



sustainable glasgow

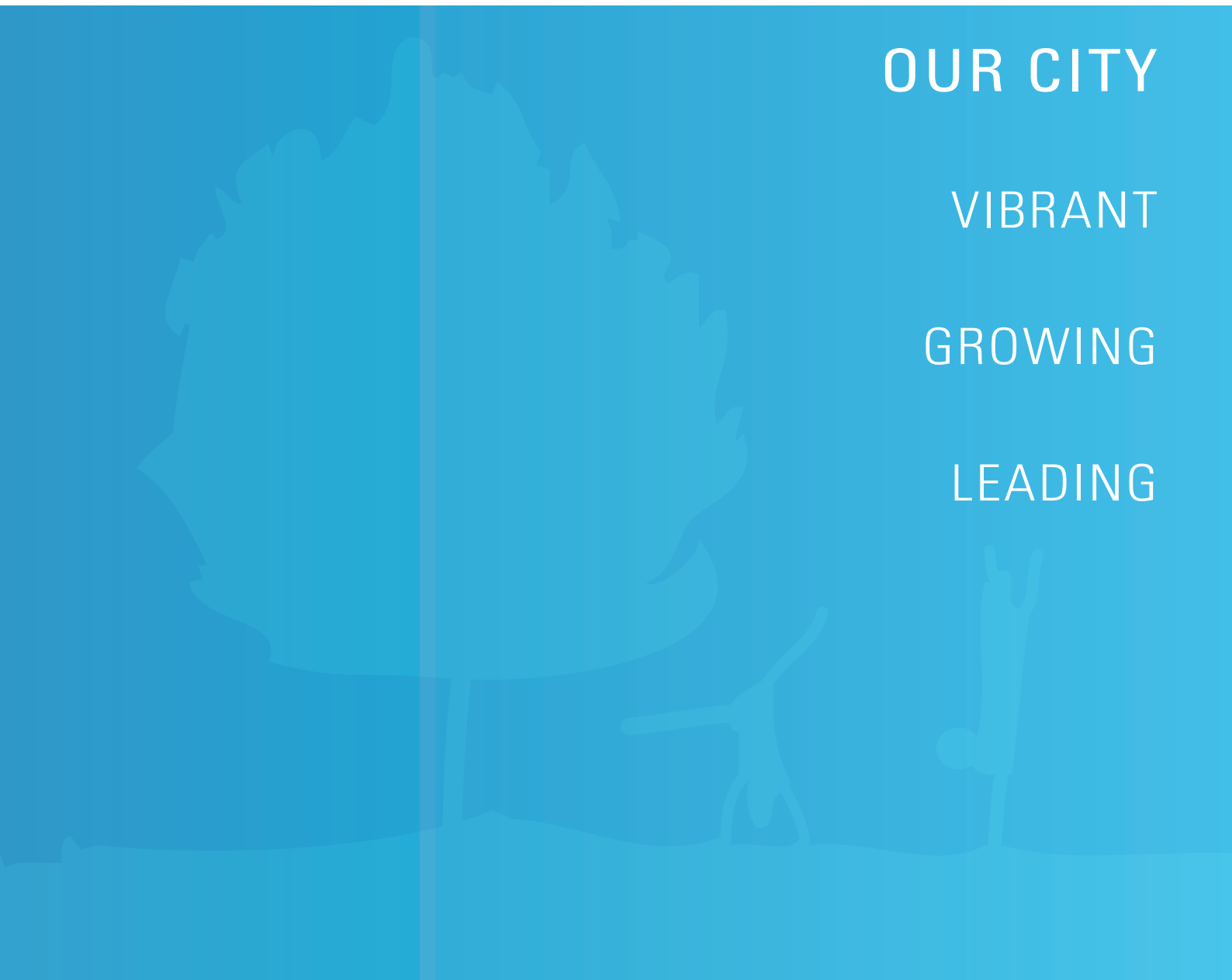


OUR CITY

VIBRANT

GROWING

LEADING



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Foreword



Foreword from Glasgow City Council Leader, Steven Purcell

Climate Change is the biggest challenge that we are facing. The scientific world is almost unanimous in its view that unless we all take action to reduce our greenhouse gas emissions we will be leaving the legacy of an uncertain future for our children. The need for action has been recognised at all levels of government and demanding carbon reduction targets have now been set. We all have a responsibility to work together in achieving these targets and to effectively manage our use of energy. Everyone has a part to play – from individuals to major organisations and businesses within the city – and we all need to examine how they use energy.

There is an additional challenge, however, in the management of energy. How can we continue Glasgow's economic regeneration – which would suggest an on-going increase in demand for energy – while, at the same time, reduce our carbon emissions? The answer lies in developing a strategic city wide approach that understands energy demand and seeks to address this by the provision of sustainable, low-carbon energy sources. By doing so will we be able to focus the current and future efforts of all citizens, communities, businesses and organisations within the city to make a real difference.

