

SEPA'S ENERGY FRAMEWORK

1. Introduction

Every day SEPA works to protect and enhance Scotland's environment, helping communities and businesses thrive within the resources of our planet. We call this <u>One Planet Prosperity</u>. Energy, both renewable and non-renewable, is one of Scotland's largest and most important resources. It is an essential resource that enables social and economic development, however while energy is fundamental to the economy its production, transmission and use can have significant environmental impacts.

Scotland has an ambitious approach to energy policy that aims to deliver energy security, an integrated and localised approach to production, transport and use, and decarbonisation of the energy system by 2050. A successful 21st century country will have a sustainable, efficient energy system that can keep our businesses and public services running, and alleviate fuel poverty while promoting sustainable growth and not jeopardising climate and environmental ambitions.

SEPA's statutory purpose directs us to protect and improve the environment, in ways that as far as possible create social and economic success; this provides us with the opportunity to support Scotland in:

- decarbonising its energy system;
- reducing the impacts, environmental and social, that can be associated with electricity and heat generation, transmission, and use;
- creating economic opportunities for communities and industry driving innovation and investment.

One Planet Prosperity – SEPA's Regulatory Strategy The Regulatory strategy outlines SEPA's approach to delivering environmental protection and improvement in ways, which will also create health benefits and sustainable economic growth. A key element of the strategy is to encourage and support businesses who seek to find innovative and efficient ways to go beyond standard levels of compliance while operating within Earth's capacity to support us.

This framework sets out SEPA's approach to energy and will be integral to the delivery of our broader <u>Regulatory Strategy.</u> The primary methods of delivery will be through our regulatory tools, sector plans and voluntary initiatives such as Sustainable Growth Agreements.

2. Bigger picture

Globally as well as nationally, access to affordable and efficient energy which minimises damage to the environment or health is essential to implementing social and economic development and alleviating inequalities, while reducing the pressure on global resources.

How we use and manage our energy resources is central to our ability to live within the resources of our planet. Scotland is demonstrating strong leadership in the transition to a sustainable low carbon economy and we recognise that energy is one of the most important factors in achieving this. We also understand the complex considerations that must be taken into account when undertaking such a transition. The <u>Climate Change (Scotland) Act 2009</u> requires an 80% reduction in greenhouse gases by 2050 and this is not possible without transitioning to a decarbonised energy system.

The Scottish Government has made decarbonisation of the energy system by 2050 a core aspect of its Scottish Energy Strategy. To enable Scottish businesses to continue to operate and grow, consideration and action will need to be undertaken now to ensure today's decisions do not become tomorrow's stranded assets.

The scale of the environmental challenge facing humanity is enormous, with a need for a real urgency to act. SEPA, a delivery agency for the Scottish Government's Energy Strategy, can work in partnership with, and support, Scottish businesses in maximising their sustainable economic opportunities. We can use our regulatory tools, experience, knowledge and partnership approach to help to influence improved decision-making regarding electricity and heat production, transmission, storage and use.

Working collaboratively through our voluntary initiatives, such as the Sustainable Growth Agreements (SGAs), or setting out key areas for improvement within our sector plans we can help business move beyond compliance and assist in delivering the aims of the Scottish Government's Energy Strategy.

Scottish Energy Strategy: The future of energy in Scotland

Scotland's first Energy Strategy will guide the decisions that the Scottish Government, working with partner organisations, will need to take over the coming decades. The strategy sets out the vision for the future energy system in Scotland.

Vision: A flourishing, competitive local and national energy sector, delivering secure, affordable, clean energy for Scotland's households and businesses.

The energy strategy vision is built around six priorities for a whole-system approach that considers both the use and supply of energy for heat, power and transport.

Energy priorities:

- 1. Consumer engagement and protection
- 2. Energy efficiency
- 3. System security and flexibility
- 4. Innovative local energy systems
- 5. Renewable and low carbon solutions
- Oil and gas industry support including decommissioning and carbon captute storage

This strategy highlights the connections between the energy system and all parts of the economy, and its importance to sustainable, inclusive growth. It also makes a strong commitment to improving the Scottish Government's approach to public awareness raising and engagement on energy issues.

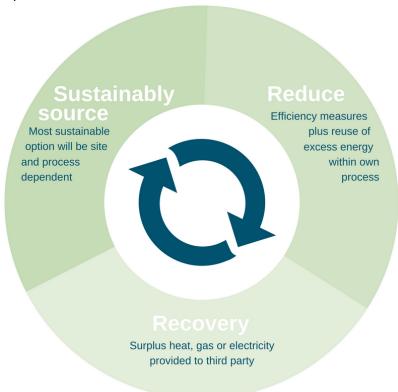
3. SEPA's Energy Framework

To be a first class environmental protection agency and an effective delivery agency for the Scottish Government's Energy Strategy, we need to use all our regulatory levers, influence and partnerships in a more effective way to bring environmental, social and economic objectives together.

