



ANNUAL REPORT

2012-13

Contents

1. Introduction
2. Partnership working
3. Achievements
4. Projects
5. Events and Engagement Programme
6. Research and Best Practice
7. Looking forward – Strategic Implementation Plan
8. Budget

Appendix 1 - Projects

1 Introduction

- 1.1 Since the publication of “Scotland’s Cities: Delivering for Scotland” in December 2011¹, a great deal has been achieved by the partners in the Scottish Cities Alliance – the cities, the Scottish Government and its agencies, the Scottish Council for Development and Industry (SCDI) and the Scottish Cities Knowledge Centre (SCKC).
- 1.2 This report looks back over the first year of operation of the Alliance, including partnership working, achievements to date, the development and status of the current projects, the events and engagement programme and how research and best practice has underpinned the work of the Alliance.
- 1.3 The report concludes by giving an indication of work that is underway to implement the strategy outlined in “Scotland’s Cities: Delivering for Scotland.”

2. Partnership working

- 2.1 The past year has been a successful one in terms of forging new working relationships between the partner organisations, who had not previously worked as a group before. In addition to establishing the working practices between the partners, building relationships and developing trust has been an important part of the process.
- 2.2 The Alliance is independently facilitated by a small team based in SCDI, drawing on the resources of other SCDI staff where appropriate.

¹ Scottish Government (2011), *Scotland’s Cities: Delivering for Scotland* available at www.scottishcities.org

3 Achievements

3.1 Since the Leadership Group first met in March 2012 to approve the governance arrangements and initial priority projects, much has been achieved. These achievements can be split into those relating to partnership working and outputs relative to achieving the Alliance aims and objectives.

3.2 Partnership Working Achievements:

- Development of protocols for how the Alliance should report on budget spend and project approval, manage communications between the partners, approve and report on Alliance participation at events and define the roles, expectations and working relationships of each of the Alliance partners.
- Sharing best practice and knowledge between the partners on an online Knowledge Hub portal.
- Setting up action teams to take forward the work of the Alliance.
- Working together to promote opportunities in Scotland's cities by:
 - hosting events including the Scottish Cities Alliance Forum and Influencers' Dinners in each of the cities designed to engage the business community in shaping the work of the Alliance.
 - exhibiting at events such as the Scottish Low Carbon Conference and promoting opportunities in all of the cities on Edinburgh and Glasgow's stands at MIPIM 2013.
 - communicating the Alliance opportunities online using the Alliance website and Twitter.
 - developing collaborative marketing materials for the Cities Alliance including the production of an interactive i-Pad presentation.
- Developing working relationships between the Alliance partners and national agencies including Transport Scotland, Visit Scotland, SDI, SE, HIE, SFT, SEPA.
- Facilitating the strategic contribution of cities and city regions to a range of national policy documents, including NPF3, the Infrastructure and Investment Plan, Scotland's Digital Future and the refreshed Government Economic Strategy.
- Engagement with Centre for Cities and Core Cities.
- Recruitment of an Inward Investment Promotion Officer

3.3 Outputs to Date

- Reference material on potential funding mechanisms for progressing infrastructure development has been produced. SCKC has hosted a seminar attended by academic and industry experts to assist the cities to evaluate these mechanisms.
- Assisted with the development of SDI's "The Source" – an on-line resource platform which holds Team Scotland's investment materials.
- Assisted cities with their Urban Broadband Fund bids – Edinburgh (£10.7m), Aberdeen (£6.5m) and Perth (£0.8m).
- Aided discussions for the swift roll out of Transport Scotland's Wi-Fi on trains programme – prioritising routes between cities.
- Accelerated the delivery plan for smart ticketing in Scotland.
- Assisted Glasgow and Dundee with their successful bids to the Technology Strategy Board Future City Challenge. Based on its feasibility study, Glasgow has subsequently secured £24 million of funding for a Future Cities Demonstrator from which, through the Alliance, benefits and opportunities will be extended across Scotland's cities.
- Audited sustainability activity across the cities including waste, transport, energy and procurement and identified areas where collaboration could increase investment and employment.
- Developed a Strategic Implementation Plan to structure the Alliance work programme over the next three years.

4 Projects

- 4.1 An overview of the current projects is outlined below with further detail provided in Appendix 1.