This document is the first step along this road. It sets out for us a range of real opportunities, not only to reduce and manage our energy consumption but to establish Glasgow as a centre of excellence in the development of sustainable energy solutions, technologies and expertise, at the same time providing jobs for our citizens. Whilst climate change will remain a challenge, the Sustainable Glasgow initiative provides a platform for the city to take the lead in the delivery of Scotland's ambitious carbon reduction targets.





Foreword from Professor Jim McDonald, Principal of the University of Strathclyde

For Scotland to protect the environment for future generations we must take action now. The Sustainable Glasgow Initiative proposes change that will create significant benefits for businesses, communities and our everyday lives.

I am delighted that the University of Strathclyde has played a key role in driving this important project forward. At the heart of Strathclyde is a commitment to excellent research that addresses global challenges, and first class education to develop the professionals who will implement solutions. Scotland has a tremendous opportunity not only to be a world-leader in renewable energy technologies, but to improve quality of life and create long-term investment and jobs. Innovative research and education have a critical role to play in securing the UK's energy future and driving down carbon emissions.

I am proud that the University of Strathclyde and the city of Glasgow are taking a lead in this vitally important field – demonstrating what can be achieved when government, universities, business and communities work together towards a common goal.

Sustainable Glasgow has identified major opportunities. Our next job is to work together to turn those opportunities into reality.



Executive Summary

The use of energy has brought huge benefits to human populations across the world, but it has also come with significant environmental impacts. Cities are responsible for around 80% of the world's greenhouse gas emissions – and as such have a major role to play in tackling climate change.

The use of energy has brought huge benefits to human populations across the world, but it has also come with significant environmental impacts. Cities are responsible for around 80% of the world's greenhouse gas emissions – and as such have a major role to play in tackling climate change.

Sustainable Glasgow is a collaboration between the University of Strathclyde, Glasgow City Council, Source One Veolia, Scottish and Southern Energy, Blitzer Clancy and Company, and Scottish Enterprise. Sustainable Glasgow aims to help Glasgow become one of Europe's most sustainable cities. Additional partners, including Scottish Power, are now coming on board to help make the sustainable city a reality.

In developed countries most of the cities and most of the buildings that will exist in 2050 are already in place. Retrofitting low carbon technologies and approaches, and integrating these with the existing infrastructure in cities, and with ongoing city development, is therefore one of the major issues facing governments in reducing carbon emissions.

Glasgow currently emits around 4 million tonnes CO₂ per annum linked to its energy use. The long-term trend will be for Glasgow's energy consumption and carbon emissions to increase unless action is taken. Sustainable Glasgow is clear that delivering city-wide large scale carbon emission reductions

requires major change – and this step change will need to be delivered by large scale projects, large scale investment, and significant changes in public policy. Small scale and emerging renewable technologies also have the potential to make a contribution to carbon emission reductions as well as generating community engagement and direct benefit.

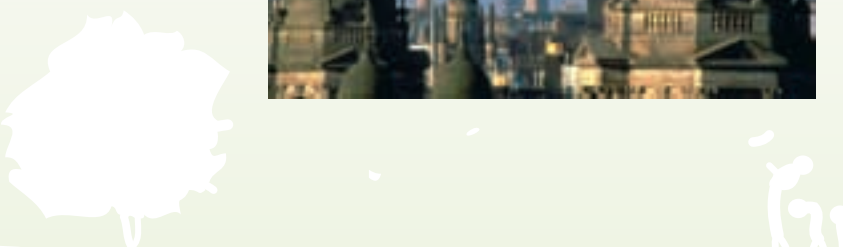
Through analysing Glasgow's current carbon emissions; the city's renewable energy resources; its infrastructure; and proposed new developments the Sustainable Glasgow Initiative has identified technically and financially feasible opportunities that could reduce Glasgow's carbon emissions by 30% within the next 10 years.

Achieving a 30% reduction over 2006 emission levels equals the Scottish Climate Change target of a 42% reduction by 2020.

A 30% reduction is a very strong result for the city as Glasgow has no significant energy industry installations (such as power stations and oil refineries) within its boundaries – and these facilities contribute 37% of Scotland's emissions.