We recognise that people are over-using our planet's resources. If everyone lived as we do in Scotland, we would need three planets to sustain ourselves. Businesses, societies and nations which will thrive in the 21st century are those that have developed ways to prosper within our environmental capacity. Scotland is an energy-rich nation with significant resources of renewable energy as well as oil and gas reserves. SEPA can work with regulated businesses to help drive the use of the most suitable energy sources, improve energy storage, increase energy efficiency and productivity (increased output from every unit of energy used) while minimising wasted energy. These areas are part of a cycle of energy use that can enable social and economic success while limiting adverse impacts on our environment.

The energy cycle outlined below demonstrates how SEPA will, through our collaborative work and our regulatory role, drive behaviours that are 'beyond compliance'; we will work with other delivery agencies to help Scottish business make choices that reduce the impacts, environmental and social, that can be associated with electricity and heat generation, transmission, and use. To reduce the environmental impact of energy all businesses need to consider how and where they source and use energy. The impact or benefits of energy choices do not start or finish at the site boundary.

Figure.1: Energy cycle priorities:



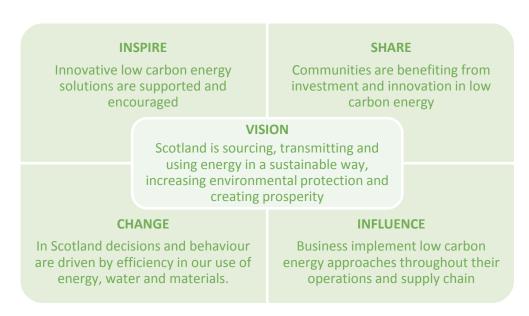
SEPA's vision and aims

OUR VISION

Scotland is sourcing, transmitting and using energy in a sustainable way, increasing environmental protection and creating prosperity

As a delivery agency under the Scottish Government's Energy Strategy, SEPA has developed this Energy Framework to clarify our remit. It highlights how we will work with partner agencies, ensure we can help to deliver One Planet Prosperity and outline how we can work with communities, businesses, academic institutions and other public bodies to play our part in the continued decarbonisation of Scotland's heat, transport and electricity. SEPA achieves a lot through direct regulation of energy but we also have a wide influential role where through partnership we can achieve even more.

The vision and four aims of SEPA's Energy Framework are described below:



SEPA's levers:

To support the delivery of Scottish Government's Energy Strategy and our Energy Framework we will:

Act as a delivery agency for the Scottish Government's Energy Strategy	Influence and drive energy decisions in planning policy development and implementation	Embed positive energy actions into our regulatory and 'beyond compliance' measures	Produce and share evidence and research regarding energy use and enivironmental impacts
Regulate to drive and support greenhouse gas emissions reductions	Regulate, influence and support improved energy efficiency and low carbon heat solutions	Maximise existing partnerships and build new partnerships to support innovative energy solutions	Regulate to protect and enhance Scotland's environment

Our aims

INSPIRE Innovative low carbon energy solutions are supported and encouraged

Innovation can be daunting, whether as a technology developer, investor or implementer. However, there are many good examples of innovating designs, behaviours and technologies leading to increased decarbonisation and improved environmental performance. We understand the benefit to Scotland of low carbon developments that also minimise wider environmental impacts and we will support and encourage innovation.

What success will look like:

- Business is confident it can receive clear and consistent advice regarding regulatory requirements for novel energy approaches.
- SEPA and its partner agencies will provide easily accessible information and advice on a range of areas including funding, technical and environmental advice and guidance.
- Research bodies are keen to ensure their products and approaches meet environmental regulatory requirements before undertaking further research or development.

- Support the use of environmentally sensitive renewable energy and other low carbon compliant technologies where appropriately scaled, located and mitigated.
- Encourage a diversity of energy sources that integrate energy supply and demand, especially supporting efficient use of surplus heat, and heat from low carbon sources.
- Support technology research and the development, demonstration, environmental assessment and commercialisation of new clean technologies.
- Seek to inform and influence decisions made now, so that they do not unduly lock Scotland into a higher than necessary carbon future, and support policy and legislative certainty to reduce project risk.
- Pro-actively help sectors and regulated business achieve compliance outcomes with the lowest carbon footprint and in ways that improve energy efficiency and reduce greenhouse gas emissions.
- Provide additional support to businesses that are piloting innovative and new approaches to help drive energy efficiency and greenhouse gas emission reductions along with other 'beyond compliance' actions.

SHARE Communities are benefitting from investment and innovation in low carbon energy

Decarbonisation of the energy system provides a great opportunity for local energy solutions to be implemented in a way that ensures local communities reap the benefits from the associated environmental, social and economic successes that it offers.