Cities Investment Programme:

- 4.2 Developing a cities investment programme is the overarching priority of the Scottish Cities Alliance. Over the course of the last year, an action team led by Edinburgh has developed a detailed programme of collaboration on cities investment. The programme focuses on the following four key elements, collectively aimed at encouraging new investment and enabling the cities to create and retain jobs:

1. Infrastructure Investment Models: This programme is developing a range of innovative funding options to unlock infrastructure development opportunities in the cities.
2. Sector Analysis: This programme is aligning national and local place-based intelligence for Scotland's priority sectors. .
3. Investment Propositions: This programme is focusing on identifying, evaluating and advancing significant investment propositions across the cities.
4. International Promotion: This programme involves the Alliance working with national agencies to take investment propositions to a wider market, as part of a Team Scotland approach to driving forward investment.

Digital Connectivity:

- 4.3 Developing a collaborative programme to improve digital connectivity across Scotland's cities and the surrounding regions was identified as a key priority for the Alliance from the outset. The secondment of a senior officer from City of Edinburgh Council was agreed to at an early stage to assist Glasgow in leading the cities to develop the programme. A tailored and evolving approach to collaboration has since been agreed which builds on local initiatives being taken forward and supports the national "Scotland's Digital Future" strategy. The programme has already assisted the cities to record a number of important achievements. Plans are now well underway to ensure that Scotland's cities achieve world class infrastructure by 2020 and that they are well placed to access emerging sources of funding aligned to EU, UK and Scottish Government strategies.

Smart Ticketing:

- 4.4 At an early stage, the Alliance acknowledged that potential benefits could be realised from Scotland's cities collaborating to shape local strategies and foster partnerships between stakeholders to support Transport Scotland's Smart and Integrated Ticketing Delivery Strategy. Dundee led conversations on behalf of the Alliance with Transport Scotland's national smart ticketing delivery team and other partners to

establish how the Alliance might help further their existing work. Consequently, Dundee has commissioned work for the Alliance to:

1. Identify local priorities, research customer needs and build a vision for smart ticketing in each city-region focused on alignment with single outcome agreements and local economic strategies; and
2. Develop the national technical architecture and roadmap to establish local partnerships between stakeholders and agree local implementation plans.

Retrofitting for Energy Efficiency

4.5 The Alliance recognised that there was potentially a significant opportunity for the cities to collaborate to promote Scotland as an attractive location for investment by utility companies and Green Deal providers. An action team led by Edinburgh was established to investigate scope for a collaborative approach to developing the retrofit market across Scotland's cities and their surrounding regions. Having considered the strategic business case, the Alliance agreed the following collaborative approach:

1. Subject to City of Edinburgh Council approval, Edinburgh could act as a pathfinder for an 'ECO led Green Deal' project. The potential for other councils to join or be named on a collaborative procurement at a later stage will be considered.
2. All cities will consider opportunities to collaborate on a series of targeted projects with a view to developing practical experience, create momentum and build market capacity in retrofitting energy efficiency measures to buildings.

Hydrogen - A Zero Carbon Fuel:

4.6 In December 2012, Aberdeen presented an economic opportunity to the Alliance to extend Aberdeen's Hydrogen project out to Scotland's cities and their regions. On behalf on the Alliance, Aberdeen has commissioned work to develop a "Scottish Cities Strategy" for the introduction of hydrogen fuel cell technology across the seven cities as well as a detailed policy paper identifying the economic benefits of Scotland's cities collaborating to deliver hydrogen technology projects.

Other Projects

- 4.7 STEP-UP: This is an EU-funded project, led by Glasgow with three other European cities and supported by the Alliance, looking at ways of enhancing strategic energy planning. The inaugural project meeting was held in Glasgow in November and included a briefing session on how the Scottish Cities will benefit from the research findings.
- 4.8 Heat mapping: Using Scottish Government funding, and a methodology developed on pilot projects which took place in Inverness and Perth, heat mapping is being rolled out in the other cities. The benefits of collaboration are in sharing best practice, optimising resource usage and providing heat maps to a common standard that paves the way to build opportunities of scale between and across cities. This work will help identify areas where district heating systems are most likely to be feasible.
- 4.9 As the Alliance's work on the above programme gathers momentum, consideration is also being given to developing a pipeline of projects where collaboration would be beneficial to achieving the aims and objectives.