The Sustainable Glasgow strategy allows resources to be focussed where they can be used most effectively. The main opportunities lie in capturing low carbon energy and utilising energy more efficiently through the following approaches. The estimated contribution each approach would make within 10 years to Glasgow's carbon emissions reduction is given below:

Combined Heat and Power/District Heating	9%
Biomass	2%
Biogas and energy from waste	6%
Other renewable energy systems	3%
Sustainable Transport systems	3%
Fuel switching	3%
Energy management systems	6%





These systems have been designed to meet Glasgow's requirements – supporting the city's growth, and meeting the needs of communities. The systems have also been designed in an integrated fashion so that projects support each other – both technically and financially. This integrated approach increases the opportunities available; reduces risk; and increases the positive impacts of each project. Some of the main proposals are summarised below:

- Implementation of improved energy management systems and energy efficiency measures across all sectors;
- Creation of systems to turn the city's sewage and municipal waste into biogas;
- Creation of urban woodlands on the city's vacant land – and use of the resultant biomass for heat and power generation;
- Development of a district heating system for the city – starting in 5 identified zones;
- Development of highly efficient natural gas/biogas fuelled Combined Heat and Power systems;
- Restricting use of petrol and diesel vehicles;
- Development of light rail systems for passengers and freight;
- Increased use of biogas and electrically powered vehicles;
- Phasing out electrical, coal, and oil heating across the city;

- Implementation of public policies (eg in planning and procurement) that support the delivery and use of the above systems;
- Engagement to draw in the resources and enthusiasm of Glasgow's people, businesses, and public sector organisations.

These green energy projects would bring in an estimated £1.5 billion in new investment into the city – and reap substantial income from new financial support mechanisms proposed by the UK Government to support the development of low carbon energy systems. The capital investment would come mainly from the private sector; creating significant numbers of jobs in the construction phase, and long term jobs with new skills linked to clean energy systems. Initial contacts with major sources of finance suggest there is significant interest in investing in the projects identified by Sustainable Glasgow. However there is a need for a more detailed assessment of these projects in order to draw in the finance required.

Sustainable Glasgow's proposed business model for implementing many of the major projects is through public/private partnership. The Council's clear support and involvement would reduce the risk perceived by investors - thus making it easier draw in significant private sector funding. Council involvement also has the advantage of maintaining a strategic approach – which will speed delivery of Glasgow's sustainability goals and increase the impact of individual projects.



Without ongoing Council involvement we would be likely to see a fragmented ad hoc approach that fails to deliver large carbon emission reductions. Council involvement should also provide a better degree of protection for consumers.

These clean energy systems could make a contribution to tackling fuel poverty through selling heat at lower and more stable prices than gas. Projects can also assist with community redevelopment through community co-ownership and community benefit schemes. Wherever possible projects will also be implemented in ways that improve the environment locally.

Glasgow will become a literally greener city through the planting of trees to form leafy boulevards, and the creation of urban woodland on vacant land. Its image would be transformed from a post-industrial city with significant problems - to a city that is actively delivering a new sustainable strategic vision for its future. This new image will attract new businesses and people to the city.

Increasing the number of trees and reducing city centre traffic levels will create both a conceptual and a literal breathing space in the city's heart – quieter and with cleaner air to breathe.

Through implementing the projects identified Glasgow will become the leading UK city in the field of sustainability with an unparalleled strategic approach to reducing its carbon emissions; tackling fuel poverty; and delivering sustainable economic development.

Sustainable Glasgow is changing the way that people think about and plan energy systems in the city. Ensuring that the opportunities set out above are delivered in reality will require a focussed programme of further activity to bring in the right partners; draw in the necessary funding; resolve regulatory issues; and integrate Sustainable Glasgow proposals into Council plans and strategies.

