follow Scotland's lead. Now that MSPs from all parties have made these moral commitments, they have a responsibility to do what is necessary to deliver them.

Stop Climate Chaos Scotland commends the Liberal Democrats and Greens for introducing robust targets early in the process and Labour and the SNP for their strong targets as the Bill neared conclusion.

<http://news.scotsman.com/politics/Scotland-can-lead-the-world.5879269.jp>

Scotland can lead the world in new carbon capture technologies

Published Date: 03 December 2009

By Adrian Clamp

THE countdown to a global treaty on climate change in Copenhagen is on – and so, too, is the race to harness the economic potential of carbon capture and storage (CCS).

Scotland is uniquely placed to be at the forefront of developing this new technology, thanks to the cavernous space under the North Sea that once stored oil resources. With challenges facing its financial sector, seizing the opportunity to create a

new world-leading storage industry in Scotland would be a "once in a generation" achievement.

Success is within reach, but it will require bold and decisive action and a visionary partnership between government and private industry.

Storing is recognised around the world as one of the most effective ways to cut the emissions of greenhouse gases from coal-fired power plants, and the race to find the new global leaders in this new industry has already begun.

President Obama has declared that he wants CCS technology ready for use in US coal-fired stations within a decade. In Norway, finance minister Kristin Halvorsen recently announced that his government plans to raise almost £400 million – a record investment – to spend next year on CCS technology.

The emerging markets will rely on innovation in the West to show the way forward. China, for example, which built an average of one new coal-fired power station every four days in 2006, will become a major CCS customer in future.

The UK is off to a good start with the launch of a CCS competition, which offers potentially hundreds of millions of pounds to support demonstration projects that can capture 90 per cent of the carbon from a commercial scale coal-fired plant.

In Scotland, the publication of an Edinburgh University-led study has demonstrated Scotland's capacity to store not just its own emissions but also those of the UK and other parts of Europe. First Minister Alex Salmond has spoken of creating 10,000 jobs in the Scottish CCS industry.

But how can Scotland take a decisive lead in the race?

The answer, just as in Copenhagen, is in achieving substantial, meaningful and purposeful collaboration.

Accenture's view is that those who understand the nature of the new collaboration and the interests and needs of each party can lead the way.

Scotland is rightly ambitious about a green future and has set its sights on an 80 per cent cut in emissions by 2050. CCS is a significant challenge and no one organisation can produce the technology and harness the space under the North Sea by itself.

For this reason, it is critical that there be collaboration between leading energy businesses and between these private-sector businesses and government, north and south of the Border.

The CCS industry is still in an emerging phase. Full implementation requires a significant amount of public funding, which the European Union and UK government is starting to provide.

Persuasive regulatory and financial incentives will be needed to help minimise the investment risks and encourage the major investment required.

The consortia of partner companies, which plan to work together to deploy CCS, will need to play to each partner's strengths and build on existing capabilities and assets.

New frameworks and operating regimes will need to be developed to ensure costs and risks are managed appropriately and transparently.

Winning the race requires private sector companies to trust and challenge each other and their public sector partners, and vice versa.

With so much at stake, all need to act in one unified direction. All will need to deal with lack of certainty around the long-term value of and confidentiality issues from sharing commercially sensitive intellectual property and strategy.

Finally, the general public also has a role to play. Thousands of people are expected to march against climate change through Glasgow on Saturday. Public support for the new CCS industry in Scotland will play a key part ensuring that appropriate significant investment can be made in Scotland, and that this "once in a generation" opportunity does not slip through our fingers.

http://www.wavegen.co.uk/news_archives_world_leader_16mar04.htm

Scotland "can lead world in wave power" 12/03/04

Scotland can become the world leader in generating electricity using wave power, securing a significant share of an industry set to be worth billions.

Scottish wave energy firm Wavegen predicts that the wave power industry is also capable of creating thousands of jobs.

But the firm also says government support, in the form of revenue funding, is vital now, while the industry is still in its infancy, to ensure it reaches its full potential.

Wavegen, which operates the world's first commercial-scale wave energy device, makes the comments in its submission to an inquiry by the Scottish Parliament's Enterprise and Culture Committee into the future of renewable energy in Scotland.

The Scottish Executive has set a series of targets to increase the amount of electricity generated from renewable energy sources such as wind, wave and hydro power – thus cutting reliance on oil, coal and gas, which will eventually run out.

Currently Scotland produces 12% of its electricity from renewable sources. This is set to increase to 18% by 2010 and 40% by 2020.

"If we are to meet these targets then it is vital that we develop a range of renewable energy technologies," says Wavegen in its submission. "We cannot rely on wind power and hydro-electricity, important as they are, to deliver these longer term targets."

Wavegen points out that wave energy is now roughly at the stage where wind energy was 10 years

ago. In the early days of wind power, the firm points out, Denmark seized the leading role and developed an industry that has created 15,000 jobs in Denmark alone – an indication of the potential of the wave industry to generate employment.

“The amount of energy in waves around the UK is more than the energy we currently convert to meet our demand for electricity, and Scotland has particularly high potential,” says Wavegen.

“Scotland has the chance to establish itself as the leader in wave energy technology across the world.”

Wavegen’s submission to the inquiry makes the case for more government support to help the industry develop and test technologies not yet at the stage of commercial viability.

The company warns: “The UK in general, and Scotland in particular, has the chance to establish the lead position on wave energy. It is vital that opportunity is not lost.

“Ongoing government support for this fledgling industry is essential if we are to maintain our lead.”

Wavegen argues that the support should be in the form of revenue funding as this would help reduce project risk, make it easier to attract and retain investors and would be less expensive for the Government, and ultimately the taxpayer.

The company also calls for significant investment in the national grid to enable it to cope with a large increase in electricity generation from more peripheral areas.

Wavegen operates the world’s first commercial-scale wave energy device that’s connected to the electricity grid. The unit, called Limpet, is on the island of Islay.

In 2003 the firm set up a joint venture with Faroese electricity company SEV to work on a project that aims to build a series of Wavegen’s air turbine power generation units into cliffs to form the world’s first wave power station. The overall project is worth £7 million and will form the blueprint for wave power stations in similar locations both in the Faroes and other parts of the world.

The World Energy Council estimates that twice as much energy can be harvested from wave power as is currently used to supply the entire world’s electricity demand.

Contacts:

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Jane Cumming & Jenny MacPherson: 01463 783018

www.platformpr.co.uk

<http://www.dailyrecord.co.uk/news/editors-choice/2010/03/17/scotland-rules-the-waves-as-country-shows-world-the-way-in-harvesting-wave-power-86908-22116924/>

Scotland rules the waves as country shows world the way in harvesting wave power

Mar 17 2010 By Magnus Gardham

IT'S a green power gold rush ... and our nation is leading it.

Scotland confirmed its place at the forefront of global wave and tidal energy yesterday when officials unveiled TEN massive projects to generate power off our north coast.

The plans will make us the first country on the planet to produce wave and tidal energy on a large enough scale to make big business sense.

And if all the projects succeed, they could power 750,000 homes - and create more than 5000 jobs - in just 10 years.

First Minister Alex Salmond couldn't hide his glee as he said: "Scotland rules the waves.

"These waters have been described as the Saudi Arabia of marine power, and today marks a major milestone in the global journey towards a low-carbon future."

The £5billion marine power revolution will centre on the Pentland Firth between John O'Groats and Orkney.

The Atlantic and North Sea meet in the eight-mile wide stretch of water, creating some of the strongest tides on the planet and producing giant waves.

The Crown Estate, which owns the seabed around the UK, gave the go-ahead yesterday for power companies to set up large-scale marine power projects in the firth and the waters around Orkney.

Officials at the normally staid public body didn't even try to hold back their excitement.

Crown Estate chief executive Roger Bright said: "This is truly amazing work. No one has attempted to do anything on this scale in the world."

Scientists have been working on marine power projects for years - but on a small scale. No one has ever tried to do it commercially - until now.

Three of Britain's biggest energy firms, ScottishPower, Scottish and Southern Energy and E.ON, will bankroll most of the 10 projects.

The giants have joined forces with wave and tidal power pioneers who have been testing.

And the seabed will look like a science fiction set as boffins bring in hundreds of weird and wonderful machines to create electricity from the waves and tides.

Edinburgh's Pelamis Wave Power will use their Sea Snake devices - huge floating booms harnessed to a "socket" on the seabed - to convert the force of the waves into electricity.

Pelamis boss Neels Kriek said yesterday's "momentous announcement" would go down in history around the world.

He added: "We look back to the birth of the steam engine in another age.

"But when our industry is fully developed, we will look back in the same way and trace the line back to today."

Another Edinburgh firm, Aquamarine Power, will fix banks of their Oyster generators to the seabed. The Oysters move back and forth with the waves and use pistons to generate power.

A third company, OpenHydro, will bolt huge turbines which look like jet engines to the seabed.

And the SeaGen machine, which looks and acts like an onshore wind turbine, will generate power as the firth's 20-knot tides turn its rotor blades.

Yesterday's announcement was a triumph for Salmond, who has put his neck on the line over marine power.

The SNP's opposition to nuclear energy leaves him no option but to back green technologies to the hilt, and he has even offered a £10million prize to encourage wave and tidal power pioneers.

But even if all 10 projects announced yesterday work perfectly, they will only meet a fraction of Scotland's energy needs.

And there are plenty of problems to overcome before they start pumping power into the electricity grid.

Marine power technology has not proved itself on a large scale, and the big power companies will have to invest up to £5billion to make the schemes work.

Another £1billion of public money could be needed to build the new harbours and power lines needed.

And the marine power firms will have to overcome the challenge of working in some of the world's most ferocious and dangerous waters.

But the prizes on offer if marine power can be made to work are far too big to ignore.

Salmond believes Scotland could eventually use renewable energy to produce TEN TIMES the power we need. That would make us a massive exporter of electricity and secure the future of our economy as well as helping to save the planet.

Britain has also pledged to cut its greenhouse gas emissions by 80 per cent by 2050, and green energy will have to play a major part if that target is to be met.

The marine energy scientists are confident they are up to the task. And yesterday's move towards wave power was welcomed on all sides.

Scots Secretary Jim Murphy said: "Scotland is naturally placed to make the most of this green revolution. We are set to see a significant expansion in the commercial development of wave and tidal energy."

Dr Richard Dixon, director of environmental pressure group WWF Scotland, added: "Wave and tidal power represent an energy and jobs bonanza for Scotland."

"Today's announcement should give investors the signal they need that Scotland is the place to be for marine energy."

FACTS

The schemes announced yesterday could produce 1.2 gigawatts of electricity - four times the peak output of the now-closed nuclear power plant at Dounreay.

The waters around Scotland hold a quarter of Europe's potential wave and tidal power.

Scotland can already generate up to three gigawatts of green power from onshore wind and hydro plants, and a further four gigawatts of onshore wind and hydro power is planned.

Plans are in place to generate up to 11.2 gigawatts of power from offshore wind turbines over the next decade.

Ministers say Scotland is on course to surpass its target of generating 31 per cent of its electricity from green sources by next year. The long-term target is to produce half our power from green sources by 2020.

<http://www.scotland.gov.uk/News/Releases/2010/06/18105749>

Energy from waste

18/06/2010

The potential energy from waste that cannot be reused or recycled has been quantified for the first time in a new report which highlights opportunities from the use of various waste to energy technologies.

It shows:

- * Heat only plants could meet six per cent of Scotland's existing heat needs
- * Electricity production in energy from waste facilities could meet eight per cent of Scotland's existing electricity demand
- * Combined heat and power waste treatment plants could meet three per cent of Scotland's total heat and electricity demand

Energy Minister Jim Mather said:

"Our Zero Waste Plan outlines how we can all prevent waste, increase recycling and reuse valuable resources. Yet energy from waste has a part to play in a low carbon society where all efforts have been made to reduce, re-use and recycle valuable resources that would otherwise be buried in landfill.

"This useful report highlights the potentially significant contribution of waste to our heat and electricity needs. Electricity only generation is, however, generally wasteful due to the loss of heat to the atmosphere so care must be taken to ensure we get the maximum energy output from waste by utilising heat wherever possible."

Professor Jan Bebbington, Vice Chair of Sustainable Development Commission Scotland who compiled the report, said:

"Strong performance in waste minimisation and recycling can go hand in hand with the use of energy from waste as part of an integrated strategy. This SDC Scotland report shows what the potential is and helps the Scottish Government's Zero Waste aspiration move forward. We believe the potential for energy from waste can be developed as part of creating low carbon communities across Scotland."

Councillor Alison Hay, COSLA's Regeneration and Sustainable Development Spokesperson said:

"Energy from waste can provide a valuable contribution to sustainable development, the delivery of a low carbon Scottish economy and the achievement of zero waste in Scotland. COSLA believes that energy from waste has an essential part to play along with waste prevention, re-use and recycling activities in a zero waste society.

"The report's identification of the various heat and/or electricity generation scenarios is welcomed. We see energy from waste include direct combustion as well as the creation and use of biogas. In either case the efficient use of heat and/or electricity locally will be important. However, the exact choice of energy from waste plant should be arrived at locally, where an analysis shows that such an approach achieves the smallest carbon emissions."

The Energy from Waste Potential in Scotland report is available at: The report was commissioned by the Scottish Government for the Renewable Heat Implementation Group. The report takes existing and planned waste targets into consideration. More information on the Scottish Government's approach to zero waste is at <http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1/>

The Scottish Government's Zero Waste Plan is at:
<http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1/wastestrategy>

Scottish Government targets are to meet 50 per cent of electricity demand from renewables by 2020 and 11 per cent of heat from renewables by 2020.

Recycling rubber tyres – possibly into running tracks or soft play areas within cities

New technology which have gone through the completed proof of concept stage of development and now require funding..... [investment-ready Proof of Concept projects](#)

<http://www.scottish-enterprise.com/investment-opportunities/invest-scottish-research/proofofconcept-completed-projects/Microbial-devulcanisation-and-recycling-of-rubber-from-used-vehicle-tyres-%28DART%29.aspx>

Microbial devulcanisation and recycling of rubber from used vehicle tyres (DART)

Contacts

- Commercial contact: Brendan McGuckin
- Principal investigator: Professor Nick Christofi
- Institution: Napier University
- Press officer: Brenda Munro

Background

The disposal of rubber products, in particular automotive tyres, is an increasing problem worldwide. Rubber is treated with sulphur in order to provide the strength required by that product - vulcanisation.

In order to be able to re-use rubber products, this sulphur must be removed – devulcanisation. There are a number of different methods current in use for this process including:

- chemical;
- mechanical;
- biological; and
- ultrasonic.

The DART process developed at Napier University treats rubber crumb with a microbiological solution. This process appears to present a competing technology to these processes, whilst not producing polluting chemical substances, or using the energy intensive mechanical means.

The technology also appears to offer a superior solution to other biotechnology and chemical based solutions to the problem of used rubber tyres which contain a multi-rubber mixture and present a more difficult material to treat as compared to a single rubber product.

In addition, in Europe there has been a ban on the disposal to landfill of whole tyres since 2003, and there will be a ban as shredded tyres in 2006.

This technology could provide a cost-effective and reliable green technology to car and rubber tyre manufacturers charged with their end-of-life treatment.

Currently the technology is at a stage where the team is ready to trial pilot-scale treatment systems.

Throughout the project, direct contact with the marketplace has been maintained; UK rubber goods manufacturers have expressed very positive interest in the proposal for a high quality, devulcanised recycled rubber product. Different rubber products contain different percentages of natural: synthetic rubber, resulting in different characteristics from the product.

A potential application for the product has been identified in the flooring market in the first instance and other wide-ranging potential applications will be quantified. Continued research will lead to the development of a higher quality material for use in higher value products such as tyres, hoses and belting.

Large-scale product development will be reliant on setting up large-scale treatment units. This could be done through an alliance with rubber crumb suppliers and large engineering companies to demonstrate the viability of the production platform and the DART team has identified crumb manufacturers who would be prepared to collaborate in setting up a full-scale treatment system and supply crumb for processing.

The means of achieving this will be investigated during the next 6 months, and will include exploring the possibility of a joint venture or licensing deal with an end user to fund this scale up process development.

The exploitation of this technology could create an opportunity for employment which fits with the Scottish Executive's "Green Jobs Strategy", launched by the Deputy First Minister in 2004. This could be through formation of a spin out company, or joint venture development in Scotland.

<http://www.envirocluster.co.uk/business-exchange/info.php?refnum=917>

Used tyre recycling to produce compressed tyre bales with applications in civil engineering projects
Enterprise Europe Network

Technology collaboration - 10 GB 46P5 3H5S

A Scottish company (UK) has become a leader in recycling tyres into compressed tyre bales which can be used in civil engineering projects. The process is simple and low cost and produces a product to a recognised standard. The company has already developed partnerships in Finland and Latvia and is looking for partners who can use the technology and expertise to address the problem of waste tyres elsewhere in Europe or who can develop the use of tyre bales in civil engineering projects.

End date: Wednesday 23rd June 2010

Website Link: <http://www.enterpriseuropeeast.org.uk/eox/services/enquire.asp?id=10 GB 46P5 3H5S&EnquiryType=BBS>

A Scottish company (UK) has become a leader in recycling tyres into compressed tyre bales which can be used in civil engineering projects. The process is simple and low cost and produces a product

to a recognised standard. The company has already developed partnerships in Finland and Latvia and is looking for partners who can use the technology and expertise to address the problem of waste tyres elsewhere in Europe or who can develop the use of tyre bales in civil engineering projects.

Full description

The company is one of the founder companies to introduce tyre baling into the UK and has steadily built up a client base within the civil engineering industry in the use of tyre bales for construction applications. They have been involved in developing a recognised standard for the tyre bale product.

The company can supply tyre baling machines each capable of recycling 3 000 tyres per day, organise training on the use of the machines and the process and supply information and technical expertise on the use of the tyre bales for the construction industry.

The tyre bales, can be used in a wide variety of applications such as:

- road sub bases
- retaining walls
- gabions and waterway control
- flood control
- mud slide and erosion control
- soil elevation
- shock absorption for foundation walls, firing ranges and bunkers
- sound barrier along motorways and railways
- impact barrier for motorways and racetracks.

Block specification is as follows:

SIZE = 1.5m x 1.25m x 0.8m approximately
VOLUME = 1.5 cubic mtrs
MASS = 0.850 tonnes approximately
DENSITY = 0.6 tonnes/m³
NUMBER OF TYRES USED PER BLOCK = 110 (car)
FORMING WIRE = galvanised 3-5 microns
WIRE THICKNESS = 4mm
TENSILE STRENGTH = 15001700N/MM²
FORMING PRESSURE MANUFACTURE 41,000 kgs

Innovative Aspects

Tyre are baled using a cold process and simple technology. The tyre bales produced, known as used rubber recycling operation blocks, meet a recognised standard and are used in civil engineering projects in place of conventional materials such as aggregates and concrete.

The advantage of using the blocks are as follows:

- lighter weight and lower earth pressure
- greatly improved drainage
- excellent thermal insulation
- pre-compressed material
- uniform size of block allowing easy building and placement

- use of recycled material
- low overall construction cost.