5 Events and Engagement Programme

- 5.1 In addition to engaging with industry, Scottish Government agencies and the Knowledge Centre, related to the work of the action teams, the Alliance has continued an engagement programme, supported by the Scottish Government.
- 5.2 Recognising the city-region aspect of the Alliance's work, a meeting was held with the managers of the Strategic Development Plan teams to outline the current projects. A meeting was also held with the National Planning Framework team, so that the combined city views could be considered alongside individual city priorities in developing the next version of the National Planning Framework.
- 5.3 The profile of the Alliance was raised at a number of events. SCDI helped host a successful Cities Forum on 1st October 2012 and a series of Influencers' Dinners are underway in each of the cities, offering an opportunity to engage with the private sector; we exhibited at the Scottish Low Carbon Investment conference and led a workshop on the Green Deal; the Alliance had speakers at the Smart Cities conference and the RTPi conference; opportunities in all of the cities were promoted on Edinburgh and Glasgow's stands at MIPIM 2013.
- 5.4 Going forward, a virtual investment team is being established by the Alliance's newly appointed Inward Investment Promotion Officer who will work with the cities to develop an investment promotion strategy and programme of shared investment promotion activity.

6 Research and Best Practice

6.1 The work of the Alliance has been underpinned throughout the last year by informed research and best practice from around the world coordinated by the Scottish Cities Knowledge Centre (SCKC). The SCKC was entirely financed by the Universities of St Andrews and Glasgow throughout the last year. Outputs to date include:

- Hosting its first annual conference in January 2012.
- Producing briefing papers on a series of topics related to the Alliance programme.
- Commencing dialogue with the cities and the Scottish Government on defining and measuring city success.
- Hosting a seminar on financing infrastructure investment which informed the cities' thinking on this aspect of the Cities Investment Programme.
- Attending and informing the discussion at Delivery Group and Action Team meetings.
- Appointment of two research fellows and an ESRC studentship.

6.2 The Alliance recognises that drawing on research and best practice is integral to its work and has subsequently agreed to contribute funding to allow the SCKC to access additional funding streams and resource itself to deliver on its strategy over the next year.

7 Looking Forward – Strategic Implementation Plan

- 7.1 After one year of active collaboration, the Alliance has already made substantial headway in strengthening the way in which Scotland’s cities, universities, national agencies and private sector partners work together. In the next year, we want to build on this strong foundation and deliver the projects that will help to attract investment and create new jobs
- 7.2 The Alliance has reflected on its first operational year and revisited its strategy to ensure that it is best placed to maximise Scotland’s economic opportunities. We have developed a Strategic Implementation Plan which outlines how we will achieve the aims and objectives outlined in “Scotland’s Cities: Delivering for Scotland”.
- 7.3 The Strategic Implementation Plan structures the Alliance programme into three parts:
- Attracting Investment;
 - Creating the Conditions for Economic Growth; and
 - Research and Best Practice

8 Budget

- 8.1 The Scottish Cities Alliance has two funding sources. The first is an operational fund to cover SCDI's costs for staff and for running a programme of events and engagement. The second is an investment fund for specific collaborative projects to accelerate their development and delivery.

Operational fund

- 8.2 Each city and the Scottish Government have contributed to the Scottish Cities Alliance fund of £160k to cover staff costs and events. Procedures have been put in place by the SCDI financial management team to monitor expenditure.
- 8.3 Moving forward the budget for the following year is being reviewed to ensure that the Alliance continues to be adequately resourced to assist the partners to deliver against its objectives.

Cities Investment Fund

- 8.4 The Cities Investment Fund of £7m has been provided by the Scottish Government. The fund is intended to leverage other private finance or European funding, support large-scale collaborative projects and develop programmes which allow for wider city region investment.
- 8.5 A summary of budget allocated and funds drawn down to date is outlined on the following two pages.