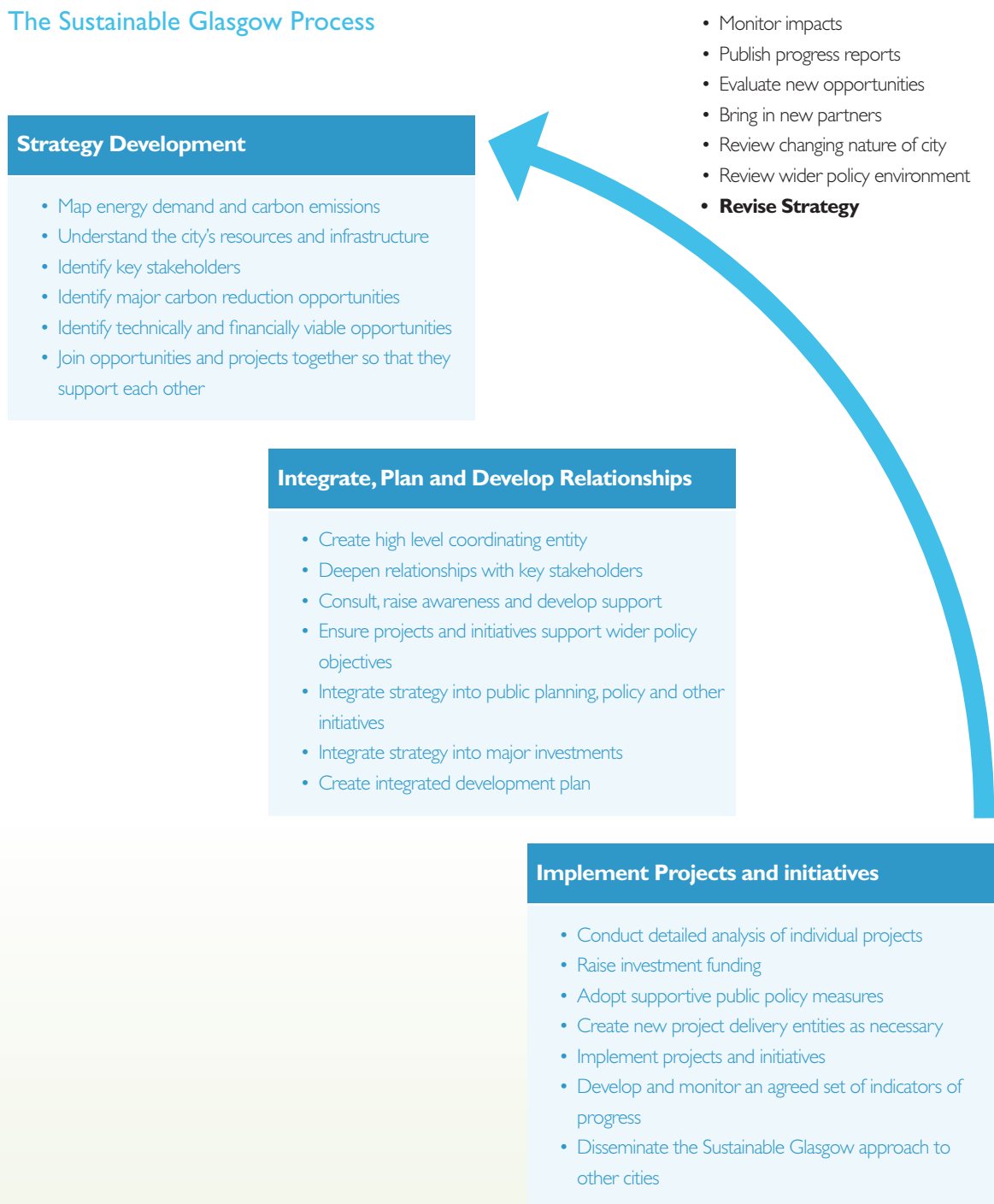
But delivering Sustainable Glasgow is not a task for the Council alone. Critical to the initiative's success will be engaging with key stakeholders – such as communities, housing providers, and employers - and leveraging their resources and enthusiasm.

Sustainable Glasgow is not a purely technical project – vital to its success in the long term will be influencing the attitudes and behaviours of the people and organisations in Glasgow to gain their active support for environmentally sustainable projects, policies, and new ways of living and working.

Finally, Government targets make clear that even greater carbon emissions reductions will be required in the future. These systems have been designed so that they have the inherent flexibility to be expanded and to integrate a wider range of low carbon technologies – thus increasing Glasgow's ability to contribute to Scotland and the UK meeting tighter carbon targets in the future. Sustainable Glasgow's strategy will require ongoing monitoring and revision as new opportunities become available and the regulatory environment changes.

Sustainable Glasgow is not a one-off exercise, it is an ongoing process summarised by the diagram opposite:

The Sustainable Glasgow Process



Summary of Sustainable Glasgow Recommendations and Proposals

The recommendations and proposals from this report set out a comprehensive approach to delivering Sustainable Glasgow's objectives. The table below summarises the report's recommendations as they appear in each section, and analyses their contributions to three key drivers for Sustainable Glasgow:

- Reducing carbon emissions
- Generating jobs
- Tackling fuel poverty

The recommendations are also analysed in relation to three factors that are important to the successful delivery of the Sustainable Glasgow strategy:

- Delivery and supporting projects
- Developing relationships and building support
- Maintaining a coherent long term strategy