They want to develop this worldwide and create new markets....

tyre recycling facility

We are a newly-established tyre recycling company, the first of its kind in Scotland. Tyres are difficult to dispose of because of their bulk, poor degradability and high toxicity. Their recycling involves the shredding and crumbing of tyres, and extracting and separating the steel and fluff from the rubber. We plan to accept and process up to three million tyres annually. The Scottish Executive offered us RSA of £230,000 in November 2003 to assist with a project involving capital expenditure of £1.4 million. We anticipate creating 29 new jobs over a two year period.

Phillip Benge, Managing Director, Anaxiom (Scotland) Ltd, East Kilbride

<http://www.competitionathleticsurfaces.com/general/articles/putting-old-tires-back-on-track.html>

Putting Old Tires Back on Track

Finding new uses for old tires is a growing trend as the country seeks solutions for one of its toughest waste problems. Used tires have been among the largest and most problematic sources of waste because of the large volume produced -- 250 million generated in the U.S. each year -- and their durability.

In the case of Competition Athletic Surfaces, Inc. the common denominator is the use of recycled tires.

What does building running tracks have to do with producing electricity, making mulch and filtering wastewater?

In the case of Competition Athletic Surfaces, Inc. the common denominator is the use of recycled tires. Each year Competition Athletic Surfaces keeps the equivalent of over 20,000 used automobile tires from stacking up in landfills by using surfacing products made with recycled rubber for 20 athletic surfacing projects.

Used tires form part of the surface for the track at Chattanooga Christian School, the rooftop walking track at Unum Group and the indoor track at the new Siskin Fitness Center, among other projects, according to President Lee Murray.

10 USES FOR A DEAD TYRE

1 As a building material

Almost any brick wall could potentially be a tyre wall, says Mischa Hewitt, project manager at Earthship Brighton. The self-contained Earthship Brighton building, for example, contains 900 old tyres, weighing around nine tons. The tyres have to be filled with earth. "You shovel the soil in and tamp it down," explains Mischa Hewitt. Using local earth is particularly eco-friendly, he points out, as there is no transport involved. "Earthships, for example, are often built into the sides of hills, so there's a supply of soil there. Building is lower-impact if you aren't moving stuff around." Tyre walls will biodegrade in sunlight, but if they are rendered, they will last.

2 To make level crossings and roads

HoldFast Level Crossings Ltd has already reused over 10 million tyres to surface level crossings; it has installed blocks made from tyres in about 3,000 of the UK's 8,000-plus level crossings. Now the company is branching out into highways. The rubber roads, which are being trialled, can be laid along old railway tracks. Each mile of road will use over 350,000 tyres and cost £1.4m per mile, compared to the average road building costs of over £20m per mile. The shock-absorbing properties of rubber are an added safety factor and the roads are durable and easy to maintain.

5 To make sports surfaces and playgrounds

Playground surfaces based on recycled rubber granules are softer than concrete or tarmac. Recycled tyres can also be used to provide a base for athletics tracks, and a rubber base also makes for more realistic artificial grass. The Charles Lawrence Group has been manufacturing synthetic sports and playground surfaces from truck tyres since 1990, and now uses around 450,000 tyres a year. Customers also have the option of including a proportion of recycled Nike trainers, says Marc Blamire of Playtop, the Lawrence play surface brand. "Nike has a corporate social responsibility programme to recycle old trainers and dispose of counterfeits." (www.clgplc.co.uk; 01636 615 868)

6 To make carpet underlay

Crumbed recycled rubber makes a very durable carpet underlay. Duralay Treadmore, for example, made by Interfloor of Lancashire, is guaranteed for 25 years and contains 90 per cent granulated car tyres. "It is very robust," says Paul Marsh of Interfloor. "Think of the wear and tear a car tyre takes. The underlay is particularly suitable for halls, stairs and landings, which get heavy traffic." Interfloor uses 2.5 million tyres a year. (www.interfloor.com; 01706 213 131)

7 Mulching the garden

Mulch with granulated tyres instead of bark and you'll never have to replace your chippings. There are other advantages too, says Robert Kellow, whose Re-Scape product has been featured at the Hampton Court Flower Show and is already laid at the Duchy of Cornwall nurseries. "It keeps weeds down, it doesn't rob plants of moisture, pests don't breed in it and it's good for drainage." And for some unknown but welcome reason, dogs and cats don't see it as a handy loo. As well as Re-Scape, Kellow also produces Re-Track, which is used in equestrian schools. Re-Scape mulch costs around £6 for a 25kg bag and around £100 per ton for large-scale projects. (Re-Scape: 01872 240 044)

Wind turbines:-----

<http://www.scotland.gov.uk/Publications/2005/06/1693437/34445>

Innovative wind turbines

We are a family-owned business involved in the design and manufacture of small wind turbines, and one of the top five manufacturers of such turbines worldwide. In 1995, we won a SMART award to design, develop and demonstrate a wind pump system with a hydraulic transmission based on a novel power-matching system. The system can also be used for sea or polluted water conversion to pure drinking water. Wind turbines using the technology are now in operation in New Zealand, Ethiopia, Brazil and South Africa. We received a further SMART award to investigate a new wind turbine for the developing urban renewable electricity generation market. This turbine will perform effectively, be cheaper to install and have a flexible design that reduces loading on the building it is mounted on.

We have installed three of our wind turbines on our premises for testing and demonstration. These turbines also supply some 40 per cent of our electricity. We eventually hope to get all of our electricity from our on-site turbines.

Gordon Proven, General Manager, Proven

Energy Ltd, Stewarton

Solar Lily Pads Leave Robot Paw Prints on Glasgow River



How can you use solar energy to power one of Scotland's greatest cities and make an old river look futuristic? Scottish architecture firm ZM Architecture designed giant lily pads for the River Clyde that collect solar energy and energize the city's grid. Want to see a cool aerial view?

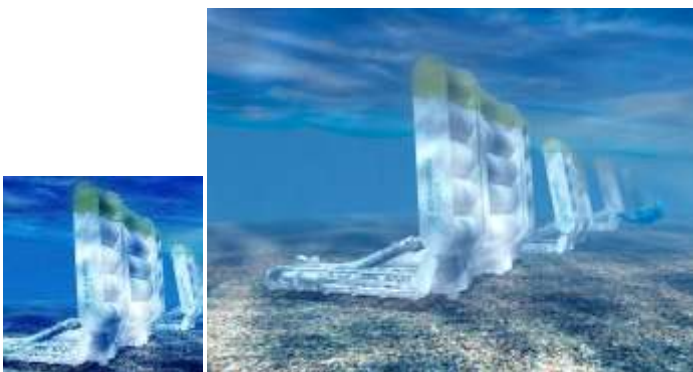


From a distance, they look like paw prints from a giant robotic animal. This idea won first place at the International Design Awards, and officials in the city of Glasgow are planning a pilot project soon.

[Wave Power Generator Electrifies Grid In Scotland](#)

Thu, Dec 3, 2009

[Alternative Power Sources](#), [Renewable Power](#), [Water Power](#)



The Oyster is a new wave energy generator located offshore of Scotland, and according to its manufacturer, is the only ocean hydro electric unit that is producing energy. Renewable energy from wave power became a bit more popular when the Oyster hydro electric unit began generating power to Scotland's electrical grid only recently.

Aquamarine Power triggered their connection of the Oyster wave power unit just offshore of Orkney, Scotland, and it is now a benchmark for ocean power procedures that currently generate electricity.

The Oyster is basically a hydraulic pump that works using a hinged flap, and a big iron component that shifts to and fro based on the wave action. As this component goes back and forth, it triggers a hydraulic piston, which then draws water below ground into a hydro electric turbine that powers a generator producing electricity.

The maximum amount of power capacity produced from the Oyster 1 device is approximately 2 MW, this figure is based on where it is located. Aquamarine Power had their research financed for this project courtesy of the UK government and is currently researching and working on the next version of the Oyster unit.

Presently, there are numerous technologies which are being researched that will utilize the energy from waves or tidal surges, which can produce electrical power, these include below water generating systems. The benefit of using a pump engineered device comes with the simplicity of its plan and the many components like the gearboxes and generators, which do not come in contact with the water.

Right now there are 20 Oysters that are connected to the ocean bottom. In about 35 feet of water, and these are able to generate enough electricity to power up to 9000 UK residences, this number comes from the manufacturer Aquamarine Power.

There is a similar device known as the sea dog pump out of the United States, which uses a similar method of pumping water from offshore to hydro electric turbines located nearby that will generate the electricity.

Initial testing for the Oyster was completed at the European Marine Energy Center. In the United States there is currently a call out to set up a similar ocean power research facility in the south part of Massachusetts.

The vast coastal regions of the United States and what with the UK being an island, it only makes good sense to further investigate and research the incredible potential of the energy that could be generated by the offshore ocean waters. Both the United Kingdom and the United States are committed to reaching alternative energy solutions for their respective populations. As both countries continue to depend on carbon producing fossil fuels to generate their electric needs, new renewable sources of energy will become more important.

Islay set to be prince of tides

Islanders back a lucrative £750,000 turbine plan to harness the power of the Moon and the sea

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- [Paul Kelbie](#)
- [The Observer](#), Sunday 6 April 2008
- [Article history](#)



Wavegen's first wave powered electricity generating power station. Photograph: Murdo Macleod

Scotland's first large-scale tidal energy project is to be installed on the island of Islay. Members of the community-owned Islay Energy Trust have backed creation of the commercial-sized project, which is to be built in collaboration with Robert Gordon University in Aberdeen.

Scotland's fifth-largest island will become home to between four and six turbines with a total capacity of around 2 megawatts. Developing the turbines is expected to cost up to £750,000 and should take around three years to complete. Once in operation, revenue would be generated from the sale of electricity.

'It's a very innovative business model,' said Philip Maxwell, chairman of the Islay Energy Trust. 'Instead of the conventional route of involving a large energy company or turbine manufacturer, the community is taking the initiative.'

'We aim to ensure that any exploitation of the considerable tidal energy resources in the seas around the Isle of Islay yields substantial and sustainable benefits to the community, as well as providing greater energy security.'

Scientists have estimated that marine power could generate one third of Scotland's renewable energy needs, with the seas around Islay holding particularly rich potential.

Islay, famed for its malt whisky, is already home to the world's first commercial wave power station - Wavegen's Limpet at Portnahaven. Waves are driven by winds; by contrast, tidal power taps the energy of the Moon as it raises tides around the Earth.

The new proposal for Islay is a major step forward in the commercialisation of tidal energy exploitation which could ultimately generate enough energy to supply about 5 per cent of total demand for the UK. It will also make a contribution to meeting Scotland's target of 50 per cent of electricity coming from renewable energy resources by 2020, and could reduce carbon dioxide emissions by around 4,000 tonnes a year.

'Tidal streams offer a substantial and predictable source of renewable energy and this is an area where RGU has specific expertise,' said Dr Alan Owen, of Robert Gordon University's School of Engineering.

It is hoped that the pre-feasibility study, which will evaluate potential tidal resources, locate possible sites for the underwater turbines and prepare for the environmental impact assessment, will be completed by the end of the summer.

Research in Universities and Education in Scotland

Research to help develop a design for the Scotland Pavilion to highlight the high standards of education we have in Scotland and how this relates to our citizens having a 'better life', through their research contributions in global issues.

(<http://www.scotland.org/about/innovation-and-creativity/education-universities-and-research/index.html>)

Knowledge is power

Education for children has been compulsory in Scotland since 1496. Consequently the number of Scots of working class origin who have risen to make significant contributions in literature, philosophy, medicine, finance, law, engineering and countless other fields has always been hugely disproportionate for a country of Scotland's size.

The key to this has always been Scotland's universities and further education institutions. Whether they be centuries old – or born comparatively recently – the facts speak for themselves: with just 9% of the UK's population, Scotland wins 13% of government research grants, and 12% of eligible EU funding: small wonder that English royalty have often travelled to Scotland for their education! (Prince William at St. Andrews being just the most recent example.)

Better living through technology

World-class universities and research facilities have helped to place Scotland at the forefront of the dynamic biotechnology industry, an area where Scotland is growing 30% faster than the rest of Europe. Consider some of the success stories to have sprung from our universities in recent years: Diagnostic Potentials Ltd, a spin-out project from Glasgow University, received a Scottish Council award for their pioneering work in improving the diagnosis of Alzheimers disease, while Dundee University is a key player in diabetes research and the Rowett Institute in Aberdeen is a world leader in obesity research.

On a slightly different tack, Scotland achieved another educational breakthrough when Abertay University became the first university in the world to offer taught courses in computer games programming, further cementing Scotland's already impressive presence in the international games development industry.

The next generation

Another of Scotland's universities, Stirling, recently played host to a unique educational gathering. The World Youth Congress; a series of symposiums designed to bring together the best and brightest young people in the world so that they can share their skills and expertise with a view to reducing poverty, ignorance and suffering around the world.

Over six hundred young people from around the world came to Stirling to attend the first WYC to be held in Europe. Young people like Ryan Hreljac – who was only six when his teacher told him children were dying in Africa because they had no drinking water. Eight years on – and still aged only

14 – the organisation Ryan established, Ryan's Well Foundation, has raised over \$500,000 and helped to build hundreds of wells in Africa.

It is perhaps appropriate that a country with a proud record of philanthropy – a country like Scotland – should have played host to such young people. . . .

Research into Scottish ethnic communities

Research to help develop a design for the Scotland Pavilion to highlight the ethnic diversity of Scotland and the immigration and emigration that has affected our nation.

<http://www.youngscot.org/onescotland/?ss=433&s=142&sr=407&ID=4640>

Minority Ethnic Communities In Scotland

Now's your chance to find out about some of the minority ethnic communities that help make up the Scotland as we know it today.

Ethnic communities are groups of people who have the same cultural traditions and characteristics, such as a common language, history, religion or social values.

The population of Scotland is made up of lots of different communities, which helps to make it such an interesting and great place to live. The [2001 Census](#) (Census takes place every 10 years), which collects all sorts of information on people living in Scotland, shows that Scotland is made up of many different communities including:

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Caribbean
- African

But there are many others.

These smaller ethnic communities are sometimes called "ethnic minority or minority ethnic communities". For all the ethnic groups, Scotland is the most common or the second most common country of birth.

According to the 2001 Census there are just over 100,000 ethnic minority people living in Scotland. That's about 2% of the total population of Scotland.

Pakistanis are the largest minority ethnic group, followed by Chinese, Indians and people who are of mixed ethnic backgrounds.

Scotland has always had lots of different ethnic communities. People started coming to Scotland from different countries centuries ago, and many of the people who make up minority ethnic communities in Scotland are the sons, daughters and grandchildren of people who first moved to Scotland many years ago.

There are also many people living in Scotland who belong to Gypsy/Traveller communities. Gypsies/Travellers are regarded as ethnic minorities although - with the exception of Roma Gypsies and Irish Travellers - they are not officially recognised as such in Scotland and aren't counted in the Census.

The Second Population Explosion

Foundries, mills, mines and shipyards changed the skyline and filled the dear green place with the smog and smoke of industry. A new work-force was needed, and willing workers flooded in from the Lowlands, Highlands and Islands of Scotland and Ireland.

In 1848 it is estimated that over a thousand Irish a week arrived in the city, escaping a potato famine in Ireland.

In 1861 the population of Glasgow was 395,503, many of them living in the Merchant City in over-crowded accommodation called 'single ends' which were bursting at the seams with humanity.

Research into Scottish food and drink

Research to help develop a design for the Scotland Pavilion to showcase our food and drink heritage, as the pavilion, like others, will need refreshment areas.

<http://www.scotland.gov.uk/News/Releases/2010/03/03112929>

Food and drink to sustain Homecoming success

03/03/2010

Homecoming was so successful in rallying Scots around a common theme that Ministers have decided that it makes strong economic sense to build on this through similar co-ordinated national activity that will see some of Scotland's great assets spotlighted in subsequent years.

Announcing today that a year focusing on Scotland's food and drink will start in 2010, Tourism Minister Jim Mather said years focused on promoting the varied aspects of Scotland's tourism industry would be part of the Homecoming 2009 legacy and a further announcement about themes to come will be made in due course. He added that this approach would help support the tourism industry during a time of economic downturn and it is crucial that Scotland continues to support its tourism sector and sustain the momentum generated last year.

The announcement comes as the Scottish Government updates its Economic Recovery Plan which aims to accelerate recovery through greater public sector alignment on Scotland's key economic strengths.

Speaking on a visit with Food Minister Richard Lochhead to Pub Grub of the Year winner the King's Wark pub in Leith, Mr Mather said:

"Through our national food and drink policy, we want to help pubs such as this one, hotels, visitor attractions, restaurants and cafes build on our international reputation and deliver the best of Scottish produce to the 16 million people who visit this country every year. The food and drink sector already employs 360,000 people and we have committed £75 million to create more jobs, more sales and more exports - what we are aiming for now is further investment in the skills and innovation required to increase its value to the economy to £12.5 billion by 2017.

Tourism Minister Jim Mather and Food Secretary Richard Lochhead at the Kings Wark in Leith, Edinburgh, with owners Lesley Currie and Mike Greig, "Recent preliminary figures showed that Scotland continues to outperform the rest of the UK in key overseas markets with an increase of 25 per cent in trips from North America and a 43 per cent increase in trips from the rest of the world (compared with increases of 6 per cent and 0.9 per cent across the rest of the UK respectively). These results clearly show that Homecoming has had an impact and people are specifically selecting Scotland as a destination of choice.

"Scotland is holding its own in what has been one of the most difficult years experienced by tourism across the world. It is clear that our reputation as a land of food and drink is one of the factors in

maintaining this position and therefore we should look to capitalise on this area of real economic benefit."

The initiative will provide the opportunity to:

- * Build on our reputation as 'A land of food and drink'
- * Link to the food and drink industry strategy pillars of Premium, Provenance, and Health
- * Drive up the quality and increase the role and use of food and drink, including fresh, seasonal and local produce, in Scotland's tourism industry
- * Highlight the best of Scottish food at home and abroad

Mr Mather said:

"As confidence returns to the Scottish economy, there remain challenges and it will take time for the demand for Scotland's goods and services to return to previous levels. However, tourism and food and drink are strong performers and a year focused on our food and drink will help deliver a lasting legacy."

Mr Lochhead said:

"Demand for Scottish produce both at home and abroad continues to soar, boosted by the successful Homecoming celebrations which helped raise awareness of our fantastic food and drink. It is vital that its legacy doesn't go to waste and this new drive to enhance Scotland's credentials as a land of food and drink will build on the successful foundations of our national food and drink policy, which fully supports our farming, fishing and food industries.

"Scotland's food and drink sector remains one of our key economic strengths. It thrives on our stunning landscapes and pristine coastal waters and its quality and freshness is a tribute to our producers and manufacturers - but we can do even better. Delivering the next wave of success can only be met through a joint response from all those growing, making, buying and selling Scottish food and drink at home and abroad."

Paul McLaughlin, Chief Executive of Scotland Food & Drink, said:

"This is a great opportunity for Scotland and a step towards developing our international reputation as 'A Land of Food and Drink'. A year focusing on Scotland's food and drink is the ideal catalyst for our industry to join with the foodservice and hospitality sectors in making this vision become a reality.

