SCOTTISH CITIES ALLIANCE



Annual Report 2021-2022



Foreword

Welcome to the Scottish Cities Alliance's Annual Report. As I reflect on the work of the partnership I have had the pleasure to Chair for the last 5 years, I am assured that it has provided a positive forum for my fellow Leaders and I to work with the Scottish Government to address those issues that have a profound effect on the prosperity of our cities and the businesses and citizens they are home to.

The very particular nature of the impact of the pandemic on our city centres is a good example of where we have been able to work as an Alliance to agree the actions needed over the immediate and longer term to ensure our city centres flourish, which this year was underpinned by a further £6 million of investment from the government's City Centre Recovery Fund.



Furthermore, in the year that Glasgow hosted COP26, the Alliance helped focus our collective efforts to work across cities, academia, the private and third sectors to anchor demand and share resource and expertise to maximise economic opportunities as part of Scotland's Just Transition. For example, in partnership with the Improvement Service, the Alliance delivered valuable carbon literacy training to 40 elected members and 30 senior officers across the cities, myself included, building confidence across city decision makers to deliver Scotland's ambitious 2045 carbon reduction target. Strong Leadership on both these core issues are key to success and in the past year the Alliance has facilitated discussions with Ministers and senior officers across both Scottish and UK Governments to inform our collective thinking and the role cities can play as the driving force of the economy.

The Alliance continues to evolve its investment promotion offering to respond to the core challenges of city centre recovery and climate change to ensure it is tailored to assisting cities to attract the right type of investment. For the first time ever the Alliance hosted all 7 city leaders in London, working alongside SDI and Scotland House to deliver a bespoke programme of activity during the London Real Estate Forum (LREF) and providing an opportunity for Leaders to engage with a range of investors including BCEGI, Native Land, CBRE Investment Management, and FORE Partnership. Overall the Alliance's one stop shop approach to investment this year allowed the partners to build relationships with investors with a combined investment portfolio of over £1 trillion and raise the profile of city specific investment opportunities across a range of platforms and publications. Recognising the importance for investors of maintaining an ongoing dialogue with Leaders, I am pleased to note plans are in place to continue to build the in-person relationships needed to deliver inclusive economic growth in our cities, with a networking event planned with the newly elected Leaders and Cabinet Secretary, Kate Forbes MSP in June aligned to the opening of Glasgow's flagship Grade A commercial property development at 177 Bothwell Street alongside developing plans to utilise Scotland House in London to deliver the inaugural Scottish Cities Week programme in September.

A cornerstone of the Alliance's commitment to making Scotland an innovative and sustainable place remains its £48 million "Scotland's 8th City – the Smart City" ERDF Programme. As the programme approaches its final year of delivery it has delivered 49 new innovative services and made 199 new datasets open and discoverable for innovation and is on course to more than double these outputs upon completion of the Programme in 2023. Ensuring the approach cities take to addressing their key challenges is informed by data remains at the forefront of work with the Edinburgh Centre for Climate Innovation to develop a carbon scenario tool which will empower national, local and partner agencies in Scotland to transition to net zero and jointly monitor progress on the 2045 carbon reduction target. Meanwhile the Alliance continues to support the development of the Hydrogen economy in Scotland through a range of work delivered alongside the Hydrogen Accelerator. This year, myself and my fellow Leaders demonstrated our cross-city commitment to support of the inaugural Hydrogen Scotland Education Programme which was delivered in partnership with Arcola Energy, ITM Power and Scottish Power.

Looking ahead, I know the outgoing Leadership Group has left a strong legacy from which the new cohort of Leaders can build, including supporting the implementation of the National Strategy for Economic Transformation and the shared vision for City Centre Recovery. Through collaboration and co-ordination the Alliance has shown that collectively it can respond to some of the really challenging and difficult issues for our cities and bring our collective capacity to bear in a positive way.