	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Glasgow's carbon footprint						
<ul style="list-style-type: none"> ongoing tracking and more detailed analysis of Glasgow's carbon emissions 	✓			✓		✓
<ul style="list-style-type: none"> consider conducting an analysis of Glasgow's wider carbon footprint 	✓					✓
Energy Management						
<ul style="list-style-type: none"> Conduct an accurate building by building survey of Glasgow to allow identification of the properties and streets that will benefit most from energy efficiency and energy management measures 	✓		✓	✓		
<ul style="list-style-type: none"> Propose to government a regulatory change that would allow energy consumption data from individual domestic customers to be shared for the purposes of energy planning and improving energy efficiency 	✓		✓	✓		
<ul style="list-style-type: none"> Open discussions with utility companies and the regulator on the potential to implement additional alternative tariff structures that reward lower energy consumption 	✓		✓		✓	
<ul style="list-style-type: none"> work closely with the social housing sector to identify additional technically and financially feasible energy efficiency measures 	✓		✓		✓	
<ul style="list-style-type: none"> Sustainable Glasgow Initiative to work with EST, housing associations, and others to deliver joint awareness raising campaigns, and to consider how to improve the effectiveness of such campaigns in a Glasgow context 	✓		✓		✓	
<ul style="list-style-type: none"> Work with other organisations to identify effective measures for retrofitting in the types of building that make up much of Glasgow's housing stock – ie tenements, flats, and older buildings 	✓		✓		✓	
<ul style="list-style-type: none"> Work with potential commercial partners to explore options for the creation of Energy Services Companies (ESCOs) in Glasgow 	✓		✓	✓	✓	

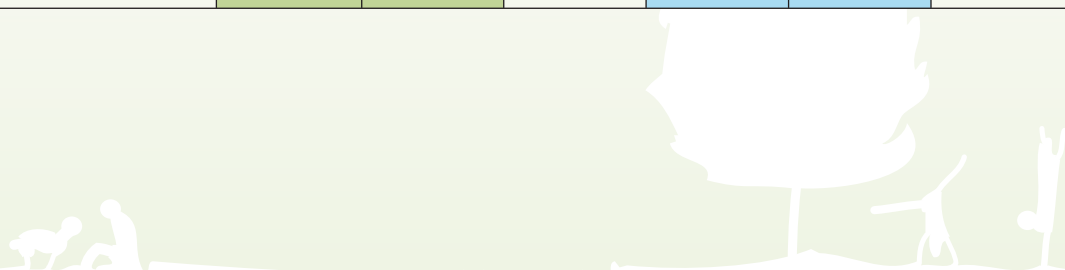
	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Energy Management						
<ul style="list-style-type: none"> The Council to consider creating energy efficiency home loans that are linked to homes (rather than people) and recovered via the council tax linked to that property 	✓		✓	✓		
<ul style="list-style-type: none"> Glasgow City Council to set a minimum standard for energy efficiency for Houses in Multiple Occupation (HMOs) as a part of the licensing procedure. 	✓		✓			
<ul style="list-style-type: none"> Conduct a building by building survey of the commercial centre of Glasgow to allow identification of the properties that will benefit most from energy efficiency and energy management measures 	✓			✓		
<ul style="list-style-type: none"> Propose to government regulatory changes that would require detailed consumption data from individual commercial and public sector customers to be shared for energy planning purposes 	✓			✓		
<ul style="list-style-type: none"> Engage with the major commercial property landlords in Glasgow to discuss measures they can take to reduce the carbon emissions of the buildings they own 	✓			✓	✓	
<ul style="list-style-type: none"> Conduct a detailed mapping of carbon emissions in key industrial and commercial sectors 	✓			✓		
<ul style="list-style-type: none"> Work with organisations in key sectors to help them reduce carbon emissions by linking with Sustainable Glasgow projects 	✓	✓		✓	✓	
<ul style="list-style-type: none"> Examine options for creating/expanding revolving loan funds for energy efficiency measures 	✓	✓		✓	✓	
<ul style="list-style-type: none"> assess opportunities for installation of more efficient street lighting systems 	✓					
<ul style="list-style-type: none"> The initiative to work with Scottish Water, housing providers, major employers and other potential suppliers to develop a water supply and consumption reduction strategy 	✓	✓		✓	✓	

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Energy Management						
<ul style="list-style-type: none"> develop tariffs and market structures that support demand management on a pilot basis 	✓			✓	✓	
<ul style="list-style-type: none"> assess and deploy smart grid technologies in the city - with the objective of making Glasgow the leading UK city in smart technologies 	✓			✓	✓	
Reduce use of high carbon fuels						
<ul style="list-style-type: none"> Develop strategies for phasing out use of high carbon fuels (coal and oil) heating 	✓			✓		✓
<ul style="list-style-type: none"> Progressive phasing out of electrical resistance heating in the city through agreement with social landlords, and stronger regulation of the private rented sector. 	✓		✓	✓		✓
Low carbon energy systems						
<ul style="list-style-type: none"> a waste strategy that supports and integrates principles aimed at achieving greenhouse gas emission reductions 	✓			✓		✓
<ul style="list-style-type: none"> a biogas strategy aimed at starting implementation of a large scale anaerobic digestion facility within 3 to 5 years 	✓	✓		✓		✓
<ul style="list-style-type: none"> an urban woodland strategy— with community involvement – aimed at starting planting of new woodlands within 2 years 	✓	✓		✓	✓	✓
<ul style="list-style-type: none"> a wind strategy aimed at wind turbine construction on the sites already identified – with involvement of local communities – and assessment of potential brownfield sites for wind turbines. 	✓	✓		✓		✓
<ul style="list-style-type: none"> an assessment of the hydro-electric potential of Glasgow's rivers and canals. 	✓			✓		✓
<ul style="list-style-type: none"> a strategy aimed at maximising revenue generation from microgeneration for public bodies and communities 	✓	✓	✓	✓		✓
<ul style="list-style-type: none"> Keep the carbon reduction performance of heat pumps under review. 	✓					✓