**SCOTTISH CITIES ALLIANCE - CITIES INVESTMENT FUND MONITORING
REPORT - BUDGET**

BUDGET

	£
Total funding allocation	7,000,000
Less project funding approvals made and sought	1,460,537
Remaining unallocated fund balance as of 17 April 2013	5,539,463

Project approvals prior to 5 December 2012

Green Deal:	150,000
Business case options study (£53.5k)	
Digital Connectivity:	326,000
Managing Consultant support (£56k)	
Preparation of business case (£150k)	
Dedicated project management (£120k)	
Cities Investment Programme:	500,000
Dedicated investment tracking service (£50k)	
internal programme of investment exhibitions (£100k)	
development of "oven-ready" investment product (£350k)	
STEP-UP: contribution to EU €3.7m project to extend to all Scottish cities	50,000
Smart Ticketing:	200,000
Hydrogen: a zero carbon fuel for Scotland's cities	50,000
	<u>1,276,000</u>

Project approvals made by Delivery Group since 5 December 2012

Scottish Cities Knowledge Centre:	
Director (half time post for three years)	184,537
	<u>184,537</u>

Project approvals sought from Leadership Group 17 April 2013

	<u>0</u>
Total Approvals (made and sought)	1,460,537
Remaining unallocated fund balance as of 17 April 2013	<u>5,539,463</u>

SCOTTISH CITIES ALLIANCE - CITIES INVESTMENT FUND MONITORING REPORT - ACTUALS

CIF Drawdown

	£
Total funding allocation	7,000,000
Less spend to date ²	497,566
Remaining unspent fund balance as of 17 April 2013	6,502,434

Project approvals prior to 5 December 2012

Green Deal:		
	Business case options study (£53.5k)	37,950
Digital Connectivity:		
	Managing Consultant support (£56k)	49,616
	Preparation of business case (£150k)	10,000
	Dedicated project management (£120k)	0
Cities Investment Programme:		
	Dedicated investment tracking service (£50k)	40,000
	internal programme of investment exhibitions (£100k)	80,000
	development of "oven-ready" investment product (£350k)	280,000
STEP-UP: contribution to EU €3.7m project to extend to all Scottish cities		0
Smart Ticketing:		0
Hydrogen: a zero carbon fuel for Scotland's cities		0
		<u>497,566</u>

Project approvals made by Delivery Group since 5 December 2012

Scottish Cities Knowledge Centre:		
	Director (half time post for three years)	0
		<u>0</u>

Project approvals sought from Leadership Group 17 April 2013

		<u>0</u>
--	--	----------

Total spend to date **497,566**

Remaining unspent fund balance as of 17 April 2013 **6,502,434**

² Cities which are leading projects may be incurring costs that have yet to be claimed back from the Cities Investment Fund. In other cases, where funding has been advanced to projects upon approval, the actual level of expenditure incurred may be lower than that shown.

Appendix 1 – Projects

Cities Investment Programme

Digital Connectivity

Retrofitting for Energy Efficiency

Smart Ticketing

Hydrogen – A Zero Carbon Fuel

Cities Investment Programme

Global conditions along with downward pressures on public spending are creating a long term jobs gaps in a number of cities. Encouraging growth in the cities is vital to creating new national employment because the cities generate proportionally large numbers of Scottish jobs. Inward investment plays a key role in city growth because it creates jobs and refreshes supply chains. Investment in infrastructure creates the conditions to attract wider indigenous and international investment. A number of studies show the link between investment in capital infrastructure, productivity and growth in the economy.

Developing a cities investment programme is the overarching priority for the Scottish Cities Alliance. When the Leadership Group first met in March 2012 it was agreed that Edinburgh should lead on this work and allocated a budget of £500,000 towards the development of the programme. A detailed programme of collaboration on cities investment was presented and approved by the Leadership Group when they met in August 2012. The approved programme consists of the following four key elements, collectively aimed at encouraging new investment and enabling the cities to create and retain jobs:

- 1. Infrastructure Investment Models:** This programme is progressing a range of innovative funding options to unlock infrastructure development opportunities in the cities.
- 2. Sector Analysis:** This programme is aligning national and local place-based intelligence for Scotland's priority sectors. .
- 3. Investment Propositions:** This programme is focusing on identifying, evaluating and advancing significant investment propositions across the cities.
- 4. International Promotion:** This programme involves the Alliance working with national agencies to take investment propositions to a wider market, as part of a Team Scotland approach to driving forward investment.