Alexander

Councillor John Alexander Chair, Scottish Cities Alliance

Investment Promotion

- Built relationships with investors via our events programme including introducing the Alliance partners to investors such as Nuveen and Kajima with a combined investment portfolio of over £1 trillion. Follow up one-to-one introductions were made for cities to our growing data base of investors including Perth to Arup and Legal & General, and Edinburgh to HUB and Summix Capital for example.
- For the first time ever the Alliance hosted all 7 city leaders in London, working alongside **SDI** and **Scotland House** to deliver a bespoke programme of activity during the **London Real Estate Forum (LREF)**, including securing participation for city leaders within the LREF programme itself, as well as providing City Leaders a platform to showcase their cities' priority sectors and projects as part of an event at Scotland House. The Alliance hosted:-
 - A breakfast roundtable event focussed on the theme of city centre regeneration, bringing together City Leaders, industry thought leaders from organisations such as Trowers & Hamlins and KPMG as well as investors including BCEGI and Native Land to discuss the opportunities and challenges facing urban centres; and
 - A lunch event involving real estate developers and investors with an interest in green investments who were keen to engage with cities in the run-up to Glasgow's hosting of COP26 such as CBRE Investment Management, and FORE Partnership.



Cllr Aitken speaking at a lunch with investors discussing opportunities to invest in Scotland's green future

Took advantage of the unique opportunity presented by Glasgow hosting COP26 and secured opportunities for City Leaders to attend high profile events organised by The World Economic Forum & Accenture, NatWest, Scottish Renewables and a networking reception for UK Leader networks as part of the official Glasgow Host City Zone.



Alliance Chair, Cllr Alexander speaking with The World Economic Forum and Accenture at COP26

Secured opportunities for cities on high level panels including: the <u>Housing 2021 Conference</u> in Manchester where the Lord Provost of **Aberdeen** spoke about city centre recovery; a panel on smart cities as part of Swisspower's <u>Decarbonising Cities</u> event in Geneva at which the Alliance's Chair showcased Scotland's strong progress in hydrogen and smart cities to a European audience; and a panel on city and town centre recovery as part of <u>Holyrood: The Recovery 2021</u> which demonstrated ongoing work to revitalise city centres.



Alliance Chair, Cllr Alexander, at Swisspower's Decarbonising Cities event

- Completed our online event programme offering in response to the pandemic to include an investment roundtable with the Leaders of Aberdeen and Dundee, <u>"Investing in cities with purpose – creating net zero</u> <u>urban centres"</u> with private sector speakers Nuveen, UK Green Building Council, DWS and Fabrix Capital, which was attended by a global audience of investors and developers.
- Secured opportunities for city leaders within established publications to profile their city priorities, including a thought leadership piece on affordable housing in <u>Inside</u> <u>Housing</u> with the Leader of **Edinburgh**, an interview with the Leader of **Glasgow** in respected real estate

publication **React News** on the city's COP26 legacy, an interview with the CEO of **Stirling** on using culture to regenerate communities in the Local Government <u>Chronicle</u> and an interview with the Leader of **Dundee** on the thriving Life Science sector in the city in <u>The Municipal Journal</u>.

- Worked with cities and stakeholders to refresh case study and proposition content in the Alliance's <u>Investment Prospectus</u>, to ensure it continues to showcase the breadth of the cities' investment offer to investors and stakeholders.
- Built our media presence, promoting the cities to a targeted international audience including:-
 - Securing an average of **26,200 tweet impressions per month,** achieving as high as **92,600 impressions in April 2021;**
 - Gaining an additional 661 followers on the Alliance's LinkedIn page, achieving a 56% increase over 12 months. LinkedIn posts reached a record 113,000 impressions in one year.
 - Worked with SDI to secure a full page advertisement for the cities with a value of €10,000 on the back cover of the Agenda for MIPIM 2022 which was distributed to all delegates at this world leading real estate event. Separately secured a double page spread in <u>MIPIM News</u> for Aberdeen profiling its plans to become a climate positive city.