What success will look like:

- The decarbonisation of heat and increases in energy efficiency have been implemented in a way that means that communities are benefiting from warmer homes and places of work and, as the heating becomes more local in source, communities benefit from the wider social, economic, health and regeneration benefits.
- Community opportunities are identified and are core to the planning and designing of a low carbon energy solutions.
- Businesses and communities work in partnership to deliver local energy projects and solutions that provide wider community benefits.
- Communities are supported in developing their local energy schemes and empowered to seek innovative solutions that deliver energy benefits and drive a circular economy approach to local energy provision.

- SEPA will work in partnership with, and support, Scottish communities and businesses in recognising energy supplier and customer opportunities.
- Use voluntary initiatives such as sustainable growth agreements and the VIBES award to specifically showcase and inspire low carbon energy innovation.
- We will use our experience, knowledge and partnership approach to help to influence decision-making from the earliest stages of design and planning.
- Engage early with stakeholders to ensure transparent decision-making through promotion and provision of clear and accessible information.
- Provide information that empowers people to make decisions. We will use data and information to underpin policy development at national and local levels, inform regulatory interventions and report on a range of issues including the availability and utilisation of waste heat.
- Work with planning authorities to encourage strong energy resource planning policies in all development plans and encourage new industrial facilities to be situated in the most appropriate location.
- Work collaboratively, both internally and externally, to ensure opportunities that deliver circular economy benefits are identified and supported to drive reductions in energy, water and waste use.

CHANGE In Scotland decisions and behaviour are driven by efficiency in our use of energy, water and materials

Reducing energy consumption and increasing energy productivity, through implementation of physical and behavioural energy efficiency measures not only improves the bottom line for businesses but it also delivers real environmental improvements locally, nationally and globally. Collaborative working and 21st century regulation must put energy efficiency at the heart of its work. Scottish business is already aware of the importance of energy efficiency and there are good examples of innovation and improvement. We want to help move these examples from exemplar to embedding them across business sectors.

What will success look like:

- Business considers energy consumption as a key component of their operation.
- Energy efficiency opportunities are identified and measures are implemented.
- There is a reduction in overall energy consumption in Scotland.
- Products are designed with energy efficiency at their core.
- Behaviour, economic and business decisions are driven by productivity with energy efficiency at their core.

- Scope and, where appropriate, include actions in every sector plan that will help Scotland reduce greenhouse gas emissions and improve energy use and choices across each sector and its supply chains.
- Scope and, where appropriate, include actions in all voluntary initiatives, including sustainable growth agreements, issued by SEPA, that significantly improve energy efficiency by the business and its supply chain.
- Ensure that every enforcement undertaking includes at least one significant energy or resource efficiency and greenhouse gas emission reduction action for the business and its supply chain.
- Drive behaviours through regulatory and collaborative working roles, that are 'beyond compliance'.
- Maximise existing partnerships and build new partnerships to support energy efficiency solutions to provide a clear path for businesses to implement measures that deliver a strong low carbon economy that minimises environmental impacts.

INFLUENCE Buisinesses implement low carbon energy approaches throughout their operations and supply chains

Energy is fundamental to the economy; however electricity and heat production, and energy transmission and use can have significant environmental impacts. Environmentally sensitive, low carbon energy solutions are key to delivering long-lasting environmental, social and economic success.

SEPA can help business to recognise the opportunities available to utilise low carbon, environmentally sensitive energy sources not only in their own processes but also in those of their associated supply chain. We will work with partners and business to identify where opportunities might exist to minimise environmental impacts associated with energy use. We can use our partnership opportunities to help business access advice and guidance and will use our regulatory levers to drive behaviours that support low carbon energy use.

What will success look like:

- Low carbon energy solutions that minimise impacts on the environment are identified, supported and implemented.
- Our regulatory and collaborative tools make a positive contribution towards a low carbon economy.
- Our regulatory and collaborative tools help to encourage the use of energy in a way that that minimises environment impacts.

- Within all sustainable growth agreements and sector plans we will seek to reflect greenhouse gas and low carbon energy ambitions with supporting actions that will provide a route for all sectors to contribute to the delivery of a decarbonised energy system.
- Work with business to help them make choices that reduce energy consumption and deliver the associated economic, environmental and social successes that arise from efficient low carbon electricity and heat generation, transmission and utilisation.
- Work in close partnership with others, including enterprise agencies, industry and their representative bodies, Zero Waste Scotland, Resource Efficient Scotland, Revenue Scotland and Scottish Government, to help deliver Scotland's Energy Strategy aspirations for industry.
- Invest in our staff to ensure they are skilled and equipped with the right tools, knowledge and training to help implement a low carbon Scotland.

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