"Scottish Food & Drink Fortnight, which takes place in September, will become a focal point of activity. Throughout the year we also look forward to ensuring that the positive messages about Scottish food and drink, and all the great produce and products that it represents, become embedded into consumers' minds both at home and worldwide."



Scotland Food & Drink: Vision, Mission & Strategy

Scotland is blessed with a fantastic larder of some of the best natural produce in the world. With a longstanding reputation for producing quality products and an envied flair for innovation, our food and drink companies should be exploiting the very values that our country stands for - beautiful unspoilt landscapes, fertile land and clean air.

Our vision is to make Scotland internationally known as 'A Land of Food and Drink' and grow our industry from £10 billion to £12.5 billion by 2017. It's an ambitious goal but one that can be achieved if the industry works together, pools resources and knowledge and uses the Scotland Food & Drink brand to the best possible advantage.

By bringing everyone together to discuss our successes, our problems and our ideas, we can harness the collective resources of one of Scotland's most successful - and important - industry sectors. And we are working to bring together the whole supply chain with the public sector to celebrate the fantastic produce available on our doorstep.

Scotland Food & Drink is committed to supporting the industry and serving the needs of discerning consumers by supplying the best of Scotland's food and drink throughout Scotland, across the UK and around the world. Our vision is a future where our farmers and fishermen, processors and distillers, researchers, educators and public agencies can work in partnership by sharing best practice across the board.

Our mission is to position Scotland among the world's top three producers of premium food and drink products and generate £12.5 billion per annum for our industry by 2017.

Key Strategies

When it was first created, Scotland Food & Drink identified four key platforms on which to develop strategies for industry growth. These were:

- Reputation
- Collaboration
- Innovation
- Skills

Each strategy had its own dedicated working group comprising dedicated individuals from member companies, the retail and foodservice sectors, trade associations, the education sector, the research industry and the public sector.

The development of the new industry strategy keeps these four areas of concentration prominent and continues to work on the projects within each of those working groups.

Whilst underpinned by reputation, collaboration, innovation, skills and also the issue of sustainability and scale, the strategy now identifies three obvious strengths to which we can play in the global market. These are:

- Strong internationally competitive PREMIUM brands
- A reputation for naturally HEALTHY foods
- PROVENANCE (our Scottish credentials) which people immediately associate with quality, authenticity and trustworthiness

It is Scotland Food & Drink's job to guide the industry so we can make the most of our natural resources, the skills of our people and the energy of businesses operating right across the supply chain. So to achieve a sustainable and profitable food and drink industry that is consumer-focused, market-led and internationally competitive - and benefiting our primary and secondary producers - we must work hard if we are to reach those strategic goals.

To find out how you can become involved and share our exciting vision and mission for the future of the industry, contact Scotland Food & Drink on 0131 524 8640 or email us.

http://www.scotlandfoodanddrink.org/view_item.aspx?item_id=58946&open2=false

Scotland Food & Drink - Our Working Groups

Scotland Food & Drink has identified 4 key areas in which it will develop its strategy for growth for the industry:

- Reputation
- Collaboration
- Innovation
- Skills

These groups comprise individuals drawn from the industry and our partner organisations and will help develop our various projects and support.

Reputation Group: This group is exploring ways in which Scottish food and drink companies can exploit business opportunities in overseas markets and how we can enhance Scotland's reputation as 'A Land of Food and Drink' on an international platform.

Collaboration Group: By working together and sharing our knowledge, information and best practice, we can harness the collective resources of one of Scotland's most important industry sectors. This group will develop ways of improving collaboration.

Innovation Group: Scotland already has a worldwide reputation for innovation within its food and drink industry so this group is looking at ways to help more companies achieve their aspirations when it comes to new product innovation.

Skills Group: People are the lifeblood of our industry yet food and drink often struggles to attract talented individuals wishing to develop a fulfilling career. This group is tasked with finding solutions to this problem and developing our existing skills.

<http://www.scotland.gov.uk/News/Releases/2010/01/20094518>

Haggis sales on the up

20/01/2010

One of Scotland's largest meat producers today announced a significant rise in haggis sales as they opened their new premises in Falkirk.

Rural Affairs Secretary Richard Lochhead visited Malcolm Allan Ltd today to officially open the new office premises and see how the company is preparing for Burns Night after learning of their 2000 per cent rise in haggis sales this year. Richard Lochhead with members of the Allan family

Mr Lochhead said:

"It's a tremendous honour to be here today to mark the next chapter in one of the food industry's true success stories. For over fifty years Malcolm Allan Ltd has gone from strength to strength and remains a key supplier of quality meat to retailers and food service providers.

"After such a phenomenal rise in sales the haggis has certainly confirmed its chieftain status. This truly demonstrates that there is strong consumer demand for our national dish. It is great news that Malcolm Allan's award-winning product is now available for lads and lassies throughout England, so they too can raise a glass a toast the haggis.

"Employing over 120 staff - in part thanks to substantial funding from the Scottish Government - they are an example to others, helping us to meet the aims of our National Food and Drink Policy. They've also shown a great deal of ambition, for example developing lower fat, healthier options and initiating an application for Lorne sausage to receive protected food name status.

"Enhancing our reputation as a land of food and drink and providing healthy and sustainable food choices is one of our top priorities, and our continued partnership with retailers and processors can help us deliver further success."

Gordon Allan, Malcolm Allan Director said:

"I am delighted the Cabinet Secretary came along to open our new facilities. The support of his department was greatly appreciated and has enabled us to expand at a greater rate than we would have been able to do so. The direct result of this support is we have increased our capacity which has let us send some of our products south of the border for the first time."

<http://www.telegraph.co.uk/earth/earthnews/7055411/Haggis-sales-up-in-credit-crunch.html>

Haggis sales up in credit crunch

Sales of haggis are soaring as people eat more unusual cuts of meat during the recession.

By Louise Gray, Environment Correspondent

Published: 9:00AM GMT 25 Jan 2010

The meat pudding is made from a sheep's stomach stuffed with oatmeal and minced intestines and is traditionally eaten on Burn's Night.

This year supermarkets are reporting stronger sales than ever and said haggis is even flying off the shelves during the rest of the year as customers look for cheap and nutritious meals.

Total haggis sales for 2009 in the UK alone were worth £8.8 million, an increase of around 19 per cent on 2008 figures, according to Scottish Government figures.

Leading haggis maker, Macsween of Edinburgh, has reported a total sales increase of 20 per cent for 2009 and an increase of 25 per cent in the run up to Burns Night 2010.

The increase is largely due to the Homecoming celebrations last year to celebrate 250 years since the birth of Scotland's national poet Robert Burns. Haggis is also being offered in more variations, including cocktail haggis for starters and slices of haggis for breakfast.

But experts say the year round increase in demand is due to consumers being a little less squeamish about unusual cuts of meat.

In the last year major retailers have brought back ration-book era cuts of meat like pigs trotters and ox cheeks as demand grows for cheap and nutritious meat.

Siobhan Barnes, Sainsbury's meat buyer, said people are also learning to love offal like haggis. Last year the chain sold more than 50,000 haggis and expects sales to go up this year.

"We've seen a surge in sales of offal and cheaper cuts of meat over the past few months, as people have been getting smarter with their cooking. Haggis sales, for example, have been rising steadily, and we expect sales to rise further as people embrace some of the more unusual ways to enjoy meat."

David Philpot, M&S meat expert, also said shoppers were embracing haggis as it is a very filling dish for the price.

"Sales have been strong throughout the year for Haggis, as well as Lorne sausage - the traditional Scottish sausage which we rolled out to M&S southern stores last year and has done well since the

'credit crunch'. Sales certainly appear to indicate that customers are becoming increasingly more adventurous with their meat choices".

Laurent Vernet, head of marketing at Quality Meat Scotland, said the craze for haggis should continue all year now.

"Butchers are also reporting that haggis is increasingly being enjoyed not only on Burns Night, but all year round," he said.

Burns night

Burns night has long been celebrated round the world. The works of Burns are taught in Russian schools, and Russia claims to have more Burns clubs than Scotland.

In Ljubljana in Slovenia, people toast Scotland's bard with their literary counterpart, Prešeren, at the Society of Slovenian Scottish Friendship's annual Burns Prešeren Supper.

The Bhatti family in Sialkot, Pakistan, cherish the Burns Supper tradition and have made bagpipes for four generations.

Globetrotting haggis

<http://www.scotland.org.uk/magazine/globetrotting-haggis>

"For the past few years we've seen haggis sales increasing by 20% a year. We now sell a quarter of a million tins of haggis a year and around 15 percent of those are for export. The Scottish gift trade is still our major market but we are moving into other areas. We sell well in Canada and we're now targeting the USA. Our haggis is also sold in Japan where it is served in bars as a snack."

Although Russia is possibly the country most noted for its Burns fervour outside Scotland, the biggest overseas market for both Macsween and Stahlys, is France.

"We do get enquiries from Russia and every Russian I've ever spoken to has been able to quote Burns but we get most orders from France," said Jo Macsween. "We send three tonnes of haggis there and we now supply the Monoprix chain of supermarkets. We also supply specialist shops in Paris which used to just want Irish goods. Now there is a demand for anything Scottish."

"I think the auld alliance also has something to do with it and the fact many ex-pats live in France but another factor is that the French have a high appreciation for fine foods and our products are respected for being of a consistently high standard."

She added that while they are more than happy to supply haggis all over the globe, variations in importation rules in different countries means the company prefers those placing the orders to arrange shipment themselves.

"We can give advice but local knowledge is really what you need. Rules can change and it is better for the people on the ground to find out what they need to get the haggis through customs. There can be quite a lot of red tape," said Jo.

Ken Stahly is also no stranger to the bureaucracy to be negotiated in exporting fresh haggis.

"Three pallets of our fresh haggis got stuck in Canada once and we had to bring the whole lot back. 10,000 labels had to be written off and we had to start all over again! At this time of year we export fresh haggis but after Burns night it tends to just be tins we send out and it is a far smoother, easier process."

Despite the difficulties it would seem that where there is a will and an appetite there is a way and on Burns night, in particular, haggis will be taking pride of place on dinner tables all over the world.

Research into green spaces

Research to help develop a design for the Scotland Pavilion, reflecting on how green space affects people living in the city.



<http://www.snh.gov.uk/about-scotlands-nature/habitats-and-ecosystems/greenspaces-and-gardens/>

Urban greenspace and gardens

'Greenspace' includes public and private [gardens](#), parks and grounds, amenity land, sports and play areas, green corridors, natural and semi-natural areas, [allotments](#) and community growing spaces, burial grounds and other functional green areas. Together this represents a wide range of habitats and ecosystems within the urban environment which are valuable to a variety of wildlife.

Urban greenspace by nature is close to where the majority of Scotland's population live and therefore provides an opportunity for people to [enjoy the outdoors](#) and connect with nature in their own neighbourhood.

What we do

sportscotland supports sport and recreation in the outdoors in the following ways:

- **Support, advice and funding to Scottish Governing Bodies of sport**, such as the Scottish Canoe Association and the Mountaineering Council for Scotland.
[See the Governing bodies section of the site](#)
- **Sport facility development and funding**
Through the [Sports Facilities Fund](#) **sportscotland** funds a range of outdoor sport facilities. This has included the Edinburgh International Climbing Arena at Ratho, the Aonach Mor downhill mountain bike course and smaller projects such as boat storage at Lochore Meadows Country Park.
- **Demonstration projects**
sportscotland produces best practice guidance on projects relevant to sport and recreation in the outdoors. This has included the design and development of a sustainable changing facility for canoeists on the River Spey and a report on the design and construction of a mountain bike training facility at **sportscotland's** National Centre Glenmore Lodge (see the guidance, research and policy page).
- **Strategy and project development**
sportscotland has worked with partners on the development of a range of projects and strategies relevant to the interests of sport and recreation in the outdoors. Recently, for example, we have been part of the steering group responsible for the development of a national framework for the sustainable development of mountain biking in Scotland.
- **Planning**
sportscotland's planning team comments on planning applications, development plans and planning guidance in the interest of outdoor sport.
- **Representation**
sportscotland represents outdoor sport and recreation interests on a range of national and regional steering groups and consultative forums, such as the National Access Forum.
- **Consultation response work**
Working with partners, **sportscotland** responds to a range of consultations in the interests of outdoor sport and recreation (see policy responses page).
- **Support**
sportscotland works to support sport and recreation interests in situations of conflict resolution and in promoting positive and sustainable solutions for sport.
- **Investment in coaching, clubs, volunteering and athletes** including a range of outdoor sports and outdoor sport participants. For more information see the "[About us](#)" section of this site.
- **The Active Schools Network** includes projects that encourage children to participate in sport and recreation in the outdoors. See [Active schools section of site](#).
- **Training, teaching and coaching** opportunities in a range of outdoor sports are provided through [sportscotland's National Centres](#).
- **Research**
sportscotland undertakes research and publishes reports, including sports participation data, relevant to outdoor sport and recreation. (see Guidance, research and policy page and [participation research](#))

<http://www.greenspacescotland.org.uk/default.asp?page=524>

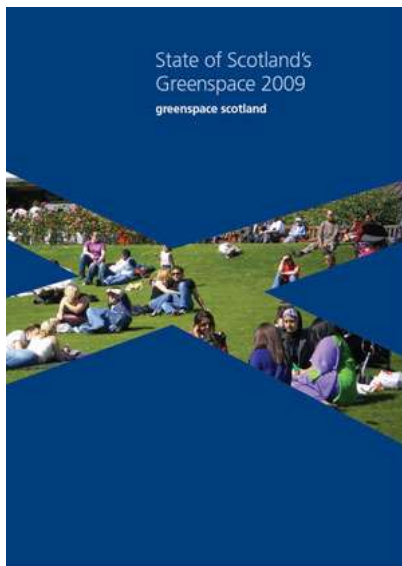
State of Scotland's Greenspace 2009

The State of Scotland's Greenspace 2009 reveals for the first time the extent of urban greenspace in Scotland. It also provides information on the different types of greenspace and charts local authority work on greenspace audits and strategies.

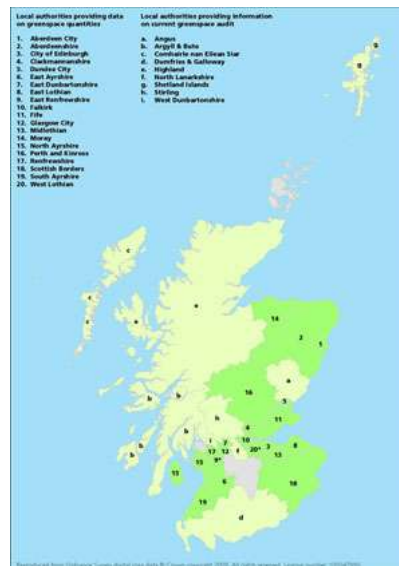
Please note that the interactive map is 5MB to download.

You will need to be in full screen mode to view the interactive map properly.

[Download the full report](#)



[Click to open the interactive map](#)



The report found that there is nearly 85,000 hectares of greenspace in urban Scotland - that's the equivalent in size to 120,000 football pitches. Translating this down to a human scale; it means that across Scotland we have an average of 23m² of greenspace per person or an area the size of 9 double beds!

The amounts, types and distribution of greenspace vary widely across local authorities, reflecting the historic settlement and development pattern of towns and neighbourhoods. At a national level, private gardens account for nearly a third (30%) of all greenspace, with natural spaces making up a further 28%. The amenity greenspace around our houses and buildings adds in another 15%, closely followed by sports areas at

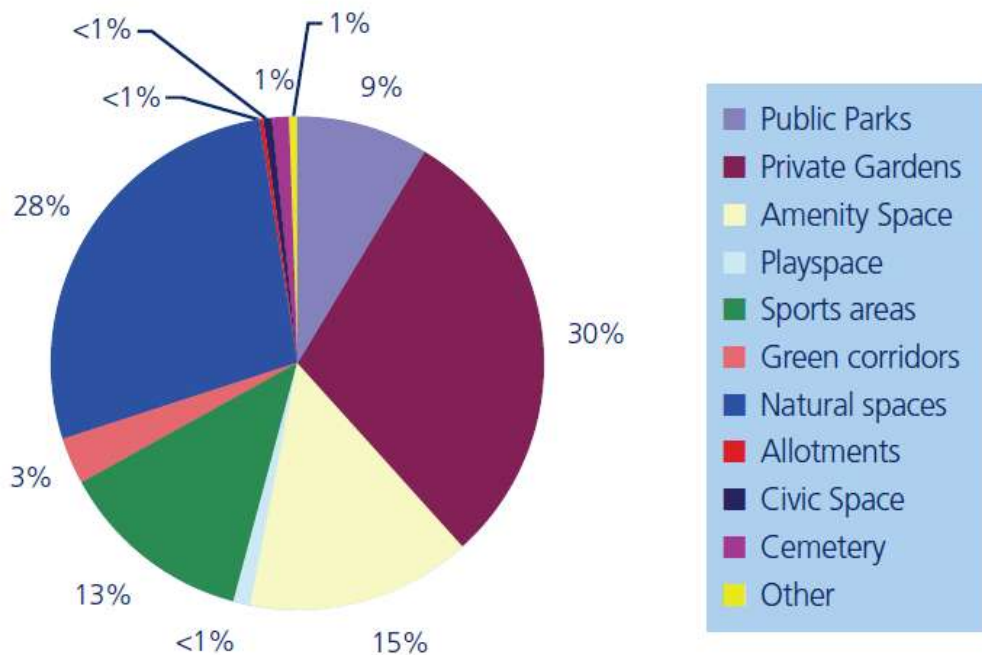
13%, and public parks and gardens at 9%. Play spaces, allotments and burial grounds cover relatively small areas.

The 2009 Report presents data from 20 of the 32 local authorities, **covering 34% of Scotland's land area and 70% of its population.** It draws on the **greenspace mapping that has been carried out with Scotland's** local authorities. This mapping records the location, area and type of all greenspaces within urban areas. It is expected that future reports will cover all of urban Scotland.

Roseanna Cunningham, Minister for Environment said:

Understanding our national greenspace resource is vital, as it is becoming increasingly evident that good quality greenspaces contribute strongly to boosting physical activity and mental health, attracting investment and creating places where people want to live. Urban greenspace can also help to mitigate the impacts of flooding, air pollution and high temperatures, as well as supporting wildlife. While it is important that local authorities understand their greenspace resource and plan for its development and management strategically, a national picture can help to track progress and tackle large scale issues of climate change and health.

Figure 3: Summary of different greenspace types in Scotland



(c) Research on health and greenspace

A study in England (Mitchell and Popham, 2008) used the greenspace category of a geographic dataset, the Generalised Land Use Database (GLUD, 2001), to classify the pre-retirement age population into five 'greenspace exposure' groups based on the proportion of greenspace in their area. They then compared this with individual mortality records from the Office for National Statistics.

The study found that populations exposed to the greenest environments also have the lowest levels of health inequality related to income deprivation. This suggests that physical environment, which promote good health could be important in reducing socio-economic health inequalities. One of the study authors, Dr Richard Mitchell at the University of Glasgow, is currently carrying out a similar analysis for Scotland.

Plants in our towns and cities

Flowering plants and ferns find many places to grow in our towns and cities.