Full page advertisement on back page of MIPIM Agenda, MIPIM March 2022

 Launched an original weekly blog on the Alliance website showcasing the best of what the Scottish cities have to offer while providing an avenue for potential investors to learn more about the cities' sectoral investment opportunities. Recent topics include the recent city investments made by the <u>Scottish National Investment</u> Bank, the impact of <u>COP26 on the tourism sector</u> within the cities, and <u>investment in hydrogen</u> in **Inverness** and **Aberdeen**.

- The £6 million <u>Creative Academy Inverness</u> opened its doors in February marking the transformation of 2 b-listed former school buildings into the largest creative facility for artists, designers, makers, creative industries, cultural social enterprises and the community in the Highlands. The opening of the Academy was supported by early analysis and studies funded by the Alliance to expand the network of WASPS creative hubs across the cities and is supported by £1.7 million of funding from the Scottish Government Regeneration Capital Grant Fund.
- Supported Stirling's bid for UK City of Culture recognising the opportunities a successful bid would have to use culture as a driver for investment across the Scottish cities as part of our 2022/2023 investment programme.

Smart Cities Scotland

Scotland's 8th City – the Smart City ERDF Programme

- Delivery of Phase 1 of the programme has completed including 26 projects involving all 7 cities and covering 9 smart city domains. Cumulatively this phase of the programme delivered 49 new innovative services and 199 new datasets made open and discoverable for innovation. Highlights include:-
 - Smart Waste projects have been delivered in Dundee, Edinburgh, Glasgow, Inverness, Perth and Stirling, deploying a range of smart waste approaches such as: bin sensors enabling responsive and more efficient collection which results in less waste going to landfill, fewer journeys made and a more efficient scheduling of collection services.
 - Smart Mobility projects across Aberdeen, Dundee and Stirling in response to issues identified around traffic, transport and travel issues.
 - The Glasgow Smart Canal Project which received six major awards for innovation, regeneration and infrastructure development. The project uses sensors and predictive weather technology to dynamically manage water levels.

- Phase 2 consists of a total of 15 projects with some seeking to develop and extend learning from phase 1. Other projects have sought to introduce Internet of Things (IoT) and integrated and intelligent infrastructure as key enablers for effective city management.
- The total value of investment across Phase 1 and Phase 2 in the Alliance's ERDF funded programme is around **£48m**, **£20m** of which are ERDF funded. Upon completion in 2023, it is anticipated that the 8th City programme will deliver **122 innovative services and 420** data sets opened for innovation.
- 8th City projects were recognised via various awards and commendations in the last year including as a finalist in the World Smart City Awards, an international competition with participation from almost 50 countries, the Public Sector Excellence Awards, and the Scottish Civil Engineering Awards.



 An independent review of the 8th City Programme confirmed that it has provided a wide range of benefits and impacts for cities and their citizens, including increased collaboration and sharing of knowledge, expertise and data, efficiency savings and overall better informed strategic planning, thinking an decision making and noted wider funding and collaborative opportunities beyond programme end in 2023.

<u>Data</u>

 Completed Phase 1 of work with the Edinburgh Centre for Climate Change to develop a common tool which would allow the cities to use a range of data sources to take a consistent and informed approach across national, local and partner agencies in Scotland to transition to net zero and jointly monitor progress on the 2045 carbon reduction target. Work is now underway to develop an implementation plan to progress the report's recommendations.

- Commenced work with the cities to establish how they may collectively access up to date data to assist them to develop targeted approaches to the sustainable economic recovery of their city centres including procuring credit card spend data for all seven cities; potential extension of the Centre for Cities data dashboard to all 7 Scottish cities as well as the merits of supporting the expansion of a data dashboard developed by Glasgow to all 7 cities.
- Opened a total of 199 datasets for innovation covering a wide range of themes with a focus on transparency and opportunities to improve services and develop economic and social value from data.
- Concluded an extensive programme of work to ensure the data cities are publishing meets the needs of citizens to maximise value from the publication of open data. In total 138 organisations were engaged across the cities. The <u>analysis</u> indicated an appetite for access to open datasets in Scotland and will now be used to inform future data activity around standards adoption.