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Low carbon energy systems						
<ul style="list-style-type: none"> Consider additional measures to assist urban communities to plan, finance and organise local renewable energy projects 	✓			✓	✓	
<ul style="list-style-type: none"> Develop a pilot pyrolysis plant within 3 to 5 years – with evaluation to assess suitability for large scale implementation 	✓			✓		
Low carbon heating: District Heating and CHP						
<ul style="list-style-type: none"> consultation and designation by the Council of the 5 identified areas as district heating zones 	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> creation of stakeholder groups for each of the designated district heating zones 				✓	✓	✓
<ul style="list-style-type: none"> consultation on creation of additional district heating zones 	✓	✓	✓	✓	✓	✓
<ul style="list-style-type: none"> consultation and adoption of planning and public procurement policy measures to support the development of district heating in the city including: <ul style="list-style-type: none"> a requirement for new developments in a designated district heating zone to join the district heating system when it is available a requirement for buildings owned or leased by public sector bodies (in particular the council) to join a district heating network when it becomes available liaison with planned development of waste water infrastructure so that the district heating network is implemented at the same time where possible – reducing costs and disruption a requirement for new developments to publish their forecast energy demand and profile. Requirements to reduce electrical heating in the residential sector in particular: 	✓			✓		✓



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Low carbon heating: District Heating and CHP						
<ul style="list-style-type: none"> a proposal to UK and Scottish Government that legal powers in relation to district heating zones are strengthened to include the following measures: <ul style="list-style-type: none"> a power for local authorities to compel connection to a district heating system in a designated zone; a power for local authorities to compel large commercial or industrial concerns to sell waste heat to district heating systems. 	✓			✓		✓
<ul style="list-style-type: none"> creation of an entity (potentially a public private partnership) to raise capital, develop, own, and regulate the district heating network. 		✓	✓	✓		✓
<ul style="list-style-type: none"> Proposal to UK and Scottish governments that legal restrictions on local authorities acting as energy companies be removed. 			✓	✓		✓
<ul style="list-style-type: none"> development of an agreed implementation plan for district heating in the city 				✓		✓
<ul style="list-style-type: none"> development of technical and operating standards for the district heating network 				✓		✓
<ul style="list-style-type: none"> development of a regulatory system for the network including: <ul style="list-style-type: none"> an aim for the prices for heat to customers to be kept below the equivalent price of gas 			✓	✓	✓	✓
<ul style="list-style-type: none"> measures to increase awareness of the district heating network as it is implemented: <ul style="list-style-type: none"> planting of trees and cycle lanes alongside district heating pipes development of at least one Combined Heat and Power facility as an educational and awareness raising facility active promotion of the district heating zones to businesses as a low cost, low carbon energy location opportunity 	✓	✓		✓	✓	



	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Transport <ul style="list-style-type: none"> • Reducing private road transport and road freight • Decarbonising road transport and public transport • Improving public transport 						
• The initiative recommends the Council sets a traffic reduction target for the city centre – and in particular a reduction target for the most polluting vehicles.	✓			✓		✓
• The initiative to conduct a study to assess introduction of a mixed passenger/freight tram or electric vehicle freight delivery scheme in the city centre.	✓			✓		✓
• The Council to consider introducing charges for lorry and van movements in the city centre. This could be phased to coincide with the introduction of a freight tram system and/or an electric vehicle delivery system	✓			✓		
• The initiative to consider the potential impact of varying council tax as an incentive to reduce car ownership. If appropriate propose to the Scottish Government that new powers should be provided to local authorities to vary council tax rates in line with car ownership.	✓			✓		✓
• The Council to develop cycle paths in conjunction with district heating and in pedestrianised areas.	✓			✓	✓	
• The initiative to work with major employers in the city to encourage them to develop employee travel strategies that encourage use of public transport, the creation of car pooling schemes, and ensures provision of salary sacrifice schemes for bicycles	✓			✓	✓	
• The Council to review existing parking provision and regulation in the city with the objective of reducing availability/attractiveness of city centre parking.	✓			✓		
• The Council to seek additional powers to regulate the provision of all types of car parking in the city.	✓			✓		
• The Council to re-examine congestion charging as an option for reducing traffic in the city centre – with exemptions for low carbon vehicles, and potentially car club vehicles.	✓			✓		✓