Islands

As our cities and towns have grown they have surrounded but preserved fragments of natural habitat. These islands of ravine woodland, grassland, scree and cliff are important refuges containing species of wild plants not found elsewhere in the urban landscape. Sometimes these plants can be rare and vulnerable species such as the sticky catchfly and forked spleenwort on Arthur's Seat in Edinburgh. Relics of our industrial past such as shale bings have created islands of new habitat which have developed a unique flora of their own.

A river runs through it

Our towns and cities grew up along the side of rivers, streams and estuaries. As well as functioning as important wildlife corridors these watercourses retain many of the native streamside plants such as water avens, giant bellflower and water mint. These native species are often part of a lively species mixture which includes garden escapes and amenity planting.

Non-native species ? unwanted invaders or welcome newcomers

Non-native plant species are those which man has brought either deliberately or accidentally to areas beyond their natural range. In our towns and cities a large proportion of the plants growing in a wild state are non-natives. Some plants such as Himalayan balsam are garden plants which have jumped the garden fence to become established in the wild, other have arrived through international transport and shipping. Non-native species can add to the colour of our towns and cities and by colonising waste ground turning it green increase the area plant cover in a concrete jungle but a small proportion become highly invasive. Giant hogweed is a good example of an invasive plant species that becomes a problem not only as it displaces native plants and blocks pathways but also because it has toxic sap.


Going wild in public places

There is a great opportunity to increase the wildlife of our towns by leaving wild plants to grow naturally where they are not in our way. This has the added benefit of reducing the cost of the mowing and spraying needed to manage them. Birds, butterflies and bees will all benefit. People may initially complain of what seems untidy but soon adapt when the advantages are explained.


Going wild in your garden

Wildlife cannot survive without habitat and every little helps, even a corner of your garden. The classic green garden addition is a little flower-rich meadow or nettle patch for the butterflies but many of our gardens are too small even for that. So think single species - every native plant is a small victory for wildlife. And some of our native plants are truly beautiful. What about wood anemone and native bluebell in a difficult shady spot? In the sunshine, try the globeflower, one of the native geraniums or the lovely melancholy thistle. The last does not live up to its name, it is a purple beauty, it could not be more Scottish and it has no inconvenient spines



Fungi are fascinating

They have been around for millions of years and are not plants or animals so have a kingdom of their own. Fungi come in all shapes, sizes and colours (and smells!) and can be found all over the world throughout the year living on wood, roots, soil, leaves, insects, dung and even on us! [One of the largest, heaviest and oldest living things known on earth is a fungus called Armillaria ostoyae in America](#) .


In Scotland

Our woodland, grassland, mountains and coasts provide special habitats for over 12,000 species (2). Scotland is internationally important for the brightly coloured waxcap species which live on undisturbed grassland. Scottish woodland provide homes for fungi protected by [UK biodiversity action plans](#)  including the Hazel Glove Fungus and a group of tooth fungi , while some species of puffball have only been recorded in Scotland (4).

Our wildlife needs them

Much of our wildlife depends on fungi. Fungi exchange food with plants to help them grow and tidy up fallen leaves and [dead wood](#)  by [decomposing and recycling](#)  them back into a healthier soil. Fungi provide food and shelter for wildlife including the small black beetle, slug and red squirrel.

We need them

We also depend on fungi as they help produce many of our everyday foods including bread, cakes, biscuits and beer, and also our medicines including antibiotics and cholesterol busting statins. Paper and dyes can also be made from fungi. Some fungi are tasty to eat, but others are poisonous, so always check with an expert and follow [The Scottish Wild Mushroom Code](#) .

What we're doing

Scottish Natural Heritage (SNH) helps to protect fungi by including them in the [Species Action Framework](#) and by the protection given to designated sites for fungi and their habitats.

What you can do

The main threats to fungi are habitat loss, high concentrations of nutrients and soil disturbance. You can help by creating a home for fungi in your garden such as a compost heap, as fungi love damp shady spaces. To find out more ways you can protect fungi try visiting the [BBC breathing places site](#) or look at these other fungi links.

<http://www.snh.gov.uk/climate-change/people-nature-and-climate/our-relationship/>

Our relationship with nature and climate

We have shaped Scotland's landscapes, flora and fauna, and they in turn have shaped, fed, and inspired us. We depend on these natural services to power, feed, fuel and build our economy and lifestyles. Conversely our nature and landscapes, as we know them, depend on the way we run our economy and live our lives to maintain the spaces and climatic conditions that allow them to thrive.

Recently, human-induced climate change has become a product of how we interact with nature - a lop-sided partnership that has resulted from ways of living that our limited natural resources cannot support indefinitely. Climate change now presents the single greatest threat to our nature and landscapes, and it also threatens our lifestyles, our economy and our culture.

[How can we respond to climate change in a way that helps our nature, landscapes and people prosper?](#)

We enjoy the obvious, tangible benefits and pleasures of visible wildlife and landscapes, and the crops and animals we farm. But there is a whole range of other goods and services our ecosystems provide us with that are no less important despite their invisibility. These 'services' range from water and air purification, through to crop pollination by bees and other insects, to flood alleviation and erosion control, to name but a few. They are provided entirely free of charge yet their value is enormous.

Opportunities for nature and people

We can work with nature to improve our response to climate change.

By changing how we manage Scotland's nature and landscapes, we can support our wild species and spaces and address the worst extremes of climate change. In doing so we will secure the fundamental ecosystem services that make our quality of life so rich and create better places for people to live.

The predicted impacts of climate change in Scotland provide a strong imperative for an urgent and effective response. It is a challenging task, but it presents us with the opportunity and incentive to redouble our efforts in enhancing Scotland's nature and landscapes, and to create greener, healthier, safer places for people to live.

By supporting Scotland-wide networks of healthy, resilient habitats we can enable many plant and animal species to disperse into new areas as the climate changes. We can help both our iconic species and the 'keystone' species, that are vital in sustaining the ecological systems we rely on for food, fuel and resources, to adapt to a changing climate.

But we can also work with natural processes to help society respond effectively to climate change. We can manage our woodlands and peatlands to store carbon, and we can harness the power of wind and waves to reduce our carbon emissions. We can plant trees and preserve bogs that help protect us from floods and we can maintain saltmarshes that support our wildlife and help protect our communities from rising sea levels.

Realising these opportunities depends on how we choose to plan for, manage and use our nature and landscapes. Find out more about how you can [help nature help you](#) respond to climate change.

Adapting to climate change impacts

We need to prepare for life in a different Scotland

Even if we reduced our carbon emissions dramatically tomorrow, the climate is set to keep changing for decades to come. So while we must also limit further damage, we all need to think about how to change what we do for life in a changed climate.

Thinking long term...

Choices we make which last a long time are the most critical. Woodlands take decades to grow, and we need to decide what sort of planting and management now will provide useful and beautiful woods in a century's time. Houses, bridges, roads and railways may be affected by rising sea levels, local flooding events, higher heatwave temperatures and future needs for fertile farmland.

Thinking about risks in an uncertain world

We don't know exactly what is going to happen, nor how fast. So in adapting to a changing climate we shouldn't put all our eggs in one basket especially in relation to longer-term choices we should try to prepare for a range of different circumstances. For example, the

plantation forests of Scotland are dominated by a single species Sitka spruce. Foresters are already considering whether to diversify plantations to limit the possible impact of a pest or disease which has become lethal to these trees under climate change.

Thinking about natural systems

We all depend on the natural world for a range of benefits, from plentiful rain and clean water, to crops pollinated by bees, and the wildlife and beauty of our wild landscapes. We have largely used these benefits as if they are a right, but in a different, climate change-Scotland they may not continue to be available in the same ways. More information will be needed on how these natural systems are working and will be changed by climate change impacts.

Gardening for well-being

As well as [helping wildlife](#) , gardening can be good for you too.

Research shows that gardening helps tackle obesity, protects against cancer and heart disease, strengthens bones and fights stress. Calorie crunchers will be keen to know that thirty minutes' digging can burn 250 calories, while even weeding takes 105 calories. As a bonus, all that bending, stretching and carrying tones up your muscles as well as any workout in the gym (and for free!).

A recent American study found that women over 50 who garden at least once a week have a higher bone density than women who do almost any other form of exercise. Getting out in the sun also helps the body to produce vitamin D, which in turn allows us to absorb more calcium - vital for bone health. Studies have also shown that gardening helps people relax and can even help people with mental health problems.

Inverness abuzz with £475,000 plan to bring bees back to cities



- The Co-operative's Plan Bee project aims to reintroduce the insects to Britain's urban landscape

DEBORAH ANDERSON

[Share](#) [0 comments](#)

28 Feb 2010

The city of Inverness has been chosen to be part of a major new scheme to encourage more - people to keep bees.

It is the only Scottish city currently taking part in the project, which aims to reverse the falling numbers of honeybees in the UK by persuading people in towns and cities to keep hives.

The scheme is being introduced by the Co-operative, which has supermarkets across Scotland. It believes urban beekeeping could be a vital tool in helping revive numbers of the insects, which play an important role in agriculture.

Last year the Co-operative, which has 600 hives on its farmland, piloted a scheme to train would-be beekeepers on allotments in Manchester.

Now it is bringing its Plan Bee programme to other areas of Manchester, as well as to London and Inverness.

Paul Monaghan, head of social goals at the Co-operative, said: "Nature's number-one - pollinating machine appears to be breaking down, and no-one knows for sure why.

"Urban beekeeping is becoming increasingly popular and could be a vital tool in the reverse of the decline in the UK."

He added: "Through our urban beekeeper projects we want to show people that you don't have to have acres of land to take up beekeeping."

The value of commercial crops that benefit from bee pollination is estimated at £100 million to £200 million a year – while the honey industry is worth some £10 million to £30 million. But bee populations face a growing number of threats, including pests and diseases such as the varroa destructor mite, and a lack of food sources such as wild flowers.

Numbers of honeybee colonies have fallen by between 6.7% and almost 12% a year over the past three years, according to the UK Government.

The Co-op scheme, in which people can sign up for a free two-day course that provides them with kit, bees and an easy-to-use plastic "beehaus" hive, is being run with the aim of getting 300 new beekeepers in the UK's cities.

Alan Teale, president of the Scottish Beekeepers Association, who is based in Inverness, said: "There is no doubt that the falling number of honeybees needs to be addressed." But he

warned: “The focus really needs to be on the countryside rather than our towns and cities, as that alone will not tackle the problem.

“People need to realise that beekeeping is quite a responsibility. I doubt whether even a couple of two-day courses would be enough, and perhaps ongoing training with local beekeeping associations should be included.

“Reversing the decline will only work if those involved are properly trained and supported.”

An extra £225,000 newly announced for Plan Bee will help fund the beekeeping scheme for city gardens and allotments, along with financing more research into the causes of bee decline. It brings total funding by the Co-operative for the programme, which was launched in January 2009, to £475,000.

Funding has already been put towards researching the potential impact on bees of pesticides known as neonicotinoids – which the Co-operative has banned from its farms.

The research programme has also sponsored efforts to map where native British black - honeybees – believed to be hardier than the Italian honeybees most often used in hives – are found, so they can be used to breed new, tougher queens.

The Co-operative will also be giving away hundreds of thousands of packets of bee-friendly wildflower seeds.

The celebrity bee list

Sir Edmund Hillary: The late mountaineer was a world-famous beekeeper. Along with his brother Rex, Sir Edmund began keeping honey bees in his native New Zealand because it allowed him to do some mountain climbing in winter.

Scarlett Johansson: The Hollywood actress developed an interest after Samuel L Jackson gave her a hive full of bees as a wedding present. Her husband, fellow actor Ryan Reynolds, revealed he was shocked when the colony of insects arrived at their home.

Ronnie Corbett: The comedy legend and one half of the Two Ronnies has kept bees since the late 1970s, and has hives at his home in East Lothian.

Farmers facing the future

19/02/2010

Scotland's farmers have a valuable role to play in Scottish society, with the potential to feed the nation, power the economy and improve the environment.

Rural Affairs Secretary, Richard Lochhead, speaking at the National Farmers Union Scotland annual general meeting, said that the farming industry could look forward to a strong future and announced over £5 million in additional support for farming. This included:

- * £3 million to off-set additional costs to farmers forced to move livestock following the collapse of buildings during the recent severe weather

- * £250,000 to educate schoolchildren across Scotland on the link between farming and the food on their plates

- * more than £1.4 million for land based skills development and training

- * almost £400,000 for a five year development programme to boost the £12 million raspberry industry

In addition, £15 million will be brought forward from the Scotland Rural Development Programme business development budget to allow more farmers to invest in their farms now.

Mr Lochhead said:

"Agriculture has a fundamental role to play in Scotland's future.

"That is why this Government is fully committed to supporting the industry and why we have taken action to ensure the sector can develop from strength to strength.

"We have sat round the table with the industry - worked with our farmers - and together found distinct solutions which work in the best interests of Scottish agriculture and Scotland as a whole.

"Last year we published 'Recipe for Success', Scotland's first ever national food and drink policy. Much has already been achieved, but 2010 can be the year people start to really believe that Scotland is a land of food and drink.

"The fundamental economic drivers for the farming sector are strong and future prospects are good. The population is growing, demand for food is increasing and the global economic recovery is gaining pace.

"Independent surveys chart the level of optimism among farmers at its equal highest. Investment in 2009 was much higher than anticipated and significant expansion is planned across most sectors in 2010.

"There will be challenges ahead to be faced, for instance on prices in the cereal sector. My pledge is to continue to work with the industry, to face up to the challenges ahead, and fight for what is best for Scotland in London and Brussels."

The National Farmers Union Scotland annual general meeting took place in the Fairmont St Andrews Hotel on Thursday February 18 and Friday February 19.

An additional £3 million has been made available to off-set the costs to farmers whose buildings collapsed during the recent severe weather. The Cabinet Secretary has acted on the recommendations of the Collapsed Building Technical Working Group and agreed to make payments

of up to £6,000 per business available to farmers to cover costs, including the uninsurable expense of having to rent or provide temporary structures for livestock. The Scottish Government has written to planning authorities stressing the importance of dealing with applications swiftly to rebuild snow-damaged buildings.

Almost £250,000 is being invested in organisations that work with teachers and school children to boost wider knowledge of the food and drink sector. This package will support the Royal Highland Education Trust and the Scottish Food and Drink Federation to work with schools on food and farming events. It will also support the International Eco Schools Conference in Scotland where Food and Drink is one of the key themes.

Lantra has been awarded a three year skills development grant, worth £463,000 per year, to help farm businesses secure skilled staff through Modern Apprenticeships. Lantra is the Sector Skills Council (SSC) for environmental and land-based industries. The Scottish Government funds the organisation under a three year contract to improve skills development for business with the current money covering the organisation to 2013. Lantra has eight staff based at offices near Scone.

The Scottish Government has awarded the Raspberry Breeding Consortium £395,000 towards a £1 million, five year raspberry breeding programme designed to strengthen the success of the sector. Membership of the Consortium, is drawn from a wide range of interests within the soft fruit industry including the Agricultural and Horticultural Development Board - Horticultural Development Company, plant propagators, soft fruit growers and Mylnefield Research Services - the commercial arm of the Scottish Crop Research Institute.

Research into Scottish Oral History

Research to help develop a design for the Scotland Pavilion to show how oral history can benefit people with alzhiemers and create an interactive activity within the pavilion that can apply to any age or race. Would help with diversity in Scotland.

Oral History Programme

The purpose of the Oral History Programme was to record the memories of those with a connection to buildings involved in archaeological examination along the route of the M74 Completion.

The Programme provided an opportunity to use oral history in combination with historical archaeology. In just over a year, twenty-four respondents from diverse social, occupational, and cultural backgrounds were recruited and interviewed for the project.

Their testimonies provide a unique set of human histories that enhance our knowledge of the social, economic, political, and cultural aspects of life in these historically important sites. The testimonies and photographs collected were also used in the exhibitions which took place at Scotland Street School Museum.

You can access the oral history archive at the [Scottish Oral History Centre](#) based at the University of Strathclyde.



Photographs gathered as a part of the Oral History Programme: left-right: Sarah Rodgers (in pram), brought up in McKinley Street; Disha Parkash, resident of Devon Street; Thomas Wilson's father in McKinley Street; Marion Neil by the furnaces at Govan Iron works (Dixon's Blazes) where her father worked

The Scottish Oral History Centre was set up in 1995 within the Department of History at the University of Strathclyde to support the use of oral history within the academic community and in the cognate areas such as archives and museums.

The Centre seeks to tackle issues concerning the use of oral history in research, whether within or outside the academic community, seeking to promote the development of a 'best practice' in relation to the conduct and utilisation of oral-history research in its widest context.

SOHC Staff

[Professor Arthur McIvor \(Director\)](#)

Oral history of work & occupational health in Britain; labour history; oral history of Glasgow; oral history of workers in wartime Britain. AHRC Knowledge Transfer Fellow (2009-11): The Voice in the Museum (work and social identities)

[Dr Angela Bartie](#)

Oral history of the arts and culture and in youth and gangs in post-war Britain. Research Fellow (funding development), training and outreach, and general administration.

[Dr Juliette Pattinson](#)

Oral history of the Second World War – with a special interest in the Special Operations Executive, the First Aid Nursing Yeomanry and the Reserved Occupations.

Dr Andrew Perchard

Oral history of industrial workplaces and communities, particularly coal, aluminium and occupational and environmental health. Research Fellow - impact of deindustrialisation on Scotland

[Dr David Walker](#)

Oral history of chemical workers and Glasgow working class communities (including dockers). Research Fellow on AHRC Knowledge Transfer Fellowship (2009-11): The Voice in the Museum (work and social identities)

Research Associates

Hugo Manson

Dr Hugo Manson, an oral historian, is currently working with the UHI Millennium Institute Centre for History on projects focussed on the hydroelectricity and forestry industries in Scotland. A former television and radio broadcaster, he has been a specialist in oral history for over twenty years. He is the Co-Founder of the New Zealand Oral History Archive. In

2006, as a Senior Research Fellow at the University of Aberdeen, he completed a 6-year study of the UK North Sea oil industry.

Andrew Perchard

A Research Fellow at UHI, Andrew is currently writing a history of the Scottish aluminium industry and the west Highland smelting communities (which includes a substantial oral history element) and has written on the development of the mine management professions in the Scottish coal industry (see publications). Research Affiliate of [Concordia Oral History Research Lab](#) (COHRL)

Jenny Simmons

Interviewer with the British Library Sound Archive, currently employed on the Scottish Artists Lives Project. Jenny recently led a Pakistani Community Pilot Project as part of the Scottish Migration Archives Network, and has conducted interviews for Glasgow Museums.

Hilary Young

Research Assistant with the Open University. Hilary is currently organising and conducting interviews for a project celebrating the 40th anniversary of the OU. Prior to this, Hilary was an ESRC Postdoctoral Research Associate at the Universities of Manchester and Warwick, working with Selina Todd on 'Living Standards, Social Identities and the Working Class in England, c.1945 - 1970' which included the creation of an oral history blog [Voices of Postwar England](#)

OHS Conferences and Events of 2007

MAKING COMMUNITY ORAL HISTORIES

Annual Conference of the Oral History Society in association with London Metropolitan University

Friday 6 - Saturday 7 July 2007, London

The 2007 Oral History Society conference re-examined the subject of community oral histories six years after the successful Talking Community Histories conference. Like its predecessor, it brought together an exciting and informal mix of community organisations, museums, libraries and archives, schools and universities to present their work and debate the nature, challenges and achievements of community oral histories.