Building a Hydrogen Economy

- The Alliance continues to support the work of the <u>Hydrogen Accelerator</u> and Transport Scotland focussed on the deployment of zero emission fuel cell technologies and refuelling infrastructure across the city
 regions including consideration of joint procurement opportunities and finance models. Specific Hydrogen activity supported by the Alliance includes:-
- Aberdeen Project JIVE continues its deployment of hydrogen buses in the city. Importantly, this project is the precursor to wider investment in the city including supporting the city to secure a joint venture partnership with BP to deliver the Aberdeen Hydrogen Hub which will build a solar power facility connected to a green hydrogen and production and refuelling facility to assist the region in its transition to green energy.
- Dundee a new engineering and manufacturing facility was opened at the Michelin Scotland Innovation Parc by Arcola Energy, which is now owned by Ballard Motive Systems. The facility is expected to create 135 high value jobs over the next 3 years. There are a number of hydrogen fuel cell projects active in this space, including:

- <u>JIVE 2 the project to deploy 12 fuel cell electric</u> buses and refuelling infrastructure is currently being reviewed following developments since the conception of the project. A further update will be provided following completion of the project review.
- Scottish Government/Transport Scotland's zero emission train project which was deployed for demonstration at COP26; work is underway on future stages of the train's demonstration.
- The successful development of the prototype for Glasgow's refuse vehicle which has led to an order of 19 refuse vehicles which will be built at MSIP using OZEV funding.
- Following previous support provided to Glasgow to deliver their Fleet Strategy, an additional c. £10 million of funding from the UK Government will support the deployment of hydrogen refuelling infrastructure at the <u>Hydrogen Storage Hub</u> at Whitelee Wind Farm.
- Continue to provide support to Inverness' ambitions for Highland including the zero-emission train project, the decarbonisation of the council's heavy fleet vehicles and exploring opportunities around large-scale hydrogen production.
- City Leaders supported the delivery of the inaugural Hydrogen Scotland Education Programme delivered in partnership with Arcola Energy, ITM Power, Scottish Power and the Hydrogen Accelerator. The programme, which is designed to help inspire the next generation of renewable energy engineers, was such a success that plans are now in place to support the delivery of an annual national programme providing ongoing opportunities to engage young people with the high skilled jobs of the future.



Cllr Jenny Laing supporting the inaugural Hydrogen Scotland Education Programme in Aberdeen

Policy and Stakeholder Engagement

 Worked with the Cabinet Secretary for Economy and Fair Work and City Leaders on the City Centre Recovery Taskforce, publishing a <u>report</u> setting out the shared vision for the future of Scotland's city centres backed by a further £6 million in 2021/2022 to assist cities to take forward local recovery priorities.



- Contributed to <u>Scotland's National Strategy for Economic</u> <u>Transformation</u> via the Alliance Chair's appointment to the Scottish Government's Advisory Council as well as facilitated discussions between Scottish Government and City CEOs during strategy development, ensuring the cities' role in Scotland's long-term economic transformation was articulated in the strategy.
- Facilitated discussions with Scottish and UK Government Ministers including Kate Forbes MSP, Cabinet Secretary for Finance and Economy MSP on city centre recovery and economic transformation, Lorna Slater MSP, Minister for Green Skills, Circular Economy and Biodiversity and Patrick Harvie MSP, Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights on their net zero portfolios and Iain Stewart MP, Parliamentary Under-Secretary of State for Scotland on the UK Shared Prosperity, Community Renewal and Levelling Up funding.
- Advanced progress on the delivery of the Alliance's <u>Transition to Net Zero Action Plan</u>. Key highlights include:-
 - Development of a Funding and Investment Strategy for Transition to Net Zero which maps funding

available from all levels of Government, National Agencies, European programmes, and funding that can be accessed from the market;