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Transport						
<ul style="list-style-type: none"> The initiative to work with transport providers to examine how the costs of certain journeys by public transport can be made comparable with the cost of driving. 	✓			✓	✓	
<ul style="list-style-type: none"> The initiative to work with the Transform Scotland Trust and others to examine options for expanding use of car clubs in Glasgow. 	✓			✓	✓	
<ul style="list-style-type: none"> The Council to consider requiring new housing and commercial developments to introduce strategies that actively promote use of public transport and reduce use of road freight. 	✓			✓		✓
<ul style="list-style-type: none"> Creation of Low Emission Zones in the city centre 	✓			✓		✓
<ul style="list-style-type: none"> The adoption of public procurement policies that favour the procurement and use of low carbon vehicles 	✓			✓		
<ul style="list-style-type: none"> The adoption of lower congestion charges for lower carbon vehicles 	✓			✓		
<ul style="list-style-type: none"> Low cost/reserved parking for electric and biogas vehicles 	✓			✓		
<ul style="list-style-type: none"> Variation in business rates to penalise companies not adopting lower carbon transport strategies, and to reward companies that do. 	✓			✓		✓
<ul style="list-style-type: none"> Incentives for car clubs to adopt low carbon vehicles 	✓			✓		
<ul style="list-style-type: none"> Free licensing for electric/biogas taxis. 	✓			✓		
<ul style="list-style-type: none"> Licensing conditions that require taxi emissions to be below a certain carbon benchmark 	✓			✓		
<ul style="list-style-type: none"> Promoting the creation of charging points for electrically powered vehicles in public authority, company car parks, and multi-story car parks (through planning policy) 	✓			✓		
<ul style="list-style-type: none"> Consider a planning requirement for the creation of electrical vehicle charging points as an integral part of the development of any CHP facility 	✓			✓		

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Transport						
<ul style="list-style-type: none"> Open discussions with major bus, taxi and fleet operators on the creation of a strategy for the adoption of electric and biogas vehicles 	✓			✓	✓	
<ul style="list-style-type: none"> Seek additional powers from the Scottish Government that would allow creation of a subsidy system for low carbon public transport vehicles 	✓			✓		
<ul style="list-style-type: none"> Opportunities for decarbonising power used by Glasgow's underground system and electrified rail systems to be assessed. 	✓			✓	✓	
<ul style="list-style-type: none"> Glasgow City Council, other local authorities around Glasgow City, SPT and other transport providers work together to develop and assess options for introduction of a revised and simplified integrated fare system for the Glasgow area. 	✓			✓	✓	
<ul style="list-style-type: none"> Consideration is also given to the development of integrated fare options for common longer distance commuter journeys outside the Strathclyde area (eg Edinburgh to Glasgow) 	✓			✓	✓	
<ul style="list-style-type: none"> Consideration of future integration of a city centre tram/LRT system with routes reserved for Fastlink 	✓			✓		✓
Attitudes and Behaviour						
<ul style="list-style-type: none"> that the initiative examines options for creating and training networks of "sustainability champions" in local communities, employers, schools, and colleges – working with existing initiatives such as eco-schools. 	✓		✓	✓	✓	
<ul style="list-style-type: none"> the initiative works with the Council, schools, employers, retailers, communities, social landlords, transport providers to develop and implement a targeted strategy designed to change individual attitudes and behaviours in ways that will deliver the greatest long term impact. 	✓		✓	✓	✓	✓
<ul style="list-style-type: none"> that all Sustainable Glasgow projects are designed to take account of behavioural change issues, and support behavioural change programmes as an integral part of their design 	✓			✓	✓	✓

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Attitudes and Behaviour						
• Sustainable Glasgow to undertake a further work into delivering community level behavioural change	✓		✓	✓	✓	✓
• the Council examines the availability and awareness of recycling facilities				✓		
• Transport providers work to improve safety and perceptions of safety on public transport	✓			✓		
Creating Supportive Public Policy						
• Adoption of supportive planning policies: <ul style="list-style-type: none"> - Objective 1: Ensuring availability of energy and carbon emission data - Objective 2: Promoting the use of energy management systems - Objective 3: Promoting development of low carbon heating - Objective 4: Promoting development of an integrated low carbon heating system for Glasgow - Objective 5: Promoting development of low carbon buildings - Objective 6: Promoting community involvement in low carbon energy projects - Objective 7: Promoting use of public transport and reducing use of private vehicles 	✓	✓	✓	✓	✓	✓
• Development of a comprehensive green jobs strategy for the city		✓		✓	✓	✓
• Invite all organisations and households in Glasgow to cease to subscribe to green energy tariffs	✓					✓
• The Council and its partners to set up a fund as an alternative to green energy tariffs that will invest community based carbon reduction projects	✓	✓	✓	✓	✓	
• The initiative to work with public bodies in Glasgow to help them take account of Sustainable Glasgow objectives and measures – and to meet their duty under the Climate Change Act (Scotland) to exercise their functions in ways that contribute to the Act's carbon reduction targets	✓			✓	✓	✓