Abstracts from the conference

VOICES OF NEWPORT

Rachael Anderton, Keeper of Social History, Newport Museum and Art Gallery
Emma Lewis, Community Memories Project Officer, Newport Museum and Art Gallery

This presentation will briefly examine several of the projects that we have worked on which fall under the umbrella of „Community Memories“. The projects were designed to not only record the memories of individuals and groups within the community but also to allow the individuals to engage with the Museums and Heritage Service. The groups involved included „hard to reach“ groups e.g. BME communities, teenagers, and people not currently in employment. We will describe the innovative methods that we used to engage with these audiences, including graffiti sessions, African drumming, tours and activities designed for ESOL (English for Speakers of Other Languages) students. We will also discuss some of the issues that did arise and the problems that we faced, such as running sessions that only two teenagers attended, and distributing 15 disposal cameras to a youth club for an identity photography project and only having one of those cameras returned.

At Newport Museum and Art Gallery we are also keen to maintain the good relationship that we have with „traditional“ users such as older people and school children. This has been achieved through exhibitions involving the community and their oral history over the last few years. The Transporter Bridge Centenary Exhibition combined significant items from the museum collection with contemporary artwork and oral reminiscences of local people and council employees. The „About Collecting“ exhibition was a community exhibition focusing on local people’s collections and using their words to interpret their collections. These exhibitions allowed us to incorporate extracts from our oral history archive within the main exhibition space. Oral history really is one of the best methods for engaging with any audience and bringing objects and collections to life.

One of the main aspects of this presentation is to demonstrate to the audience that museum staff must be prepared to alter their approach to engage with different audiences. This can be difficult, especially on a small budget, and demands creativity. We want people to realise that they may put on three or four sessions / workshops that are complete failures before they achieve success with the fifth. Working with hard-to-reach audiences is difficult because they can be unpredictable, but when it all comes together in the end it makes all the struggling seem worthwhile.

TAKING THE PULSE OF BASINGSTOKE

Barbara Applin, Basingstoke Archaeological & Historical Society

Taking the Pulse of Basingstoke, published by the Basingstoke Archaeological & Historical Society in 2005, presents excerpts from interviews recorded since 1992. Surgeons, GPs, nurses, district and community nurses, dentists, opticians, a matron, a practice manager and

many patients describe experiences „Before the National Health Service“ and „On the National Health“, up to the present.

Many of the excerpts are from life story interviews, at first aimed at „Basingstokers“ with their own memories of people, places and events. To reach a wider audience, in time and location, master tapes were lodged at the Wessex Sound and Film Archive, with copies at Basingstoke’s Willis Museum.

With the 1998 anniversary of the National Health Service, excerpts were chosen for publication, but they provided an incomplete and unbalanced picture. So specific health workers and patients were interviewed and encouraged to give personal comments. Some experiences were typical of their time and place: the impact of the National Health Service and the town’s 1960s expansion for „London overspill. But there were also surprises. A dentist worked on a „phantom head“ and a nurse was knocked out by a dead man. A boy selling papers at Park Prewett hospital saw soldiers treated in the burns unit for horrific injuries: „And although I was 14, I realised, this was what you called war, what those men had gone through“.

The book has been well received locally, initiating more interviews, articles, displays and talks. As a social / medical case study it has not yet reached the wider audience hoped for, but a review in *The Local Historian* (February 2007) says it is „of far more than local interest. It contains numerous examples of the special strengths of oral history, such as detailed descriptions of obsolete skills“.



A ‘Phantom Head’
by cartoonist Alan Turton

COMING TO COVENTRY : STORIES FROM THE SOUTH ASIAN PIONEERS
Stacey Bains, Cultural Diversity Officer, The Herbert Art Gallery & Museum
Jitey Samra, Community Development Worker B&ME, Mental Health, Coventry &
North Warwickshire NHS Partnership Trust

Coming to Coventry was a partnership project between the Asian Mental Health Access Project (AMHAP) and The Herbert Art Gallery & Museum, funded by the Heritage Lottery Fund. It recorded the experiences of South Asian migrants who came to Coventry from the 1940s to the 1960s. Video interviews, photographs and other personal objects were collected to create a book, website (www.coming2coventry.org) and exhibition.

During the course of the project we recorded the memories of over 60 pioneers and collected more than 600 images relating to their migration experience. The book and a temporary exhibition were greeted with enormous pride and interest by the South Asian community.

The project successfully met its aims of gaining recognition for the pioneers from younger generations of British Asians and encouraging the wider South Asian community to value its cultural heritage.

The presentation will detail how the project combined mental health objectives with the museum's agenda of widening participation. It will also examine the benefits that *Coming to Coventry* offered to newer migrants, the wider community, and professionals working in a variety of areas. The contemporary relevance of an oral history project that ultimately explored issues of identity, immigration and „Britishness“ will be opened up for debate.

The presentation will also offer practical and honest advice on our experience of delivering an oral history project with a variety of ambitious outputs. Key to the success of the project was that it was led by people from within the community, enabling us to engage South Asian participants from different faith, geographical and socio-economic backgrounds. Engaging participants, disseminating outputs and even collecting audience responses and evaluation were greatly aided by the „insider“ nature of the project team. We will draw on our experience to give practical universal insights for delivering a successful community oral history project.

THE POLITICS OF COMMUNITY ORAL HISTORY: EXPLORING LIVING MEMORY 1981-1991

Joanna Bornat, Professor of Oral History, Faculty of Health and Social Care, The Open University

Exploring Living Memory was a loose association of life history and oral history projects in the Greater London area which began in 1981 as a workshop and exhibition and which developed into a large-scale exhibition, staged twice in the Royal Festival Hall in the mid 1980s. Funding for fortnight long events meant that it could create a shop-window for oral history projects, with groups and individuals representing the remembered history of London's many locality-based as well as cultural and minority ethnic communities.

With two-dimensional displays, moving image, theatre and workshop discussions, it drew audiences of thousands, old and young. Closely linked to the politics of the GLC (Greater London Council), it was a willing collaborator and a beneficiary of GLC arts policies, then framed as a 'Campaign for a popular culture'. Amongst other objectives this policy aimed at opening up new venues for the arts and the promotion of history-making as a source of social solidarity amongst and between London's many communities. This paper will outline Exploring Living Memory's history and discuss issues raised by the political sponsorship of oral history as well as comparing the impact of different forms of presentation, then and now.

THE PURPOSE OF ORAL HISTORY: WHO SPEAKS? THE CONSTITUTION OF THE SUBJECT IN COMMUNITY ORAL HISTORY PROJECTS.

Verusca Calabria, Oral Historian

If the goal of oral history is to facilitate a shift in power relationships through the inclusion of a multiplicity of standpoints to generate a more democratic reconstruction of the past, how can the process of interviewee selection enable the oral historian to achieve this goal? I will address this question in relation to community histories. When the life histories of people that occupy privileged positions within their communities dominate the collection then existing power structures can be reinforced, important aspects of the history of a group are excluded and the project fails to transform the purpose of oral history. However when the life histories of a variety of members of the community, including those marginalised in the communities themselves, comprise the collection then the oral historian succeeds in allowing a multiplicity of stand points to reconstruct the history of that community from the bottom up. I will highlight the practical issues an oral historian confronts when trying to put theory into practise with reference to my experiences of both coordinating, supporting volunteering in a number of community related oral history projects including Three generations of Bengalis in UK, Kings Cross Voices, Memories from Emilia Romagna and Sicily, Moroccan Memories in Britain.

VOICES ON THE WEB : TUC LIBRARY DIGITISATION PROJECTS

Christine Coates, Librarian TUC Collections, London Metropolitan University

The TUC Library Collections, based at London Metropolitan University, have successfully used audio and video interviews in three digitisation projects organised in partnership with the Trades Union Congress. A small number of audio and film clips were used on the website *The Union Makes Us Strong* : TUC History Online and 100 audio interviews were collected by their partners, the National Pensioners Convention, for the website *The Workers' War: Home Front Recalled*. Both websites are accessible from www.unionhistory.info . The TUC Collections are currently working on a new digitisation and website project to record the struggle for Equal Pay which will include 7 filmed interviews with women involved in major campaigns eg the Ford Sewing Machinists in 1968.

INVENTING A COMMUNITY

Paper to be given by Rib Davis with short introduction by Marilyn Scott

Woking has a short history, the modern town having only come into existence with the arrival of the railways in the 1830s. It has had relatively little opportunity, then, to establish a sense of community. Since its inception its residents have not been predominantly of local stock, and there has been a recent population explosion. At present (as previously) the majority of those living there were born elsewhere, in other parts of the UK (many having been deposited there from London after the Second World War) or in other countries, including Italy, China, and – most significantly – Pakistan. In addition, many who live in Woking work elsewhere, and many who work in Woking commute into the town.

The oral history programme *Woking Living Words* interviewed a cross-section of over 200 members of the community. The resulting interviews are to be used in permanent exhibitions in the The Lightbox, the new museum and gallery (to open in September 2007), in a book of oral history and photographs (recently published), on The Lightbox's website and in its educational materials. The intention has been to reflect the community and its recent history, in all its variety, and also to foster a sense *of* community.

It could be said, though, that in all but the smallest settlements, or perhaps the more remote parts of the UK, community is no longer essentially a matter of geography. It cannot be assumed that because there is a name on the map there is therefore a community. Rather, particularly in our urban areas, it may be that communities exist in other forms: there are communities of sporting and other leisure activities, communities of work, religious communities and ethnic and language-based communities. A feeling of belonging to a place may be less important than feeling part of an organization or other grouping.

This paper examines the intentions behind the *Woking Living Words* project in this context, and asks the question: to what extent is an oral history project such as this reflecting a real community, and to what extent is it in effect inventing a community where little real sense of community actually exists?

**'THERE GOES THE NEIGHBOURHOOD' - KING'S CROSS VOICES:
COMMUNITY ORAL HISTORY IN THE HEART OF URBAN TRANSFORMATION
Alan Dein, oral historian and co-ordinator of King's Cross Voices**

Since the arrival of the railways in the mid-nineteenth century, whether you love the place or loathe it, King's Cross has become one of the most well-known districts of London – and today, King's Cross is big news. Huge cranes now dominate the skyline, construction workers are everywhere, and over £2 billion worth of facelift is underway.

For decades the area was a neglected wasteland of rusting industrial heritage, and its name became an infamous symbol of sleaze and scandal. Today „the Cross“ is in the throes of a massive transformation with the redevelopment of the 67 acres of former railway lands north of King's Cross and St Pancras stations, the arrival of Eurostar in November 2007, and the completion of Kings Place in 2008 which will house both The Guardian and a new concert hall for London.

King's Cross Voices (KXV), funded primarily through the Heritage Lottery Fund, was set up in 2004 to explore the living memory of King's Cross at this time of great change. Over the last three years some 300 interviews have been recorded, capturing the voices of a diverse range of King's Cross characters past and present, covering long-gone occupations and communities, to a more recent generation talking about their lives in their new patch of King's Cross.

However, as the title of this presentation suggests, King's Cross is inevitably a collection of many unique places and identities, some of which have already been lost, some in the process of change, and others confused by the coming regeneration. It's a district of London that has been carved up in a maze of railway tracks, main roads, one-way systems, the Regent's

Canal, and even dissected by the boundaries of two London Boroughs. For many locals, their personal King's Cross is in fact a sub-section of our projects broader picture.

In 2006, King's Cross Voices was commissioned by Camden Council to create a sound trail using the oral history from the collection. Rather than cover the whole of King's Cross to illustrate all those voices, we honed in on one tiny locality, known as Argyle Square. It was a place that summed up the topsy-turvy history of King's Cross, it was small enough a terrain to be covered by the feet of our younger and older listeners, and importantly, it also provided a selection of very specific stories and incidents set within its own peculiar boundaries.

The selection of extracts that you will hear from *The Argyle Square Sound Trail* covers all those universal stories of hardship and tragedy, of comedy and madness that sum up the life and times of King's Cross. We hope that they will also demonstrate the ethos of a community history project based in the heart of not one community, but in all of them.

Though, of course we have to ask, whose voice are we actually hearing? That of the interviewees, our perceived community, or maybe the voices of the editors themselves...

BLAND COUNTY HISTORY ARCHIVES

John and Bonnie Dodson, Rocky Gap High School, Virginia

Bland County is a rural community of 7000 people located deep in the Appalachian Mountains of southwestern Virginia, and the home of Rocky Gap High School, which for 15 years has developed and managed the Bland County History Archives, an oral history and technology project. Students have conducted over 570 interviews to date, created an award-winning website, and involved the entire community in the project.

Several years ago a Rocky Gap High School student interviewed Darnell Miller, who was asked to recall some of his earliest memories:

My first memory of anything is being in the hospital in Bluefield, when I was about three, or a little better than three years old. I had double pneumonia, and that is actually the first memory that I have of anything, is being in the hospital in Bluefield. It had a nice big blue door. The room had a blue door on it, and I thought that was beautiful. I thought that was the prettiest thing I'd seen. „Cause in the old cabin we lived in there was no paint, no nothing like that.

Too often Appalachian youth see their history and culture as the door Miller remembers from his home. It is rough, unpainted, and starkly unhip in the glare of the mall and MTV media blitz that passes for popular culture. They hurriedly cast their heritage aside as they slip into adolescence. Embarrassed by this stereotype of the Appalachian hillbilly redneck, they shed their culture and become part of the homogeneous whole.

A community is defined by its reflection in the eyes of outsiders. Thus, the audiences for an oral history projects like this one are both the outside world and the community itself. This presentation will discuss how a community can preserve its heritage in a way that enhances this reflection and helps create a sustainable community where quality of life and progress are synonymous.

John Dodson is a high school history and technology teacher. Bonnie Dodson is a K-12 school librarian.

ENABLING COMMUNITY VOICES TO BE HEARD: AN ORAL HISTORY OF THE TOWN MILL, LYME REGIS

Robert Eliot (Project Manager), Town Mill, Lyme Regis; Bridget Wilkins (Book Editor) and Catherine Dixon (Book Designer), Central Saint Martins College of Art & Design, University of the Arts, London

This presentation will emphasise how volunteers with different skills worked as a team to produce a book with CD to communicate to a broad cross-section of the Lyme Regis community the human history of the Town Mill as a centre of village life and its potential to take that role again.

The focus will be on the task of making the history of the last 100 years of the watermill come alive through the voices of local people and those responsible for its recent reconstruction. The challenge was to make that story aurally and visually engaging, while maintaining the integrity and authenticity of the participants' voices.

The generation and production of the book to help accomplish this will be explained, alongside the criteria used for the selection of content and the awareness of the requirements of different audiences. The importance of the editor's role as a facilitator, respecting the voices of the people and making the editorial role transparent will be discussed, as well as the editorial need to embrace the tensions between sound, images and text.

Good design was a major factor in making the CD and book accessible to their audience. The designer brought a set of pragmatic skills to the evolving project rather than just making things look nice. The benefits of engaging with design early on will be outlined along with thoughts on the difficulties of managing the design of visual / audio in combination.

I INTERVIEW, YOU TAKE PART, WE RESEARCH, THEY...EXPLOIT? ORAL HISTORIES OF HEALTH AND ILLNESS AND THE DIPEX PROJECT

Kate Field

If we want people's stories to be heard and used by others rather than being part of an archive, we have to decide at the start of a project why we want to interview people and what we are going to do with those interviews. That much is a given and should underpin any project that receives funds from the state, charities and/or educational foundations.

DIPEX the research project exists to make the voices of individual people who have experienced illness heard and seen – literally – on the internet. The website (www.dipex.org) which carries video excerpts selected from our collections of recorded interviews (mainly on video, some audio, some written only). The website can be accessed by anyone anytime.

DIPEX the website is one of four outcomes from the project. The others are academic papers (generally aimed at raising the profile of patient perspectives thereby improving clinical

practice), presentations (to get our work more widely known and to attract funding), and most recently, teaching packages for medical nursing and social science tutors. It attracts funding from a number of bodies, medical and educational trusts, individual charities and the Dept of Health.

Though we feel we have tight ethical guidelines – which we stick to – we are finding it quite difficult to ring fence our project and protect our interviews. Yet, whose interviews are we protecting and from whom? Are we right to have concerns?

We have chosen to put people's accounts on the internet and yet each researcher feels s/he has the responsibility for protecting our respondents from journalists who want sob stories, charities who want to copy our winning formula, university tutors who break copyright by copying our video clips to create their own teaching packages, and, more recently, health information companies who like the idea of having a few „patient stories“ as an add-on and offer us funding for more projects.

We think of those tapes and transcripts as „our interviews“ – but who really owns them? We know the answer legally – they belong to the University of Oxford – but morally where do we stand?

ORAL HISTORY AND ETHNIC COMMUNITIES

Rodger Harris, Oral Historian, Oklahoma Historical Society.

Harris is a graduate of Oklahoma State University and the University of Central Oklahoma.

The prospect of collecting oral history in ethnic communities was mostly unknown to the Oklahoma Historical Society until 1997. Prior to that time some oral histories had been collected with a significant number of American Indians and a few others that might be considered members of an ethnic group. The Oklahoma Historical Society on-going oral history program began in 1980. The program grew out of a local college's program called "The Living Legends Program" which had begun in 1969. In the more than 3,400 interviews collected before 1997 very few had dealt with ethnic groups. Although a few people with ethnic backgrounds were interviewed it was usually to understand another aspect of their lives and rarely about their ethnicity. In 1990 the oral history program began to use topical approaches based on a historic context report on Oklahoma's history. The former approach tended to be more about interviews of opportunity. Studies on broadcasting, transportation, Route 66, reconstitution of Indian nations and tribes, and other topics were highlighted first.

The Tribal Songs Project was the first effort to collect in ethnic communities. This project used Jim Anque, a member of the Kiowa Tribe, as a guide. Mr. Anque explained how to make a respectful approach to Indian elders, the context of song, the drum, dance, and PowWow traditions. The Tribal Songs Collections now total 45 interviews and approximately 500 hours of donated recordings given to the Society once the various donors began to appreciate the Society as respectful repository. Much of the same approach used in American Indian communities was used with projects targeting African-Americans, Asians, Hispanics, eastern Europeans, and other groups common in Oklahoma. The presentation will include what principles have proved successful in each of these community efforts.

WHY ORAL HISTORY PROJECTS ARE CONSTRUCTED IN THE COMMUNITY: A REFLECTION ON WHAT AGENDA DRIVES A PROJECT.