- Supported Aberdeen, Dundee, Edinburgh and Glasgow to work collaboratively with Climate-KIC to submit an application to the EU LIFE Programme which could unlock €17 million of funding for additional resources to support delivery of net zero activity across their cities. The Alliance played a key role in facilitating discussions between the cities and Scottish Government to identify €5 million of match funding to support the application.
- Built on work with the Improvement Service to develop the Alliance's Peer-to-Peer Network for Transition to Net Zero as a useful forum for knowledge sharing across the cities and enable officers to learn from each other and share best practice including through a series of online events focusing on climate compacts, climate governance and the application of a newly developed public sector building standard.
- In partnership with the Improvement Service, delivered carbon literacy training to 40 elected members across the cities and 30 senior officers, equipping them with the skills required to influence behaviour change across their communities.
- Progressed work across the 4 project plan areas of the Action Plan including working with Zero Waste Scotland to progress a pipeline of low carbon heat projects across the cities to pre-feasibility and outline business case stage and exploring agglomeration opportunities from local authority vehicle procurement.
- Provided an opportunity for cities to inform Scottish Government thinking on their manifesto commitment to establish a National Public Energy Agency to ensure it best supports city climate change plans.
- Capitalised on the unique opportunity presented by Glasgow hosting COP26 to strengthen existing partnerships and engage new partners to encourage knowledge sharing and aid delivery of transition activity including the Under2 Coalition, Connected Places Catapult, UKCCIC and the Cabinet Office. This led to the Alliance being represented on the BEIS Programme Board for the UK Cities Climate Investment Commission to help develop the market for investment in the cities' green investment pipeline.

 Worked with the energy network providers SPEN, SGN, Scottish Power and National Grid to explore how they may align investment in their business strategies with city climate change plans.

Led by **Perth**, began work to look at developing the Alliance's approach to the Technological Change challenge in the <u>Scottish Cities Outlook</u>. Working closely with Prof. Mark Logan to build upon the recommendations of the <u>Scottish</u> <u>Technology Ecosystem Review</u> agreed priorities for collaborative action include:-

- Maximising opportunities from the growth-focused entrepreneurial hubs/tech scalers to be located across the cities;
- Considering how the cities collectively might best support the role out of advanced digital skills provision linked to SDS' Digital Skills Action Plan;
- Marketing Scotland as a place for high growth entrepreneurship; and
- Exploring opportunities to build upon the Alliance's Scotland's 8th City the Smart City ERDF Programme following Programme completion in 2023.



Carbon Literacy Certification provided to 40 elected members and 30 senior officers

Budget – 2021-2022

The Scottish Cities Alliance has two funding sources, the first is the Cities Investment Fund for specific collaborative project activity to accelerate their development and delivery. The second is the Alliance Core Team budget which includes employment and overhead costs for the Alliance's Core Team based in SCDI.

Cities Investment Fund

£7 million was provided by the Scottish Government when the Alliance formed in December 2011. The purpose of the fund remains unchanged and it continues to be used to leverage additional private finance and/or funding to generate income from private sponsorship and support largescale collaborative projects to develop programmes which will allow for wider city region investment.

On 5th December 2017 the budget was set for the period 1^{st} April 2018 – 31^{st} March 2022. This budget had a projected shortfall of £612,068, and it was agreed that close monitoring would take place in an effort to reduce this shortfall.

Considerable savings have been realised across the period of the Operational Plan 2018-2022 which has removed the overall projected shortfall entirely. The CIF budget report to 31^{st} March 2022 shows a balance of funding available of £111,623. The savings in the CIF budget will be carried across to the funding available for the operational period 1^{st} April 2022 – 31^{st} March 2026, in line with the future funding approved by the Leadership Group for this period on 3^{rd} June 2021.

Alliance Core Team Budget

Each city and Scottish Government contributed to the Scottish Cities Alliance operating costs of £238,000 to cover staff costs and events for the financial year 2020-2021. Procedures are in place for the SCDI financial management team to monitor expenditure.