The Alliance has made good progress in taking forward each of the four key elements of the Cities Investment Programme. Achievements to date and the future focus for each of the elements is outlined below.

- 1. Infrastructure Investment Models:** An extensive mapping exercise culminated in a multi-stakeholder workshop in February 2013, at which a range of funding options was considered. Further discussions are underway with a number of funding experts. Infrastructure priorities will be mapped and refreshed for each of the cities, and funding frameworks to take these forward will be developed.
- 2. Sector Analysis:** A comprehensive mapping of key sector data held by the cities is underway. A report outlining the findings of the sectoral mapping exercise, and making recommendations for future work, will be completed by Spring 2013. The recommendations will be taken forward later in the year.

3. Investment Propositions: An audit of key development sites across the cities has been completed and a targeted approach to site promotion, linked to key sector activity, is being developed. The classification of sites according to market opportunity will help with the development of a pipeline of investment propositions.

4. International Promotion: The Alliance has recruited an Investor Promotion officer who is completing a series of city visits to develop a clearer picture of the challenges and opportunities faced by the cities. A virtual investment team is being established across the cities which will develop a SCA investment promotion strategy and programme of shared investment promotion activity to be taken forward in 2013. In addition, the Alliance will work towards a joint presence at MIPIM 2014.

Digital Connectivity

World class digital networks have the potential to transform the way Scotland's cities work: boosting productivity, driving economic growth, providing jobs, connecting communities and revitalising the way services are delivered. It is estimated that there is the potential to create £1.8bn of GVA per annum and generate 6,700 new jobs by ensuring Scotland's cities are leaders in digital technologies. Significant investment is being made by the telecommunications industry. The first 4G networks were rolled out by EE in Edinburgh and Glasgow in 2012. Superfast broadband is now available in all Scotland's cities although there is some way to go before all residents and businesses can get connected. The cities have been working with industry, the UK and Scottish Governments to develop plans to ensure rapid rollout across the cities.

Developing a collaborative programme to improve digital connectivity across Scotland's cities and the surrounding regions was identified as a key priority for the Alliance when the Leadership Group first met in March 2012. The Delivery Group subsequently agreed the secondment of a senior officer from City of Edinburgh Council to develop the programme.

A tailored and evolving approach to collaboration was agreed between the cities at the Leadership Group in August, building on local initiatives being taken forward and supporting the national "Scotland's Digital Future" strategy. Collaboration between the cities spans seven areas which together support achievement of the key outcomes of GVA and creation of new jobs. A particular focus of the collaboration will be to establish plans through to 2020 for all of Scotland's cities to achieve world class infrastructure and ensure they are well placed to access emerging sources of funding aligned to EU, UK and Scottish Government strategies.

Achievements to Date

Super/Ultra-Fast/Wireless Broadband

The Scottish Cities Alliance has provided support to Aberdeen, Edinburgh and Perth in their successful bids to secure over £17.5m of funding from the UK Government Urban Broadband Fund. This funding will enable cities to work with industry to extend the availability of next generation fixed and wireless networks through 2014 and 2015. Support has also been provided to other cities to establish their own digital programmes and to plan future investment strategies.

Mobile Connectivity

The Scottish Cities Alliance has established dialogue between mobile operators and the planning services in each city. Areas for potential improvement have been identified as the basis for future engagement. The Scottish Cities Alliance has worked with Scottish Government and Transport Scotland to successfully trial Wi-Fi on trains and plans have been agreed to ensure Wi-Fi is rolled out on all trains linking Scottish cities over 2013.

Digital Participation

The cities have compared and contrasted local approaches to ensure citizens and businesses have both access to the internet and the skills and confidence to take advantage of the digital age. Alignment is being secured between local and national programmes and opportunities identified for collaboration. The Scottish Cities Alliance is supporting the Royal Society of Edinburgh's independent enquiry into digital participation which aims to explore best practice and identify strategies for the future.

Innovation and Smart Cities

The Scottish Cities Alliance has supported Dundee and Glasgow in their successful bids to the Technology Strategy Board Future Cities programme in which Glasgow was successful in securing £24m of funding. Conversations are taking place between Scottish Government, Scottish Enterprise and the cities to ensure Scotland's cities are well placed to access similar emerging EU funds focused on Smart Cities initiatives.