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Creating Supportive Public Policy						
<ul style="list-style-type: none"> The Council to take account of the Sustainable Glasgow strategy and objectives in development of City Plan 3 	✓			✓	✓	✓
<ul style="list-style-type: none"> Sustainable Glasgow to work closely with Clyde Gateway to ensure that the initiatives take account of and mutually support each other's objectives 	✓	✓		✓	✓	✓
<ul style="list-style-type: none"> The Council to review its public procurement strategy to ensure it supports Sustainable Glasgow objectives – and to encourage other public bodies to adopt similar policies 	✓	✓		✓	✓	✓
Transforming Glasgow's Image						
<ul style="list-style-type: none"> development of guidance and a plan for the incorporation of city image change into low carbon energy projects and initiatives 				✓	✓	✓
<ul style="list-style-type: none"> development of a long term "Sustainable Glasgow" brand that can be deployed widely – both within the city and for external audiences 				✓	✓	✓
<ul style="list-style-type: none"> develop a promotional strategy that explains Glasgow's vision - and the real and positive changes it is achieving 				✓	✓	✓
<ul style="list-style-type: none"> integration of education and awareness of Sustainable Glasgow into the curriculum of local schools (for example, through working with the eco-schools initiative) 				✓	✓	✓
<ul style="list-style-type: none"> a programme designed to engage and involve local employers and employees in Sustainable Glasgow 				✓	✓	✓
<ul style="list-style-type: none"> a programme designed to involve communities and housing associations in Sustainable Glasgow 				✓	✓	✓
<ul style="list-style-type: none"> creation of a comprehensive "one-stop" website for Sustainable Glasgow that provides information on the initiative, and tells people, communities and business how they can get involved and what they can do to help. 				✓	✓	✓

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
Business models and financing						
<ul style="list-style-type: none"> The Council works with partners to create appropriate delivery vehicles for the large novel energy systems recommended here 		✓		✓	✓	✓
<ul style="list-style-type: none"> The Council considers working with partners to create an overarching investment trust to take forward investment in financially viable Sustainable Glasgow projects 		✓		✓	✓	✓
<ul style="list-style-type: none"> The Council examines means to facilitate communities to become involved in, and benefit from, Sustainable Glasgow projects 		✓	✓	✓	✓	
The Next Steps						
<ul style="list-style-type: none"> Creation of a high level steering group 				✓	✓	✓
<ul style="list-style-type: none"> Appointment of a Sustainable City "tsar" 				✓	✓	✓
<ul style="list-style-type: none"> Programme co-ordination 				✓	✓	✓
<ul style="list-style-type: none"> Ensuring the city has access to the skills and expertise it will need to drive forward the next phase of activity 				✓	✓	
<ul style="list-style-type: none"> Development of investment grade project proposals and engagement with potential investors and other funding sources 		✓		✓	✓	
<ul style="list-style-type: none"> Creation of a wider partnership and delivery business model 		✓		✓	✓	✓
<ul style="list-style-type: none"> Creation of an energy masterplan for Sustainable Glasgow 		✓		✓		✓
<ul style="list-style-type: none"> Dissemination, community and stakeholder engagement programme 				✓	✓	
<ul style="list-style-type: none"> Ensuring new developments are fully integrated into the Sustainable Glasgow initiative 	✓			✓	✓	✓
<ul style="list-style-type: none"> Consultation and adoption of supportive public policy measures 	✓	✓	✓	✓	✓	✓

	Reducing carbon emissions	Generating jobs	Tackling fuel poverty	Delivering and supporting projects	Developing relationships and building support	Maintaining a coherent long term strategy
The Next Steps						
• Creation of a plan for developing a clean energy supply chain in Glasgow		✓			✓	✓
• Conduct a Strategic Environmental Assessment of the Sustainable Glasgow strategy				✓	✓	✓
• Develop an agreed set of indicators for measuring the city's progress						✓
• Creation of a decision support system that can be deployed in other cities				✓	✓	
• Ongoing strategic review - monitor impacts, publish annual progress reports, review opportunities	✓			✓	✓	✓
• Recommend that Government requires all urban settlements above 100,000 people to map their carbon emissions, energy supply, and energy usage in detail.	✓			✓	✓	✓