Janette Hilton Project Director, Living History North East; The Regional Oral History Centre

This presentation will explore - What motivates oral history projects within communities? Do some projects have a more organic, evolutionary development that is reflective of the community it aims to represent? Is an oral history project now defined in principle by the limitations of a funding agenda, organisational demands etc? If a project is driven by such „impersonal“ agenda can it maintain its integrity to the community it hopes to represent? To illustrate, this presentation will look at three oral history projects from very diverse communities:

The History of Sight Loss - 1945 onwards in the Tees Valley is an ongoing ambitious project by an organisation called Blind Voice UK; to record and document life experiences of those who were partially sighted or completely blind. The management committee of Blind Voice UK, who are predominantly partially sighted or blind, were eager to play an active role as interviewers and lead this project throughout every stage. The presentation will look at how this project set out to conquer any boundaries to training and recording in their community.

Building Bridges of Understanding; an Interfaith Oral History Project was a multi-partner project, with its origins in the concept that funding could be achieved to record and document issues around faith and religion. This was an intergenerational, interfaith oral history project that spanned 10 months, involved 21 young people aged 13-21 years with three permanent community volunteers and 35 participants as interviewees. The presentation will demonstrate what resulted and what community, if any, was reflected in this project.

“Words from the Wall” was a community initiated project at Heddon-on-the Wall in Newcastle, Tyne and Wear. Its foundations were rooted in a small village community initiated by the local heritage group and primary school. This year long project worked with 32 six/seven year olds; equipped them with new skills and understanding. The ambition of the project was to reflect local community history through oral history recordings that were then transferred into a brief piece of animation.

RECONSTRUCTING THE PAST THROUGH ORAL HISTORIES: THE CASE OF THE OLD BAZAAR OF TIRANA

Armanda Hysa, Dep. of Ethnology, Institute of Folk Culture, Institute of Folk Culture,

The Old Bazaars in the Balkan cities have been the centers of their economic and social life during ottoman rule and afterwards. In the case of Albania, the bazaars continued to play this role up to the mid of 20th century. The communist regime, which ruled the country since 2WW considered these old constructions as symbols of oriental past, of backwardness and fanatics, also as symbols of private entrepreneurship. This way, the ruining down of these centers of memories was judged as one of the pre-conditions of leaving the “dark” past behind shoulders and of building a “new life from the ruins of the old one”. Among the ruined down bazaars was the old bazaar of Tirana, the capital of Albania. My research

focuses exactly in this bazaar. The reason I've chosen to study the Old Bazaar is not related simply to the fact that it has been the first urban kernel of the city. It represented also an economic, trading and financial center, a meeting place for people coming from different villages and even towns and cities, a place of recreation and amusement beside the work, a place of exchanging experiences and of life mixtures, a place where people could discuss about politics as well as about arranging marriages.

The effort to understand ever so little what this Bazaar has been and what it meant for the city is also an effort to understand the relations between people, their ideas and mentalities about life, the base of city's economic development, the various customs and traditions that are not to be found written on any document.

As it does not exist physically, the biggest part of the information comes from oral testimonies and oral stories from people who once worked in this center. In this paper we will see how through these sources I come to delineate not only the map of the old bazaar, but also to reconstruct a community of people, who worked together and formed a specific strata of the city: that of trading craftsmen.

This research will be a contribution for the historical memory and identity of the capital of Albania, harmed by the demolition of this historical centre, and from the lack of studies on it.

TALES OF THREE GENERATIONS OF BENGALIS IN BRITAIN: WHO DID WE INTERVIEW?

Jamil Iqbal, Project Manger, Swadhinata Trust's Oral History & Scio-Cultural Heritage Project; Ansar Ahmed Ullah, Chairperson, Swadhinata Trust

We have recently completed an oral history project on the Bengali community. Our project consists of a collection of 58 oral history interviews with a focus on three specific themes: „roots and memory“ (dialogue between first and third generation on the history of Bangladesh and the 71 war of independence); „community creativity“ (dialogue between second and third generation on welfare and community involvement in the UK, from the 70s-80s) and finally „popular culture: between tradition and innovation“ (across three generations, mainly focusing on traditional and more recent British Bengali musical heritage, from the 70s-80s).

We had hoped the dialogue between older and younger people would have fostered mutual learning by providing a unique space for an exchange of views and experiences. Young people would have the opportunity to understand the experience of their elders settling in Britain and adjusting to a new social environment through community involvement. Moreover, they would have the opportunity to link Bengali cultural traditions, expressed through music, with contemporary forms of cultural expression.

The project itself is linked to various local heritage organisations and will also develop a learning pack in conjunction with Tower Hamlets School teachers. It will, therefore, encourage non-Bengalis to look at the lives of people with diverse backgrounds, experience, and different values and customs. This Project's key outputs were a website, a book, an exhibition and educational learning pack designed for use within secondary schools.

We would like to present and share our experience and lessons learnt in carrying out this project. We will introduce the project, talk about key issues, interview relationship in the community context, including issues around „insider“ and „outsider“ interviewers, interviewing in community languages, and inter-generational interviewing difficulties and outcomes of the project and screen a DVD of some of the interviews.

PRAISE SONGS AND THE OVAHERERO COMMUNITY. HOW WE REMEMBER THE COLONIAL WAR AGAINST THE GERMANS

Johanna Kahatjipara, (Independent researcher)

In the Otjiherero language, the term *Ejuva r'Otjikesa* designates the 26th of August 1923, which was the day when the coffin of Samuel Mahahero returned from exile. The renowned Paramount Chief led the war against Imperial Germany which ended the conflict with an official policy of genocide in 1904. Ever since his burial the Ovaherero people assemble annually in the central Namibian town of Okahandja to praise their leaders, pay homage to their ancestors, foster their kinship and celebrate their people's oral history of resilience and survival of Germany's colonialism. A new aspect of this cultural expression was the *Oturupa* (troops), who gave the yearly gathering its popular name *Otjiserandu* (Red Flag Day), by mimicking the military parades and titles of the German colonial soldiers. At the same time, Mahahero's people started in earnest to reorganise themselves politically under the leadership of Hosea Kutako who fought with his fellow Namibians the war of liberation from the South African apartheid administration. Working from this backdrop, my paper presentation will address the contemporary struggle of the Ovaherero people to tell their history from their perspective. The Okahandja commemoration exemplifies that the Ovaherero have created their own sources, methods and theory when it comes to remember the colonial war against the Germans. However, this body of knowledge has been systematically ignored with respect to the question of responsibility for the much debated policy of extermination by Imperial Germany. For instance, there is a rich oral history of the *Otjitiro Otjindjandja tj'Ovaherero*, as the genocide is known in Otjiherero. As an Omuhherero woman, I would like to make available the oral history of the Ovaherero community, especially the praise songs of soldiers, the legacy of rape by German colonial troops as well as general culture such as marriage, birth of children and death rituals.

SHARING STORIES: CREATIVE WAYS OF MAKING COMMUNITY HISTORY RELEVANT TO EVERYONE

Helen Klæbe, Senior Research Fellow, Creative Industries Faculty, Queensland University of Technology, Brisbane, Queensland Australia

The Kelvin Grove Urban Village (KGUV) is a 16-hectare inner-city redevelopment project of the Queensland Department of Housing and the Queensland University of Technology (QUT). The Department of Housing sponsored a research project called Sharing Stories that offered the opportunity to tell stories using a variety of mediums. This project aimed to engage a large cross section of the community in ways that were historically appropriate and relevant to each of them. Outcomes included publishing historical books, digital stories, staging public art and photographic exhibitions, storytelling workshops with community members and establishing a website- all developed with the intention of building a sense of

place, identity and history that would resonate with individuals from within the Kelvin Grove community, as well as with the general public.

Helen Klaebe is a senior research fellow at QUT. Her PhD examined new approaches to participatory public history using multi art form storytelling strategies. She is the author of: Onward Bound: the first 50 years of Outward Bound Australia (2005); and Sharing Stories: a social history of Kelvin Grove (2006).

INTERACTIVE MEMORIES: SPARKING REMINISCENCE ON THE WEB

Jack Latimer

The award-winning *My Brighton and Hove* website at www.mybrightonandhove.org.uk is a uniquely active community history site. Its 1000 visitors a day post a steady stream of reminiscences, photographs and information, as well as adding their own comments to the contributions of others. This presentation will explore the different types of memories being uploaded onto the site and examine how these memories spark off other memories. It will also look at similar community heritage sites around the country, which have been set up on the *My Brighton and Hove* model and make extensive use of oral history. What are the benefits and risks of allowing people to comment on the memories of others? If we want to use oral history interviews to trigger other memories, what is the best way to do this online?

Jack Latimer founded the *My Brighton and Hove* website in 2000 and specialises in creating oral history and community history websites. He is a member of the Community Archives Development Group and established the national directory of community archives at www.communityarchives.org.uk. His company www.communitysites.co.uk sets up easy-to-maintain websites for oral history projects and community heritage groups around the country, based on the *My Brighton and Hove* model and software.

CREATING COMMUNITY: REFLECTIONS ON THE MAKING OF AN ORAL HISTORY ARCHIVE

Dr Bea Lewkowicz, Co-Director Refugee Voices

In this paper I will talk about the making of the Refugee Voices Archive, a filmed oral history archive which set out to record the historical experiences of the German/Austrian Jewish refugees who emigrated to the UK in the thirties. I will explore notions of community found in the narratives of the interviews, investigate notions of community underlying the conceptualisation of this project, and present some of the Refugee Voices interviews in a short film. I will also draw comparisons to my work with other oral histories, namely on Belsize Square Synagogue and on the Jewish Community of Thessaloniki.

ENGAGING COMMUNITIES IN ORAL HISTORY WORK - THE PROCESS

Dien Luu

Academics and professionals have traditionally collected oral history. Recently however, members of diverse communities have begun working together to record their own oral histories. This move provides a more unique flavour to oral history. The following presentation explores areas on *how* to engage communities in collecting their own oral history.

Luton Voices is an oral history project that aims to engage communities in oral history. A participatory approach is used to encourage communities to take an active role in producing a vision of what they would like to achieve. The members play an integral part in accomplishing these goals. As a result, many communities that previously had no knowledge of oral history are now “recording their own voice”. The process of community outreach, peer education for community members and volunteers, and dissemination in community events are discussed in this presentation. People living in Luton have access to the oral histories being collected through short documentaries made by community members, radio broadcasts, creative educational workshops, and in the long-term through web-sites and availability in public archives.

Luton Voices is supported by the Lottery Heritage Fund, Luton Borough Council, Renaissance in the Region, and Bedfordshire Museums Group.

TAKING COMMUNITIES’ ORAL HISTORIES ONLINE AND THE ISSUE OF SUSTAINABILITY: THE MEMORYNET PROJECT

Ino Maragoudaki, 1st year collaborative PhD student, International Centre for Cultural and Heritage Studies, Newcastle University and Tyne and Wear Museums

More and more museums and other memory institutions decide to collect, manage and present their communities’ oral histories online in an effort to be more relevant to more audiences. At the same time, museum funding-bodies increasingly encourage memory-projects to include an element of „skilling-up“ and empowerment of participants by using new technologies, with the objective of extending projects beyond the time limits of funding. This presentation will focus on Memorynet, a Tyne and Wear Museums project that presents local communities’ oral histories on the web. This work will look at the different digital aspects of Memorynet (the website, the digital equipment loans boxes and the workshops) and investigate the response of some of the community groups involved, in terms of the project’s sustainability. In particular, it will examine how these aspects have contributed towards the sustainability of the project as a whole. It will also look at the issues that are important for the community groups and how they relate back to the Museum’s priorities and understandings.

WHAT USE IS A FACILITATOR TO A GRIOT?: A STORYCORPS FACILITATOR’S ACCOUNT OF HELPING BUILD A HISTORICAL COLLECTION OF STORIES AFRICAN AMERICANS SHARE WITH LOVED ONES.

Nadja Middleton, Facilitator, StoryCorps

StoryCorps Griot is a special initiative of the ambitious American oral history project StoryCorps. Aiming to collect nationwide and over a ten year period 250 000 oral histories

of ordinary Americans, StoryCorps is following in the footsteps of the Works Progress Administration's Federal Writer's Project. However, in contrast to the 1930s project, storytellers are interviewed by loved ones in the presence of trained facilitators and they take home a broadcast quality CD recording of their conversation. StoryCorps Griot is a one-year initiative to record the stories of over 1700 African Americans, told notably by Second World War veterans and by those involved in the Civil Rights Movement. With the permission of participants, these oral histories will be archived in the Library of Congress and in the Smithsonian Institution.

Nadja Middleton worked as a facilitator on StoryCorps Griot in Atlanta, Newark, and Detroit –the first 3 stops of the initiative's nine-city tour. Following a presentation of the StoryCorps project and its interview set-up, Nadja will examine how this model is being applied to collect the stories of African Americans. What is the significance of and impact on oral histories being solicited by loved ones rather than „outsider“ researchers? In this context, what is the purpose of having a facilitator present during interviews? To what extent do StoryCorps and its facilitators shape the oral history that is being recorded? How aware are facilitators of the affect of their race on interviews and what, if anything, do they do about it? What other factors affect the narrator and the historical record being made?

CORNISH BRAIDS: NARRATIVES OF CORNWALL'S COMMUNITIES

Kayleigh Milden, Research Fellow, Institute of Cornish Studies, University of Exeter

Cornish Braids was the cornerstone project of the Cornish Audio Visual Archive (CAVA) from 2003 to 2005. This community oral history project investigated key strands of cultural activity, in particular work, religion, politics, leisure and social relationships, with the aim of creating a multigenerational profile of community life in Cornwall - both past and present. Cornwall radiates a multiplicity of historical images and community narratives that range from it existing as a Celtic nation to an English county. We cannot necessary speak of *one* Cornish community within the richness and complexity of contemporary Cornwall.

The presentation will explore the tapestry of community narratives that were collated for Cornish Braids. It will focus on how Cornish Braids challenged the notion of a homogenous Cornwall from Lands End to the Tamar, by revealing a diversity of different spatial, social and ethnic communities that constitute Cornwall as a whole. It will include excerpts taken from oral testimony recordings from the core strands of the project to demonstrate issues relating to „whose voice“ constructs and defines these Cornish communities both within Cornwall and overseas. It will conclude with an evaluation of both the challenges and achievements met by Cornish Braids and how it can be sustained as an essential part of CAVA's „living archive“ for future generations of Cornish communities.

‘STEALING OUR MEMORIES’: FOUNDATION MYTHS AND IDENTITY AMONGST THE COALMINING COMMUNITIES OF KENT

Dr. Lynda Pearce, Oral Historian, Coalfields Heritage Initiative Kent (CHIK) project, Dover Museum, Kent.

The CHIK project is a community archive project, funded by Heritage Lottery Fund and local sponsors under the guidance of Dover Museum, to establish and train six community groups within the ex-coalfield communities to collect a virtual museum of images and recollections (see website at www.kentcoal.co.uk). The project has an established oral history archive collected by the oral historian containing over 200 hours of life histories. The project has also trained community group members in basic oral history techniques to enable volunteers to continue collecting oral testimonies within their communities.

Despite the closure of the Kent pits by the end of the 1980s, the communities associated with the four pits remain relatively isolated, with a strong sense of their own separate identity. The presentation examines how stories of the arrival and early treatment of the coalminers who migrated to Kent from the traditional mining areas of Britain during the „20s & „30s engendered a sense of shared identity amongst mining families. The paper will also reflect on how these memories continue to reinforce a sense of otherness and to shape aspects of their community identity.

Considering the subject of „What Community“, I will reflect on the difficulties faced with engaging this type of closed community and the validity of an accusation made during an initial meeting with one of the parish councils that the project, in particular the oral historian, was intending to „steal our memories“ and the implications of this for understanding the dynamics of collecting community histories.

EVOKING COMMUNITY HISTORIES FOR FILM **Nirmal Puwar, Lecturer in Sociology at Goldsmiths**

Just as 'communities' are not homogenous entities, the collecting and making of 'communities' is similarly a contested and conflict laden task. These two films I have - Khabi Ritz Khabie Palladium and Coventry Ritz - are memory texts that work with a specific cinema as a site of memory. Thinking through the interwoven and textured nature of visuals, words, songs, debris and architecture, this session will elaborate on the methods which have deliberately employed to produce evocation. The film can be glimpsed from the BBC online site. Click [here](#) to visit the page.

Nirmal Puwar: Author of 'Space Invaders: race, gender and bodies out of place', 'South Asian Women in the Diaspora' (co-ed), Special Issue on Orientalism of Fashion Theory (co-ed) and co-editor of numerous issues of Feminist Review. Working on creative critical methodologies through a series of collaborations.

THE TELLING TALES OUT OF SCHOOL PROJECT – EXPLORING THE HISTORY OF ELEMENTARY EDUCATION IN THE COMMUNITY OF NORTH TYNEDALE AND REDESDALE IN NORTHUMBERLAND, 1870 TO 1944. **Dr Ian D Roberts, WEA tutor and Hon. Fellow of the Department of History, University of Durham.**

The presentation is about a project being carried out in a relatively remote rural community which has changed radically in the last hundred years and which could be described in many

ways as suffering significant economic and social deprivation. It began as a study of local educational history using traditional sources located in record offices, the local Heritage Centre and in private collections supplemented by oral history interviews of former pupils and others associated with the schools still living in the community. This has been refined to an exploration of elementary education in the period 1870 to 1944 which is now being turned into a book and a permanent oral history archive with the assistance of a grant from Awards for All.

The presentation will consist of an initial brief outline of the project but will then concentrate on its oral history aspect in which former pupils and others have been interviewed in order to provide a picture of what it was like to be a member of the community and its schools in the period 1919 to 1944. Issues that will be considered are the identification of the community, determining its social and economic profile and its effect on the schools, identifying and interviewing informants, assessing educational experiences and their value and exploring the impact of external policies and events on the pupils and the community in which they lived. A hand-out incorporating essential information will be provided for participants and recorded extracts from interviews will be used during the presentation.

SITES AND SIGNS OF REMEMBRANCE: TRACING THE EMERGENCE OF MINORITY COMMUNITIES AND THEIR LOCAL SUPPORT SYSTEMS THROUGH THE ORAL TESTIMONY OF ETHNIC ELDER
Pam Schweitzer, Co-ordinator of European Reminiscence Network

Sites and Signs of Remembrance for peace, democracy and reconciliation in Europe is a 2-year lifelong learning project supported by the EU with partners in UK, Berlin, Dresden and Poznan (Poland). Project teams from the partner countries are interviewing older residents in their respective cities concerning those sites and signs of remembrance which have a particular personal or a community significance. Project teams and interviewees are visiting the other partner countries and learning about one another's post-war history through personal and community testimony in direct meetings. They are also learning about the different cultures of remembrance and the different approaches to the recording and dissemination of memories in each country. How does biographical work of this kind, whether conducted through group or individual interviews promote tolerance, understanding and a greater sense of inclusion. The project process, as well as its products, is being documented in an online- platform including the oral testimony collected in each country.

The UK part of the project involves reminiscence workers (assisted by Greenwich University students of community history) and ethnic minority elders in local community groups working together to map the local area from the perspective of the elders' direct experience. Interviews have focused on their early experiences in the UK as new immigrants in the 1950s and 60s and their involvement in the gradual creation of self-supporting minority communities with their own services, local visibility and representation.

In this presentation Pam Schweitzer will share some of the results of group and individual interviews conducted with ethnic minority elders from different community groups in the London Borough of Greenwich, including Chinese, African, Indian, Caribbean and Irish elders. She will also demonstrate how these memories are being translated into sharable forms through dramatisation and theatre workshops in schools and the wider community.