Working with Scottish and UK Governments, the planned focus for 2013/2014 will include:

- Working with Scottish Government in the development of plans for 'world class' infrastructure by 2020 and building the investment case within Scotland's cities.
- Supporting Scotland's cities to collaborate in the delivery of improvements secured through funding from the UK Urban Broadband Fund.
- Engagement with mobile operators and city planning services to implement closer working.
- Identifying best practice and collaboration in the delivery of digital participation programmes to help citizens and SMEs take advantage of the digital age.
- Supporting cities to explore innovative new approaches to the delivery of Smart City Services.

Retrofitting for Energy Efficiency

More efficient buildings make Scotland's businesses more competitive and reduce public sector costs, mitigate the pressure of rising energy costs and address fuel poverty along with supporting Scotland achieve its climate change targets. DECC estimate Green Deal and ECO delivery could support between 39,000 and 60,000 Green Deal insulation and construction jobs by 2015 UK wide³. Therefore, this represents an important contribution in our transition to a Low Carbon Scotland and could present huge opportunities for Scottish industry.

Retrofitting activity has existed in Scotland for many years, but the UK Government Green Deal scheme offers an opportunity to significantly increase the scale of energy efficiency retrofitting activity. A collaborative energy efficiency retrofit programme across the cities could help build market capacity and supply chains and maximise funding through programmes such as the Green Deal, Energy Companies Obligation (ECO) and other sources.

The Green Deal is designed to improve the energy efficiency of all types of buildings allowing people to pay for energy efficiency improvements through savings on their energy bills. There are almost 2.5million homes in Scotland and it is estimated that 740,000 of these have scope for retrofitting improvements.

ECO is the legal responsibility placed on the six energy companies with more than 250,000 customers, to fund energy efficiency measures to homes. ECO funding from the energy companies has replaced several previous energy efficiency subsidies. It is worth about £1.3billion across the UK each year until March 2015.

The Scottish Cities Alliance aims to promote Scotland as an attractive location for investment by utility companies and Green Deal providers.

In August 2012, the Leadership Group approved funding for the Alliance to develop a strategic business case for the cities to take forward a collaborative approach to developing the retrofit market across Scotland.

Work was commissioned in September by the City of Edinburgh Council to develop the business case for energy efficiency retrofit for both Edinburgh and the other Scottish cities. A Green Deal Action Team consisting of representatives from each city was established and given the opportunity to input to the development of the business case and ensure that it reflected each city's housing profile. There was consultation with the major utility companies to ascertain their views on what programme structure they would like to see the Alliance develop.

The draft business case was published in January 2013 and presented to the Delivery Group when it met in February 2013. The business case recommended a collaborative ECO-led Green Deal programme which would target around 1,000 council and private homes in each

³ UK Parliament, Green Deal Watching Brief, 16th May 2013 - <http://www.publications.parliament.uk/pa/cm201213/cmselect/cmenergy/writev/greendeal/m12a.htm>

local authority area. It also recommended a series of projects to develop practical experience, create momentum and build market capacity in retrofitting energy efficiency. Local authorities were considered best placed to target areas where market failure could arise. These projects would allow the cities to explore the use of specific technologies including external wall insulation, and consider issues relative to retrofitting in specific housing tenures including privately rented housing. Based on a ten year delivery framework, in addition to developing skills and supporting the supply chain, the business case anticipated the creation of 1800 net local jobs.

Having considered the strategic business case, the Alliance agreed the following collaborative approach:

1. Subject to approval by the City of Edinburgh Council, Edinburgh could act as a pathfinder for an 'ECO led Green Deal' project. The potential for other councils to join or be named on a collaborative procurement at a later stage will be considered.
2. All cities will consider opportunities to collaborate on a series of targeted projects with a view to developing practical experience, create momentum and build market capacity in retrofitting energy efficiency measures to buildings.

Although Edinburgh is developing the business case recommendations with a view to implementation, it is recognised that all of Scotland's cities have other important collaborative roles to play in this agenda. These responsibilities include promoting Scotland as an attractive location for early investment for ECO and Green Deal, reviewing and sharing housing stock data across the cities with the market and capturing and sharing knowledge about emerging skills and technologies in the retrofit market.