INVESTMENTPROMOTION



The Alliance's Investment Promotion workstream helps cities promote their multi-million-pound investment opportunities to a targeted investor audience via a single <u>Investment Prospectus</u>. The workstream has played a vital role in helping develop relationships between partners and promote collaborative working ensuring that there is a wider understanding of each city's unique investment offer, strengthening investment promotion collateral and enabling the cities as part of Team Scotland to make a significant impact in a very competitive environment.

Over the last year, the Alliance has introduced cities to a range of institutional and boutique investors. Taking our lead from the cities, the Alliance is uniquely placed to have the agility to act quickly to promote investment opportunities and talk to investors about new opportunities. Across the investor landscape, there is a great a widespread desire to deploy capital in Scotland's cities.

Responding the challenges of the COVID-19 pandemic, the Alliance completed its online event programme established in 2020 which involved all City Leaders showcasing the cities' offering as investable, sustainable and attractive locations. However, recognising the importance placed by investors and Leaders alike in developing those important in-person relationships, the Alliance worked closely with SDI and Scotland House London to develop a bespoke events programme aligned to the London Real Estate Forum in September 2021 involving all 7 City Leaders. This programme was really well received and plans are in place to build upon its success with the delivery of Scottish Cities Week in London this year. Additionally, the Alliance continued to secure opportunities for the partners to participate in panel events, promoting the investment potential of their cities.

We act as a conduit for bringing relevant opportunities from key public sector organisations such as Scottish Development International, Scottish Enterprise and the Department for International Trade to the attention of the cities, ensuring they are part of informing the overall strategic approach to attracting investment to Scotland. For example, the Alliance has helped facilitate discussions with the Scottish Government on the development of the green investment pipeline.

The Alliance's unique role as a collaboration between the seven cities has resulted in developing a wider narrative of the opportunities available across Scotland and raising the cities' profiles collectively in their marketing in key media outlets and through the Alliance's Twitter and LinkedIn accounts and on the Scottish Cities Alliance's recently refreshed website.

The seven city regions have a strong story to tell, and collaboratively they are making a significant impact in a very competitive environment. The Alliance will continue to support and promote the opportunities on offer across the cities to our growing database of investors who welcome our unique one-stop-shop approach to attracting investment.

If you are interested in learning more about the investment opportunities in our Investment Prospectus please contact Lauren Pascu, Inward Investment Lead on

lauren.pascu@scottishcities.org.uk

8THCITYPROJECTS

The 'Scotland's 8th City – the Smart City' programme is funded as a 'Sustainable Growth' Strategic Intervention (SI) within the 2014-2020 European Regional Development Fund (ERDF) operational programme. Phase 1 of the programme concluded in December 2021 delivering the following outputs:-

Data Analytics / Open Data: This operation involved **Aberdeen, Dundee, Glasgow, Inverness, Perth,** and **Stirling**. Key deliverables include nine Innovative Services, including the development and deployment of open data platforms, and the delivery of **144** open data sets. Approaches and lessons learned arising from data analytics activity has informed the establishment of dedicated data teams in some cities, with activity being progressed in Phase 2 of the programme. Cities contributed case studies and shared learning as part of an 'Innovating with Data across the Public Sector' conference during DataFest 2020.

Intelligent Street Lighting (ISL): Projects in **Aberdeen, Glasgow, and Perth** are using LED lamps with central management systems and network controls to achieve efficiency savings of around 70%; this significantly reduces energy costs and a reduction in CO² emissions – with Aberdeen noting

anticipated annual **savings of around £1 million** for street lighting costs and Glasgow **reducing CO² emissions by around 700T per year**.

ISL also creates opportunities for the deployment of sensors and data collection as integral support for city ambitions to deploy IoT-led Smart City solutions.