REDISCOVERING COMMUNITIES & COMMUNITY LIFE THROUGH REMINISCENCE

**Kath Smith, Project Co-ordinator, Remembering the Past, Resourcing the Future
Project;**

**Pip McKeever, Project Manager, The GifTT Project (Generations Interacting for Today
& Tomorrow)**

This award-winning user-led project records the memories of older people in North Tyneside in the North East of England and disseminates them on a website to a world wide audience. The project has been running for over five years with support from a variety of grant funders and we have been able to create an archive of over 400 local memories.

Much of the work is undertaken by volunteers and the project offers new opportunities for leisure and learning for older people, encouraging them to make links with others to combat social isolation and enabling them to become more familiar with computers and the internet. Volunteers manage the project, give talks on the material in the collection and contribute to other local history activities in the area.

Recently our reminiscence work in sheltered housing schemes, undertaken in partnership with the GifTT project, has produced wonderful oral history material, some of which has been published on our website and in booklet and CD format. Collaborative working and a user-led approach has deepened our understanding of contemporary community life and made us realise that „community“ means different things to different people, especially where reminiscence is concerned.

We'd like to tell you about how we've approached the work, how it has been shaped and developed by the people we've met along the way, and about the way it has revised our views on „community“ in its past and the present sense.

THE OUR TOWN PROJECT

**Colin Stott, Learning Manager and Laura Matthews, Community History Officer,
Norfolk Museums and Archaeology Service (Great Yarmouth)**

The Our Town Project aims to make a community archive by recording people's experiences of living and working in Great Yarmouth over the last 60 years, through oral history, reminiscence sessions, film and photography projects and contemporary collecting. The work is building on the existing Great Yarmouth Voices Archive at the museum.

The speakers will outline:

- How the project is working with the community to record their memories for future generations;
- The methods used to engage the local community in recording oral histories both as interviewees and researchers;
- How the museum have been recording people's motives for participating;
- How the interviews will be used and made accessible to the public.

THE CHALLENGE OF RECORDING AN INDUSTRY

Peter Sturley, Assistant Curator of Photography, Film & Sound, National Railway Museum, York

In 1999 the National Railway Museum and its Friends embarked on an oral history project to capture the memories of people who worked in the industry at all levels. The result to date has been some 600 recordings lasting 1,100 hours and associated material collected by volunteer interviewers. The information captured has been used in displays at the museum, broadcast by the BBC and in print.

Whose story are we recording?

How do we ensure projects are representative and recognisable to (local) communities?

The challenge of recording the oral history of an entire industry (or attempting to) has both positive and negative aspects which this presentation will discuss. Recording industrial oral history by members of the industry itself is different to the norm; insider involvement may be affected by former professional relationships, hierarchy, area of work, Trade Union/management. Pre-existing relationships are often complex and unspoken or even unrecognised.

Career stories and life stories often encounter resistance to areas of interviewing from interviewers and interviewees that are painful – memories of accidents for instance – that impact on historically objective recording of the industry (a potential problem for any single subject museum with (inevitably) close links to their industry).

Interviews can tend to be biased towards the interests of the interviewer and this can lead to a predominance of certain types of work and/or worker. Being too close to the subject can also mean that obvious questions are not asked

There are benefits too with this system. Interviewers will have knowledge of the complexities involved in the industry and understand technical jargon, organizational structures, geography etc. There may well be a feeling of common understanding and shared experience which can assist when probing questions are asked.

THE SHAPING OF COLLECTIVE MEMORY IN A VOLUNTEER PROJECT

Paul Thompson, Brenda Corti and Janet Turner

The great majority of recent community oral projects, particularly those currently supported by the Heritage Lottery Fund, are carried out by volunteers primarily interested in local history rather than in academic research. This has been a major change brought through the growth of local oral history activity since the 1980s. By contrast, earlier most community studies were carried out by social researchers, mainly anthropologists and sociologists, who had their own intellectual tradition, and sought through their investigations to confirm or develop these wider perspectives. What is the significance of this change for our understanding of community history?

Paul has worked in both kinds of project. His earlier oral history research on fishing communities in Scotland for *Living the Fishing* was strongly influenced by this earlier more academic tradition. In the last three years he has led a community oral history project in his own Essex village, Wivenhoe, with a team of over twenty volunteers.

In this paper we want to share some of the fruits of our community project in Wivenhoe, but at the same time offer some brief reflections on the differences between earlier community studies and a contemporary volunteer-based community oral history project. These will concern, firstly the choice of who is interviewed; secondly, the self-censorship in the interviews of some controversial topics; and thirdly, the differences in audience.

Paul Thompson is Research Professor in Sociology at the University of Essex, and director of the Wivenhoe Oral History Group's project, 'Remembering Wivenhoe'; *Brenda Corti*, retired, is Secretary and Administrator of the project; *Janet Turner*, retired is Wivenhoe Oral History Group's audio specialist. All three were active interviewers on the project.

ORAL HISTORY IN MULTI-CULTURAL COMMUNITIES

Ann Westgarth: Project Co-ordinator *The Immigrants Project* (Reading Local History Trust)

The Immigrants Project collected the experiences of people who came from all over the world to settle in Reading, Berkshire in the last sixty years. The interviews were recorded, transcribed and archived in Reading Museum, published in a book „Routes to Reading“ and on a website: www.theimmigrantsproject.org.

The project was highly participatory and involved local volunteers in interviewing, transcribing and making editorial decisions about content and publication. „Experts“ were only called upon to offer advice and support when necessary. Those involved from the community were passionate about its purpose. Such emotional commitment has advantages and drawbacks and these will be explored.

Initially, fifty people volunteered to be interviewed, posing questions about who should be interviewed. In addition, many people from different ethnic backgrounds attended interviewer training resulting in the possibility of a wide variety of cross-cultural interviews and raising a number of issues. For example, whether people from a particular community should be interviewed by people „known“ to them? Whether a dialect common to interviewer and interviewee is re-enforced during an interview and what impact does this have? Should interviewers themselves be interviewed? In selecting a number of individuals from different ethnic minority backgrounds, do they become „representatives“ of that community?

The title of the project stimulated discussion around the perception of the term „immigrant“. Further discussion took place regarding the publication of verbatim transcriptions and how non-standard spoken/written English might sound/appear to others.

The common experience of being an immigrant helped to identify certain common themes for the project although there were a variety of reasons why people came to Reading in the first place. The project's largest public event required careful facilitation in bringing together such

a culturally diverse group of people. Unprecedented in Reading, this resulted in generating a lot of very positive publicity.

**BRIDGING THE YEARS: AN INTER-GENERATIONAL PROJECT
CELEBRATING THE COMMUNITY HERITAGE**

Heather Williams, Community Development Project Officer, Northern Marches Cymru (NMC)

NMC is a partnership organisation which serves the needs of rural communities by helping to develop and implement projects in the rural Wrexham area, (in North East Wales) which will give long-term benefits to the economic, social, cultural and environmental vitality of the area. This project was Rural Community Action project, which was funded and facilitated by the Welsh Assembly Government.

Bridging the Years was initiated as a project to encourage primary school pupils to develop their awareness, understanding and appreciation of the local environment through oral history. The aim of the project was to interpret, preserve and celebrate local heritage and also, to assist in the development of links between the youth and older people in the Bangor on Dee area.

The pupils interviewed local residents capturing their memories of the local area during the 1960s and 1970s - exploring what the village was like and discovering what changes had taken place. In each interview session the pupils were split into small groups and each group interviewed one person who had been chosen to talk about certain topics using a prepared list of questions. Further details about how the project was carried out and the topics covered will be given in the presentation. In addition the benefits that the pupils and school have gained from this project will also be revealed.

1000 copies of a CD with edited recordings of the interviews were produced and available free of charge in the community. The pupils also prepared their own exhibition about the project, which was displayed in the local church. Finally, a touring exhibition was created using transcripts from the CD, together with photographs to complement the text.

<http://www.oralhistory.org.uk/conferences/2007.php>



Research into Scottish urban regeneration

Research to help develop a design for the Scotland Pavilion to highlight the regeneration plans of Scotland. This could be used as an area within the pavilion.

Need to think about retention of talent in cities especially further north such as Inverness.

Glasgow's canal corridor: The canal is the study area's unique asset, and a key source of distinctiveness and competitive advantage, but an under-used waterway can become a liability and place that people avoid rather than an attraction. For this reason, any positive future scenario will be predicated on the presence of a lively and attractive waterfront, and activity on the water; there is a need for early action to animate the waterspace and encourage people to visit Glasgow's little-known canal.

☒ Improving public transport: For a variety of historic reasons, the study area is poorly served by public transport. Radial routes pass through the area, north and south, but bus services do not penetrate into the heart of the area. This only serves to compound a sense of isolation, and local business recognise it as a weakness. Sustainable regeneration can only be achieved if Glasgow City Centre North is reconnected to the city centre and adjoining neighbourhoods, and all the best European models treat connectivity as a non-negotiable requirement.

☒ Improving pedestrian access to and through the study area: Most pedestrian routes in and out of the study area are obscure and unattractive, and sometimes hostile. Port Dundas, for example, is easily walkable from the city centre but it is not a good experience. The study area often feels deserted: even at the busiest times of time there are few people on the streets. Over time, radical solutions may be required to remove barriers; in the short term, a plan to make pedestrian routes safer and more attractive is imperative.

☒ Enhancing the public realm: Although parts of the study area have a rich character and heritage, the quality of the public realm is almost uniformly poor: The canalside around Speirs Wharf is the only exception. The strategy must include a long-term plan for strengthening and enhancing the public realm and creating high quality urban spaces, but a short-term early action plan should also be devised – focusing on areas with the potential for rapid improvement, for example, by cleaning up derelict land, improving recent development sites and influencing new developments.

☒ Promote investment in a sustainable city-wide public transport system building upon the proposed Guided Bus Network and existing services, connecting attractions and facilities across the City which are becoming all the more widespread and potentially disparate.

☒ Work within each of the City 'Quarters' to nurture a sense of distinctiveness rooted in the characteristics and cultural uniqueness of each place.

The Merchant City is one of the oldest quarters of Glasgow and has been the home for monks, merchants and merry makers for centuries. In medieval times orangeries and rose gardens once scented the air, but as the city developed in mercantile wealth and notoriety, this pretty little area is where the dog and bird markets, bowling greens and places of entertainment could be found. The likes of **Charles Dickens**, **Oscar Wilde** and **Paganini** (the demon fiddler) have entertained here, the suffragette, **Harriet Beecher Stowe** demonstrated and Temperance activist **Carrie Nation** campaigned here.



Today the Merchant City has seen a remarkable rebirth and in amongst the bars, boutique hotels, luxury apartments, restaurants, shops and artists galleries there still survive a few hidden gems, such as the [Britannia Panopticon Music Hall](#) where **Stan Laurel** made his debut or the architectural splendour of the magnificent 18th century [St. Andrew's in the Square](#) or the sublime [City Halls](#) and [Old Fruitmarket](#).

Archway Royal Exchange Square

In the early 1980s Glasgow saw the start of a Merchant City and Glasgow-wide regeneration symbolised by the “Glasgow’s miles better” campaign. This was further enhanced with the 1988 Glasgow Garden Festival and two years later, the accolade of European City of Culture. Investment increased – led by a strong partnership between the City Council and the then Scottish Development Agency, and Glasgow began to celebrate its old buildings and the architects who built them.

Old warehouses became modern fashion houses (the Italian Centre on Ingram Street, designed by Page & Park Architects is an award winning example); empty market buildings were given new life as restaurants or bars and loft living arrived with the Todd building (Ingram Street) which is so cool even the pigeons wear shades!

The Italian Centre is a bold and popular re-claiming of derelict early 19th century tenements by Classical House Ltd. and the award winning architects Page & Park which saw creation of a sunny, sheltered courtyard around a mixed-use scheme of housing, offices and 'haute couture' shops and cafés with a heavy dose of classical and more contemporary versions of public art. Particularly noteworthy are the trademark Sandy Stoddart's 'bronzes' of Mercury and Italia sitting atop the wallheads and the playful response of Shona Kinloch within the courtyard with her 'wee dug' and 'wee man' - the latter a budding Romeo throwing a kiss to his imaginary sweetheart (check out the tattoo) on one of the upper balconies...aaahh!

Research into Scottish tourism

Research to help develop a design for the Scotland Pavilion to look at what people think about our nation through travelling here and our global reputation.

http://www.scotsmart.com/info/general/f_tour.html

Who comes?

In recent years around 1.5 million overseas visitors per year

USA	27 %	Australia	7 %
Germany	16 %	Italy	5 %
Irish Republic	10 %	Netherlands	4 %
France	10 %	Spain	3 %
Canada	8 %	Japan	3 %

Why do they come?

They say....

- 1) Scenery
- 2) Friendly locals
- 3) History

What do they see?

Top tourist attractions in Scotland
(more or less in order for recent years):

Edinburgh Castle
Kelvingrove Gallery and Museum, Glasgow
Royal Botanic Gardens, Edinburgh
Royal Museum of Scotland, Edinburgh
National Gallery of Scotland, Edinburgh
Glasgow Botanical Gardens
Edinburgh Zoo
Scottish United Services Museum, Edinburgh
Museum of Transport, Glasgow
Deep Sea World, N Queensferry, Fife
Stirling Castle
New Lanark Industrial Village
Holyrood Palace, Edinburgh

Urquhart Castle, Loch Ness
Glenturret Distillery, Crieff, Perthshire

[Scottish Government International Framework](#)

File Format: PDF/Adobe Acrobat - Quick View

Scottish interests abroad; the work of Scottish Development International ... allow us to develop ways of managing Scotland's reputation more effectively. ...

www.scotland.gov.uk/Resource/Doc/221041/0059464.pdf - Similar

Have saved this as a pdf under my documents – Scottish government policy abroad

Lots to say on our reputation globally

Research into Scottish sport and Commonwealth Games, Glasgow 2014

Research to help develop a design for the Scotland Pavilion to highlight the regeneration that is happening to create a world class venue for the 2014 Commonwealth Games, the legacy of which will help to create facilities for the people of Scotland for many years to come. This includes research into Scottish sports that are developing in China so that the pavilion can be seen as relevant in the host city.

Glasgow 2014 will be the XXth Commonwealth Games bringing 6,500 athletes and officials from 71 Commonwealth Games Associations to 1 host city. 17 sports over 11 days of competition between 23rd July and 3rd August 2014.



New venue in Glasgow



Cathkin Braes Country Park

Cathkin Braes, a country park in Glasgow City's South Side, will serve as the venue for the Mountain Biking competitions. Glasgow's first international standard mountain biking course will be constructed in ideal terrain overlooking the city just 15 minutes south of the Athletes' Village, from an initial layout developed in 2009.

Owned by Glasgow City Council and South Lanarkshire Council, the course will be a legacy that will not only provide a venue capable of staging future international events, but also a facility that will benefit the communities of Glasgow and surrounding areas in a sport that is rapidly growing in popularity.

Cathkin Braes' hills, wooded terrain and open spaces with a spectacular panorama will provide spectators with a wonderful setting for exciting competition amidst beautiful natural scenery.

A short history of bicycles in China

30th November 2007



While China is known as the world's bicycle capital nowadays, this western invention was not easily integrated into the Chinese way of life. At the end of the 19th century, when bicycles were coming into fashion, China, which has suffered humiliation in one way or the other from Western powers, was not quite ready to open its arms to yet another foreign invention.

The first mention of bicycles in China was in 1860, when a European official named Binchun wrote of seeing a fantastic sight --- a velocipede, an early version of the bicycle, newly-arrived from Paris. In truth, Binchun and his delegation were on a trip to China to evaluate the latest technological innovations and to consider whether they can be used for military purposes. At that time, it appears that the bicycle was not considered suitable for warfare.

A gentleman doesn't sweat

At the end of the 19th century, the only people who used bicycles in China were foreigners who lived in Shanghai. The Chinese were mostly amazed at the passion the "big-nosed" foreigners displayed at this physical activity. During those times, no self-respecting Chinese who had even the tiniest of wealth would consider moving around on his own. He would instead take the sedan chair, or if he were inclined to use the latest mode of transport, use a rickshaw which was invented in 1870.

It was only during the 20th century that imported, and therefore expensive, bicycles were sold to the Chinese. But sweating and exercise did not fit into the Chinese way of life, so in the beginning only the nouveau riche, especially those who have gone abroad to study and have lived among bicycle-riding people. The prostitutes ("sing-song girls") who worked in the ports open to foreign trade were also avid users of the bicycle. They had relatively good income and were already living on the margins of polite society anyway.



In China, bicycles are a convenient way of transporting goods from one place to another. (Image: China News Service)

During the 1920s, when the 6-day work week became common in the cities and people had free time for themselves that enthusiasm for the bicycle rose. In the coastal areas and cities, that is. In the inner regions of China, the bicycle came into wide use only during the 1930s and 1940s.

The people's vehicle

The bicycle industry in China began in the 1930's, when assembly plants for foreign-made bicycles were first established. China-made bicycles came in the 1940s. The founding of the People's Republic of China in 1949 was a turning point for the bicycle industry. The Party decided to promote the bicycle as the people's vehicle and started a massive production drive. Bicycles were taken into account in city planning and those who used bicycles to travel to and from work were given benefits. The lack of a public transport system was solved! China's first Five-Year Plan included the growth of the bicycle industry by 60 percent, and by 1958, China was producing more than a million bicycles annually.

By the way, the bicycle is called *zi xing che* (自行车) in Chinese, meaning, self-driven transport.

<http://www.allroadsleadtochina.com/2010/01/22/can-hipster-youth-reinvigorate-bike-culture-in-china/>

[Can Hipster Youth Reinvigorate Bike Culture in China?](#)

Guest Post from John Solomon, Director of enoVate



The fixed gear bike movement has hit the streets of China. Just three years ago, you could count the number of fixed gear bikes here on your fingers (and maybe toes). But spend an afternoon strolling Shanghai's French Concession, and you're sure to see various youth — Chinese and Foreign — riding fixies. What's more, this movement is not limited to the Big Two (Shanghai and Beijing). Tyler Bowa, founder of People's Bike, states China's biggest fixed gear scenes are actually in Shenzhen and

Dalian, where 7 months ago there were no such bikes. This movement is spreading to cities nationwide: Suzhou, Nanjing, Chengdu, Wuhan, the list goes on. But why? The fixed gear industry has done little-to-nothing to popularize this product in China. Besides a handful of local companies, like airwalk (link), fixed gear brands have mostly neglected their relationship with the Chinese consumer. This, of course, will change very soon.

Crucial to the rise of fixies in China has been the internet. For one, the fixed gear scene has become increasingly well-documented. Videos and photos litter the online world. These bikes are popping up on popular websites, blogs, and video sharing websites. Chinese youth can watch popular fixie movies, such as MashSF, on youku. Secondly, the internet has provided a place for riders to organize communities. Threemin, China's first fixed gear website has an active forum, with roughly 4,000 members for its Southern China forum alone.