Smart Ticketing

Good public transport extends labour markets and opens opportunities for individuals and businesses. It supports businesses to access markets, customers and employees and allows citizens to access jobs, education and services. For visitors, it is perhaps their first and last experience of Scotland. Improved patronage of public transport supports carbon reduction and eases congestion. In a recent global survey of city leaders⁴, transport was identified as the most critical infrastructure investment challenge to future economic competitiveness.

On 1 October 2012, the Deputy First Minister launched Scotland's Smart & Integrated Ticketing Delivery Strategy. The long term vision is that:

- all journeys on Scotland's bus, rail, ferry, subway and tram networks can be accessed using some form of smart ticket or payment mechanism.
- where demand exists, new ticket products will be developed which are shared and work across different commercial operators and modes of transport.
- ticket systems across the various public transport networks are flexible, able to interoperate and accommodate a range of different ticket products.

Much investment has already been made. This includes equipping 7,100 local buses operated by 260 companies with smart enabled ticket machines. In addition, 1.7m smart cards, including 500,000 Young Scot cards, have been issued by local authorities. Strathclyde Partnership for Transport is currently implementing a smart ticketing solution for the Glasgow subway system which will become operational in 2013. A phased approach to delivery is planned. The national ticketing delivery plan will see a series of local demonstration projects being taken forward in 2013. This portfolio of demonstration projects will build confidence between all stakeholders and support the design of products that add value to customers, promote the convenience of smart ticketing and support a drive to increase patronage of public transport.

The Alliance recognises that there are potential benefits which could be realised from Scotland's cities collaborating to shape local strategies and foster partnerships between stakeholders to support Scotland's Smart & Integrated Ticketing Delivery Strategy. A paper was presented to the Leadership Group in December 2012 outlining how the Alliance could help support Transport Scotland's national smart ticketing delivery team and the Leadership Group approved funding of £200,000 to be used to:

- Identify local priorities, research customer needs and build a vision for smart ticketing in each city-region focused on alignment with single outcome agreements and local economic strategies.
- Develop the national technical architecture and roadmap to establish local partnerships between stakeholders and agree local implementation plans.

The Alliance has subsequently commissioned work to develop the programme over the next 6 months.

⁴ Globescan and MRC McLean Hazel, *Megacity Challenges: A Stakeholder Perspective* (Siemens AG)

Hydrogen – A Zero Carbon Fuel

Hydrogen could have a key role to play in the successful development of Scotland's low carbon economy. For example, by providing a means of storing surplus energy from wind-farms, hydrogen could play a vital role in enabling the effective management of Scotland's vast renewables resources and a direct link to the development of low carbon heat and transport opportunities. Importantly, there is the potential to exploit emerging markets in America, Asia and Northern Europe.

In Scotland, hydrogen has already been used to power the Hydrogen Office Project initiated by the Business Partnership in Fife. This project includes Heriot Watt University and Robert Gordon University who are exploring how fuel cell energy systems can be used in the built environment. Aberdeen City Council is supporting two strategic European hydrogen transport projects representing the first major element of the Aberdeen Hydrogen Project to introduce zero emission green energy to the North East of Scotland. This will see buses being fuelled using locally generated renewable hydrogen, the creation of the production facilities needed to generate this fuel source and additional hydrogen for other uses.

By extending Aberdeen's Hydrogen project out to Scotland's cities and their regions, there is the potential to create a national infrastructure which exploits all of Scotland's renewable resources, extends the benefits to a wider population base and consequently create the conditions for Scotland to become a global leader in the development of hydrogen infrastructure enabling it to exploit opportunities in emerging markets.

In December 2012, the Leadership Group acknowledged the potential for the cities to collaborate to introduce green hydrogen as a "real" alternative fuel. The Leadership Group approved funding of £50,000 to commission work to produce a "Scottish Cities Strategy" for the introduction of hydrogen fuel cell technology across the seven cities as well as a detailed policy paper identifying the economic benefits of Scotland's cities collaborating to deliver hydrogen technology projects.

A report is due to be presented to the Leadership Group in September with recommendations on how and why the Alliance should collaborate on the delivery of hydrogen infrastructure across Scotland's cities and their regions.