Innovation Lab: Nested within the wider <u>Perth Creative Exchange</u> development led by PKC and WASPS which opened in February 2020, the 8th City and ERDF funded Innovation Lab offers a space for stakeholders to work on urban challenges by integrating inputs across a range of perspectives to re-frame problems and prototype smart city solutions using multiple approaches, activities and tools. The focus is on combining data and digital technology to support the development of new products and services helping to tackle the challenges that Perth city faces.





Innovation Lab at The Famous Grouse Ideas Centre in Perth

The Innovation Lab

Example Glasgow Intelligent
Lab Street Lighting

local funding and was re-branded as The Famous Grouse Ideas Centre. The wider Perth Creative Exchange won the Regeneration Project of the Year at the Scottish Property Awards 2021.

Mobile Working: Glasgow and **Perth** delivered a range of mobile working services in Phase 1 of the 8th City programme. This led to the development of **17 innovative services and 2 data sets** – with each city hosting 'show and tell' events to share information

and learning across the 8th City programme and beyond. Deployment of app-based mobile working has led to significant benefits for council officers and for the users of those services.

Dundee: City Operations / Public Safety CCTV Image provided by Stephen Birrell



services.

City Operations / Public Safety: Dundee and **Perth** (with Angus Council as a non-8th City programme partner) have combined resources and learning to work on a Tayside approach to delivering an integrated public safety network. The introduction of enhanced public space CCTV and video analytics capability is playing a key role in integrating the work of partners all playing a role in tackling crime and disorder and promoting community safety.

Smart Energy: **Stirling's** deployment of energy dashboards to track and monitor energy demand, carbon emissions and renewables performance across 35 key Council sites.

Smart Mobility: Aberdeen, Dundee, and Stirling each delivered projects in response to issues identified in relation

to traffic, transport and travel issues. The Aberdeen Digital Data Development project involves deployment of high-quality sensor nodes to enhance Intelligent Transport Systems (ITS) strategies and provide a better managed transport network. Stirling has also deployed sensor-based monitoring of a range of travel modes – including vehicles, cyclists, and pedestrians. This vehicle monitoring

infrastructure helps to reduce congestion and make travel more efficient.

In Dundee, the focus has been on Mobility as a Service (MaaS) solutions with a wide range of innovation-led projects delivered via the <u>Dundee MILL</u> (Mobility Innovation Living Lab).

Smart Waste: Projects delivered in Dundee, Edinburgh, Glasgow, Inverness, Perth, and Stirling have deployed a range of Smart Waste approaches including: solar-powered compactor bins and bin sensors to enable responsive and more efficient collections - meaning less waste going to Landfill, fewer journeys made due to data-led routing and scheduling of collection



Stirling Smart Mobility Sensors helping reduce congestion

Smart Water: The **Glasgow** Smart Canal project uses sensors and predictive weather technology to dynamically manage water levels along the Forth & Clyde Canal - allowing it to become a drainage route for excess surface water during high rainfall events.

This smart city solution on 250-year old infrastructure has reduced local flooding risk and helped to **unlock 110 hectares of previously unusable land** across North Glasgow for development and regeneration. The project also delivers **CO² savings of 500T per year** by reducing the amount of wastewater requiring to be pumped.

In the last year the Smart Canal project received six major awards for innovation, regeneration and infrastructure development. The project has also attracted interest from other local authorities and international visitors who are rethinking how they can use their reservoirs and canal networks.

For more information on the Programme please visit https://scottishcities.org.uk/smart-cities/

HYDROGEN

In 2021, the Scottish Cities Alliance supported Arcola Energy (now Ballard Motive Solutions) to deliver its Scottish Schools' Hydrogen Challenge in 10 locations across the 7 Scottish city regions in which students across Scotland were challenged with designing, building, and racing a green hydrogen fuelled model car ahead of a grand final the day before COP26 began in Glasgow.

The Challenge was an educational experience for secondary school students and the general public. There were over 4,800 second year students who participated in a series of workshops delivered over two weeks in each of Scotland's seven city regions, culminating in a high profile grand final event at CoP26 in Glasgow on 30th October. The Challenge helps participants learn, collaborate and build energy efficient, hydrogen-powered scaled-down vehicles using LEGO components and real, miniature hydrogen fuel cells during two-hour workshops.