Also worth mentioning is the sometimes subliminal cultural magnetism of China's neighbors — Japan, Korea, and Taiwan — where fixed gears have an already long-established tradition. But Karl Ke, co-founder of People's Bike, notes that beyond just fixed gears, bicycle culture is experiencing a resurgence in China.

“Basically, I think people more and more fancy riding a bike, based on four key areas: 1) the government began extensive promotion of environmental protection concepts. 2) More and more Western media are promoting the concept of bike riding and healthy living. 3) More people want to escape from depression and immerse themselves in city life. Cycling is one of the most effective and easy ways to escape and control things in one's daily life. 4) Fixed gear is simple and close to the concept of extreme sports, but has its own unparalleled noble temperament.”

For many young Chinese today, the bicycle stands for much more than just a means of transportation. It is now a fast-growing culture, that consists of a large community dispersed throughout China. This is especially the case for fixed gears. Websites like People's Bike and Threemin keep riders all over connected, while events like Alleycat (video here) have united riders from all over for races in Beijing, Shanghai, and this weekend Guangzhou. This community will continue to grow. The second half of 2009 saw a real explosion in China's fixed gear scene, but that was just a taste of things to come as we enter a new decade.

We expect to see brands hopping on the bandwagon in the immediate future. Brands like Puma and Thule have already associated themselves with local bike culture by sponsoring the Shanghai Alleycat. Expect more of this, but also expect the fixed gear industry to open its eyes to the China market. It's an open playing field. Giant will be entering the fixed gear market soon with a new brand called Momentum. This is smart. Fixed gear aficionados tend to stay away from mega-brands when building their cycle. This demographic seeks a personal relationship with their bike. A Giant branded bike would ultimately fail. As Tyler Bowa states, “we don't want to walk into a big store and pick something off the wall, that's why small bike companies thrive throughout the world.”

For some great Shanghai fixie photos, check out Tyler Bowa's portraits on flickr: <http://www.flickr.com/photos/peoplesbike>. All photos are from Tyler Bowa and People's Bike.

<http://en.wikipedia.org/wiki/Curling>

Curling



Highest governing body	World Curling Federation
Nickname(s)	Chess On Ice, The Roaring Game
First played	Approximately late medieval Scotland
Characteristics	
Team members	4 per team (2 in Mixed Doubles)
Venue	Curling sheet
Olympic	<ul style="list-style-type: none"> • 1924 (Retroactively made official in 2006). • Demonstration sport in 1932, 1988 and 1992. • Officially added in 1998.

Curling is a sport in which players slide stones across a sheet of ice towards a target area. It is related to bowls, boule and shuffleboard.

Two teams, each of four players, take turns sliding heavy, polished granite stones across the ice curling sheet towards the house, a circular target marked on the ice.[1] Each team has eight stones. The purpose is to accumulate the highest score for a game, points being scored for the stones resting closest to the centre of the house at the conclusion of each end, which is completed when both teams have thrown all of their stones. A game may consist of ten or eight ends.

The curler can induce a curved path by causing the stone to slowly turn as it slides, and the path of the rock may be further influenced by two sweepers with brooms who accompany it as it slides down the sheet, using the brooms to alter the state of the ice in front of the stone. A great deal of strategy and teamwork goes into choosing the ideal path and placement for each situation, and the skills of the curlers determine how close to the desired result the stone will achieve. This gives the game its nickname of "Chess On Ice".

Origins and history

Curling is thought to have been invented in late medieval Scotland, with the first written reference to a contest using stones on ice coming from the records of Paisley Abbey, Renfrewshire, in February 1541. Two paintings (both dated 1565) by Pieter Bruegel the Elder depict Dutch peasants curling—Scotland and the Low Countries had strong trading and cultural links during this period, which is also evident in the history of golf.

Evidence that curling existed in Scotland in the early 16th century includes a curling stone inscribed with the date 1511 (uncovered along with another bearing the date 1551) when an old pond was drained at Dunblane, Scotland. Kilsyth Curling Club claims to be the first club in the world, having been formally constituted in 1716; it is still in existence today.[2] Kilsyth also claims the oldest purpose-built curling pond in the world at Colzium, in the form of a low dam creating a shallow pool some 100 × 250 metres in size, though this is now very seldom in condition for curling because of warmer winters.[citation needed]

The word curling first appears in print in 1620 in Perth, in the preface and the verses of a poem by Henry Adamson. The game was (and still is, in Scotland and Scottish-settled regions like southern New Zealand) also known as "the roaring game" because of the sound the stones make while traveling over the pebble (droplets of water applied to the playing surface). The verbal noun curling is formed from the Scots (and English) verb curl,[3] which describes the motion of the stone.

In the early history of curling, the playing stones (or rocks) were simply flat-bottomed river stones that were sometimes notched or shaped; the thrower, unlike those of today, had little control over the stone, and relied more on luck than on skill and strategy.

It is recorded that in Darvel, East Ayrshire, the weavers relaxed by playing curling matches. The stones they used were the heavy stone weights from the weavers' "warp beams," fitted with a detachable handle for the purpose. Many a wife would keep her husband's brass curling stone handle on the mantelpiece, brightly polished until the next time it was needed.[4]

Outdoor curling was very popular in Scotland between the 16th and 19th centuries, as the climates provided good ice conditions every winter. Scotland is home to the international governing body for curling, the World Curling Federation, Perth, which originated as a committee of the Royal Caledonian Curling Club, the mother club of curling. Today, the game is most firmly established in Canada, having been taken there by Scottish emigrants. The Royal Montreal Curling Club, the oldest established sports club still active in North America,[5] was established in 1807. The first curling club in the United States began in 1830, and the game was introduced to Switzerland and Sweden before the end of the 19th century, also by Scots. Today, curling is played all over Europe and has spread to Japan, Australia, New Zealand, China, and Korea.[citation needed]

Olympic curling

Curling has been an official sport in the Winter Olympic Games since the 1998 Winter Olympics. In February 2006, the International Olympic Committee retroactively decided that the curling competition from the 1924 Winter Olympics (originally called *Semaine des Sports d'Hiver*, or International Winter Sports Week) would be considered official Olympic events and no longer be considered demonstration events. Thus, the first Olympic medals in curling, which at the time was played outside, were awarded for the 1924 Winter Games, with the gold medal won by Great Britain and Ireland, two silver medals by Sweden, and the bronze by France. A demonstration tournament was also held during the 1932 Winter Olympic Games between four teams from Canada and four teams from the United States, with Canada winning 12 games to 4.[6][7]

Equipment



The playing area in curling is shown here. Stones must land between the hog line (bottom of photo) and the back line (behind the rings) and may not contact boards or out lines (on the sides) at any time during travel.

The curling sheet

The playing surface or curling sheet is defined by the World Curling Federation Rules of Curling.[8]

The sheet is an area of ice, carefully prepared to be as flat and level as possible, 146 to 150 feet (45 to 46 m) in length by 14.5 to 16.5 feet (4.4 to 5.0 m) in width.

The ice may be natural but is usually frozen by a refrigeration plant pumping a brine solution through numerous pipes fixed lengthwise at the bottom of a shallow pan of water. Most curling clubs have an ice maker, whose main job is to care for the ice. At the major curling championships, ice maintenance is extremely important. Large events, such as the Brier or other national championships, are typically held in an arena that presents a challenge to the ice maker, who must constantly monitor and adjust the ice and air temperatures as well as air humidity levels to ensure a consistent playing surface. It is common for each sheet of ice to have multiple sensors embedded in order to monitor surface temperature, as well as probes set up in the seating area (to monitor humidity) and in the compressor room (to monitor brine supply and return temperatures).The surface of the ice is maintained at a temperature of around 23 °F (−5 °C).[9]

A key part of the preparation of the playing surface is the spraying of water droplets onto the ice, which form pebble on freezing. Because the stone rolls over the pebble, any rotation of the stone causes it to curl to the inside or outside; the amount of curl can change during a game as the pebble wears.

Curling stone



The curling stone or rock is made of granite



An old-style curling stone

The curling stone, (also sometimes rock, North America) as defined by the World Curling Federation is a thick stone disc weighing between 38 and 44 pounds (17 and 20 kg) with a handle attached to the top.[8] The maximum allowable circumference is 36 inches (910 mm).[8] The minimum height is 4.5 inches (110 mm).[8] The handle is attached by a bolt running vertically through a hole in the centre of the stone. The handle allows the stone to be gripped and rotated upon release; on properly prepared ice, the stone's path will bend (curl) in the direction the front edge of the stone is turning, especially as the stone slows. The handles are coloured to identify the stones by team. Two popular colours in major tournaments are red and yellow. The only part of the stone in contact with the ice is the running surface, a narrow, flat annulus or ring, 0.25 to 0.50 inch (6.3 to 13 mm) wide and about 5 inches (130 mm) in diameter; the sides of the stone bulge convex down to the ring and the inside of the ring is hollowed concave to clear the ice.

Traditionally, curling stones were made from two specific types of granite called "Blue Hone" and "Ailsa Craig Common Green", found on Ailsa Craig, an island off the Ayrshire coast in Scotland. Blue Hone has very low water absorption, which prevents the action of freezing and melting water from eroding the stone.[10] Ailsa Craig Common Green granite is a lesser quality granite than Blue Hone. In the past, most curling stones were made from Blue Hone; however, the island is now a wildlife reserve and the quarry has closed. The second location where granite comes from to manufacture curling stones from is in Northern Wales. This granite is called "Trefor" and comes in shades of blue/gray and red/brown. The quarry in Wales that supplies the granite to its exclusive curling stone manufacturing company in Canada, Canada Curling Stone Co., is a full and active quarry and it is not anticipated to ever run out of this granite for making curling stones. Canada Curling Stone Co. has been manufacturing curling stones since 1992. The cost of new Trefor granite curling stones is about \$600 CDN a stone.

Kays of Scotland has been making curling stones since 1851 and has the exclusive rights to Ailsa Craig granite, granted by the Marquess of Ailsa, whose family has owned the island since 1560. The last "harvest" of Ailsa Craig granite by Kays took place in 2002. Kays have said that they harvested 1,500 tons, sufficient to fill anticipated orders through at least 2020. Kays has been the exclusive manufacturer of curling stones for all three Olympics where curling has been a medal sport.[11]



The Fingask Curling Club, Perthshire, Scotland, in 1854

Competition teams are normally named after the Skip, e.g. Team Martin for skip Kevin Martin. Amateur league players can (and do) creatively name their teams, but when in competition (a bonspiel) the official team will have a standard name.

Top curling championships are typically played by all-male or all-female teams. The game is known as mixed curling when a team consists of two men and two women. The Canadian Mixed Curling Championship is the highest-level mixed curling competition, in the absence of world championship or Olympic mixed curling events.

Curling is played in many countries including Canada, United Kingdom (especially Scotland), the United States, Norway, Sweden, Switzerland, Denmark, Finland and Japan, all of which compete in the world championships.

Good sportsmanship

More so than in many team sports, good sportsmanship is an integral part of curling. Even at the highest levels of play, players are expected to "call their own fouls", so to speak, such as alerting the opposing skip if they "burned" a stone. It is also traditional for the winning team to buy the losing team a drink after the game.[15] This is often referred to as the Spirit of Curling. This tradition is in contrast to the games of darts where the loser traditionally buys the winner a drink by way of congratulations.

As noted above in the game play section, it is not uncommon for a team to concede a curling match after it believes it no longer has a reasonable chance of winning but before all ends are completed. Concession is an honorable act and does not carry the stigma associated with quitting, and allows for more socializing. To concede a match, members of the losing team remove their curling gloves (if they wear them) and offer congratulatory handshakes to the winning team. Thanks and wishes of future good luck are usually exchanged between the teams.

Special needs in curling

Curling has been adapted for wheelchair users and people otherwise unable to throw the stone from the hack. These curlers may use a special device known as a "curler's cue" or "delivery stick". The cue holds on to the handle of the stone and is then pushed along by the curler. At the end of delivery, the curler pulls back on the cue, which releases it from the stone. The Canadian Curling Association Rules of Curling allows the use of a delivery stick in club play but does not permit it in championships.

<http://www.beijngtoday.com.cn/tag/beijing-zilongxiang-curling-club>

By Chu Meng

Curling, previously a little-known game in China, has gained popularity in Beijing after the Vancouver Winter Olympics, due mostly to the unexpected wins by the Chinese national curling team.

“There have been at least 20 calls from locals asking us how to join our club,” Li Xin, coach of the Beijing Zilongxiang Curling Club, said, adding that this was a welcome development since the group had gotten only a few calls a month since its establishment in 1998. “And most of them were foreigners, such as Canadians living in town.”

Li, 33, discovered curling as a student at the University of Vancouver in the 90s. He joined a curling club on campus and has been in love with the sport ever since.

Before the Vancouver Games, held February 12 to 28, few Chinese people knew about the game, Li said. China has only 100 professional athletes involved in curling compared to Canada’s 1 million registered players, he said.



Beijing Zilongxiang is the only place to play curling downtown.

“And there are just three stadiums equipped to host professional curling competitions: one in Harbin and two in Beijing. We are the first and the only curling club in downtown Beijing open to the public. The other one is in the outskirts, in Huairou District, used for the national team’s training.

Yang Cheng, the club’s assistant coach, said curling is a sport that actually suits Asians’ physique since it emphasizes skill rather than physical strength and involves limited body contact among players.

He found out about Zilongxiang club through an article in the Beijing Youth Daily in 1998, and developed a fascination for the sport after watching several games involving the Chinese national team. “I liked the wonderful feeling of sliding, although I didn’t know much about curling at the time. After I played it, I felt pretty cool. I’m addicted to it now,” he said.

Yang said curling’s development in China has been impeded by a lack of facilities and the sport’s expensive equipment. The stone must be made of polished natural granite from Scotland, and each

curling set costs anywhere from 40,000 to 100,000 yuan. In addition, personal equipment, such as brushes and shoes, costs several thousand yuan a set.

Chinese people still have a long way to go toward understanding the sport, said Yang.

"Most people still confuse curling with skating. They often ask me whether they can wear their skating shoes for curling. I tell them curling and skating are two completely different kinds of sports. Curling shoes do not have blades; instead one foot is smooth and the other rougher."

To attract more players, Li and Yang imported professional curling equipment, including an ice-making machine, from Canada.

In exchange for a monthly membership fee of 200 yuan, Zilongxiang's members do not have to worry about curling facilities and equipment. The club provides free training each Tuesday and Thursday, and can also help members order shoes and sportswear from Canada.

<http://www.china.org.cn/english/sports/198662.htm>

In order to improve the level of curling in the country, Chinese winter sports officials are going to hit the road to raise the sport's profile.

"We plan to start promotion in colleges and universities in Beijing," said Yu Tiande, head of curling at China's Winter Sports Administrative Center. "We will hold some competitions among those universities, which will help a lot in the sport's development."

Yu said he was looking for sponsors to help take the sport forward.

"Some companies, especially companies from southern China, have expressed their willingness to invest in curling venues. As more venues are built, I believe it will become known to more people."

Despite the shortage of facilities, the ambitious team have set their sights on a medal at the 2010 Vancouver Winter Olympic Games.

"China's curling team will strive for a medal in Vancouver in three years' time," said Li. "But for a gold medal, I think we'll need to wait another four years after Vancouver."

(China Daily February 2, 2007)

http://news.bbc.co.uk/1/hi/scotland/tayside_and_central/7674629.stm

National Curling Academy to open

A National Curling Academy is to be built in Kinross.

The decision was announced by the Board of the Royal Caledonian Curling Club, who had shortlisted sites in Kinross and Ratho for the project.

The new academy will feature a six sheet curling rink, with full supporting facilities, offices, meeting rooms and a museum.

The club said they aimed to have the new facility up and running in time for the 2010/2011 season.

Jamie Montgomery who led the Kinross bid, described the news as "extremely exciting".

'Historic location'

He added: "The local area has long had a strong curling tradition centred on Loch Leven and Kinross Curling Club is believed to be one of the oldest, if not the oldest club in the world.

"The prospect of a state-of-the-art curling facility in Kinross, catering for both local curlers and national elite squads, furthers our aspiration to become the genuine curling centre of Scotland."

Colin Grahamslaw, from the Royal Club, said the decision would help secure the sport's future.

He added: "Kinross's historic location makes this a perfect home for the National Curling Academy and we are please that this decision will also have the benefit of securing the future of curling in Kinross for the long term."

The new academy will be built on the proposed Market Park site in the heart of Kinross.

Funding for the project is expected to be a mix of public cash, trust funding, loans and donations from local curlers.



The new National Curling Academy will be located in Kinross

http://www.glasgow2014.com/the_games/athletes_village_and_venues/venues/hampden_park.aspx



Hampden Park

Once the world's largest stadium, Glasgow's famous Hampden Park will play host to both the Athletics competitions and the XX Commonwealth Games Closing Ceremony.

For Glasgow 2014 the stadium will be transformed from a football stadium to an international standard track and field facility by implementing an innovative building technique that uses a solid in-fill to raise the playing surface from its current level by over 1.5 metres. Additionally, a warm-up track and jump areas will be provided immediately adjacent to the stadium at Lesser Hampden with direct and secure access from this site into the main stadium.

Hampden Park is an iconic place not only for Glaswegians but also for all Scots. Home of the national football team, it holds around 52,000 reduced to 46,000 spectators for the Games. In addition to the track and field events, the Marathon course is planned to start and finish at Hampden Park.



National Indoor Sports Arena (NISA) & Sir Chris Hoy Velodrome Precinct

The National Indoor Sports Arena (NISA) and the adjoining Sir Chris Hoy Velodrome in the East End of Glasgow will provide one of the most versatile and innovative structures of its type in Europe. This state-of-the-art precinct site, which is owned by Glasgow City Council, is located in Dalmarnock alongside the Athletes' Village. Due to open in 2012 this joint venue will become a superb legacy for Scotland aiding the development of the next generation of elite Scottish athletes.

National Indoor Sports Arena (NISA)

In terms of sheer engineering innovation the adjoining National Indoor Sports Arena is unparalleled in Scotland and will be one of the largest facilities of its kind in Europe. This will be a fantastic, flexible community facility with its 12 Badminton Court Sports Hall complex that comprises three sports halls with 1,500 retractable seats, dance and fitness studios, external multi-court areas, media, event control and hospitality suites and offices for Governing Bodies of sport and sportscotland. At the touch of a button a top class 200-metre indoor athletics track will be hydraulically lifted from below in order to host the traditional end of January Aviva Indoor Athletics events that is currently hosted in the Kelvin Hall.

Sir Chris Hoy Velodrome

The Velodrome is named in honour of Scotland's most successful gold medal winning Olympian and Commonwealth Games champion. Its 250-metre track has been designed by Ralph Schumann, one of the world's foremost track designers. With its permanent viewing capacity of 2,500 it will be able to attract some of the world's top cycling events to Glasgow.

Scotland has an outstanding record in international track cycling competition, winning six medals in the Melbourne 2006 Commonwealth Games. The ambitious design and quality of the Velodrome will celebrate this success.

Glasgow 2014 will sell an estimated 1,000,000 tickets to some 250 medal events. The Games will be broadcast to hundreds of millions more - the Commonwealth accounting for about a third of the world's population. It requires a brand that will convey our vision through everything we say and do. We introduce you to that brand here and explain why it is something we believe is vital to protect.