The Alliance worked alongside Arcola Energy, Scottish Power, ITM Power and the Hydrogen Accelerator to deliver the challenge which saw city leaders the finals in their cities to support the next generation on young engineers and was instrumental in approaching new project partners ARUP, ARC and OPITO.

During the workshops, competitors were able to find out more about the decarbonisation of transport and the important role it is playing in reaching Scotland's climate change targets. The Challenge also offered a chance for members of the community to learn about green hydrogen, its applications and its expected growth over the next decade during evening and weekend workshops. Experts were on hand to answer any questions about the technology and offer a chance to try their hand at building their own hydrogen-powered vehicle.



As part of the Challenge local university students were trained as workshop facilitators offering them the chance to explore STEM engagement, teaching and improve their public speaking skills. Several universities also offered to host training sessions for their students, these included The University of the Highlands and Islands Inverness campus, University of Aberdeen, University of Dundee and University of Glasgow.

The success of the collaboration has been recognised as an opportunity to establish the challenge as an annual event through to 2025/26 with the <u>Energy Skills Partnership</u> expressing a desire to support youth engagement as part of the programme. The 2022/23 programme is scheduled for mid-

September through to the end of March with a Grand Final taking place before Easter 2023. The aim is to engage all S2 students in Scotland by 2025/26.

POLICY



Carbon Literacy for Elected Members: Our Story

Watch feedback from elected members who participated in carbon literacy training via above You Tube video

With a view to supporting the delivery of the Alliance's <u>Transition to Net Zero Action Plan</u>, the Alliance worked with the Improvement Service to create an inclusive space for low carbon officers across the cities to share their experience of delivery on city climate change plans and link in with wider stakeholders across the government and agencies. As a result, the Alliance's Net Zero Peer-to-Peer Network was launched in April 2021.

The network itself is hosted on MS Teams and contains a digital case study and materials library as well as making information on relevant climate change events available to all officers across the Scottish cities. In addition, the network has committed to holding a programme of officer focussed events including:

- A launch event in April 2021 focusing in on low carbon heat and energy efficiency including an overview of the <u>Scottish Government's Climate Change Plan update</u>;
- Discussions led by Glasgow with city officers around maximising opportunities from COP26 and developing a lasting legacy;
- A knowledge sharing event on climate compact models, where Clare Foster, Partner, Shepard and Wedderburn LLP spoke about the <u>Edinburgh Climate Compact</u>, and Guy Jefferson, Chief Operating Officer at Scottish Power energy Networks spoke about the <u>Glasgow Sustainability Charter</u>. Following feedback from the session, the Alliance is exploring the opportunity build upon these models to establish a Scottish Climate Compact.
- A session on city climate change governance at which each city presented on their authorities' climate change governance model and discussed lessons learned.

The Net Zero Peer-to-Peer Network also helps local authorities with capacity development through delivering a training programme for elected members and senior managers in partnership with the Improvement Service and Keep Scotland Beautiful. The training uses the Carbon Literacy Project's newly developed toolkits for elected members which have been adapted to take into account specific issues Scottish cities should be informed about.

The 7 hour course empowers participants by educating them on the science and policy context behind what climate change means at a local government level focusing on how they as officials and officers can communicate with a focus on solutions and actions. It is designed to encourage peer-to-peer learning across the local authorities and help decision-makers build the confidence needed to make difficult decisions related to the climate change agenda. Participants have described the training as valuable, relevant, thought provoking and useful.

The Transition to Net Zero Peer-to-Peer Network is an example of the collaboration that is at the core of the Alliance's values and offering. By creating an inclusive space for officers and a professional development space for elected members and senior leaders, the Net Zero Peer-to-Peer Network encourages knowledge sharing and peer-to-peer learning to build capacity within local government to deliver on Scotland's ambitious net zero goals.