

The Low Carbon Economy Impacts and Opportunities

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Scottish Enterprise's Contribution

Focus on building the competitive advantage of Scotland's key industries and businesses as our contribution to sustainable economic growth

Strategic Priorities

SE's Contribution

Learning, Skills and Well-Being

- Deliver organisational development & leadership
- Stimulate demand & skills utilisation
- Promote talent attraction & retention

Supportive Business Environment

- **Focus on key sectors**
- **Support growth companies**
- **Improve access to risk capital**
- **Internationalise company base & attract FDI**
- **Increase business innovation & exploitation of IP**

Infrastructure Development & Place

- **Deliver bus. infrastructure & national / regional regeneration**
- **Facilitate industry influence on transport, planning etc**

Effective Government

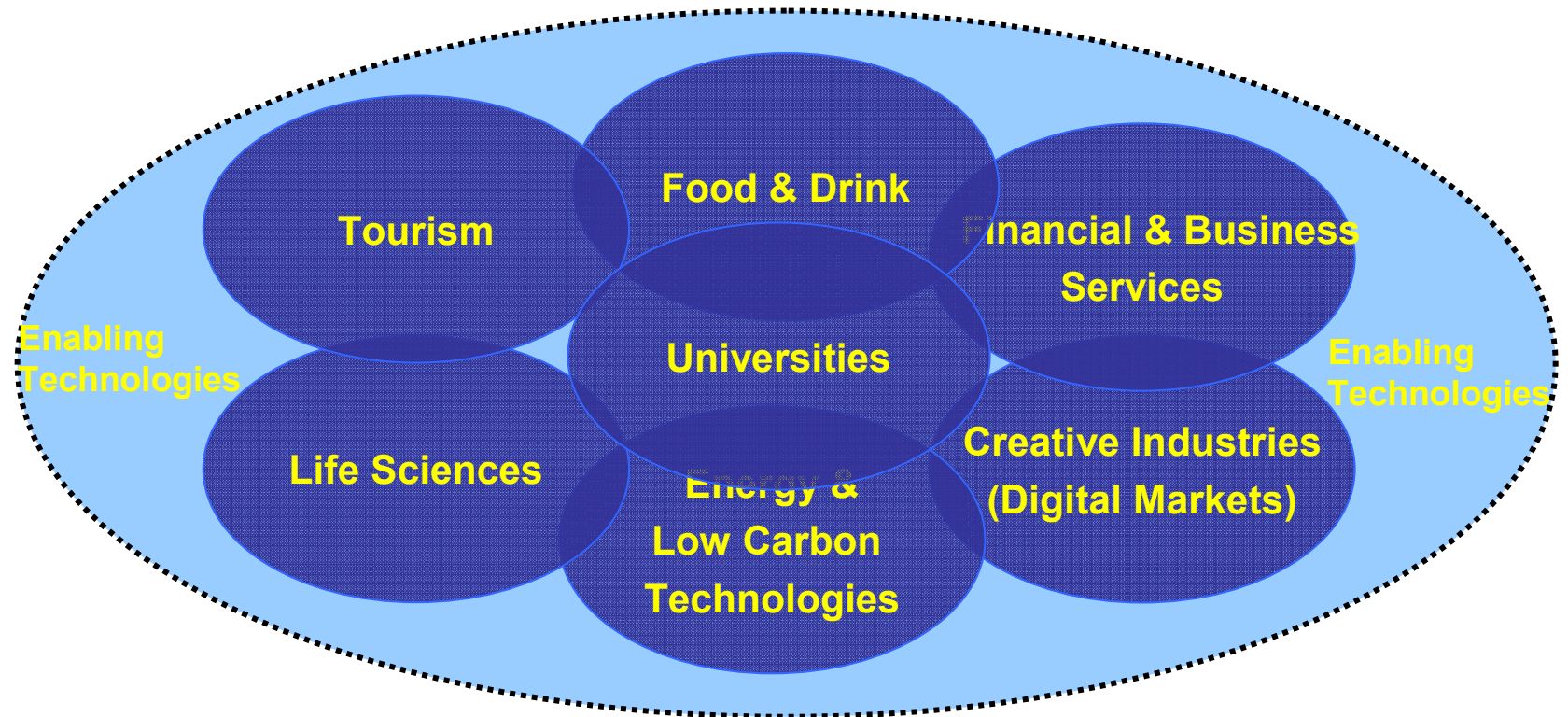
- Deliver year-on-year efficiencies
- **SE to be an effective partner** (eg Strategic Forum)

Equity

- **Increase renewable energy & business resource efficiency**
- Promote business benefits through diversity
- **Support rural growth and diversification**

Our industry focus

Key Sectors



Other Growth Industries



Our low carbon focus

- **Ambition**

- A strong, strategic focus on stimulating low carbon economic development. This includes adapting to and mitigating against climate change, supported by internal processes where low carbon thinking is truly embedded

- **Strategic Priorities**

Build understanding of sustainable economic growth and climate change across the organisation through:

- Clear policy direction that fully integrates low carbon economic opportunities;
- A low carbon evidence base to inform future policy development;
- Integrating carbon assessment (alongside economic impact) into operational activities and processes.

“A low carbon economy is one where all products and services, right through the supply chain, embrace a low carbon approach. ‘Low carbon’ is a way of thinking, behaving and operating that minimises carbon emissions (and equivalents) while enabling sustainable use of natural resources, economic growth and quality of life improvements”.

Our low carbon focus

Environmental & Clean Technologies

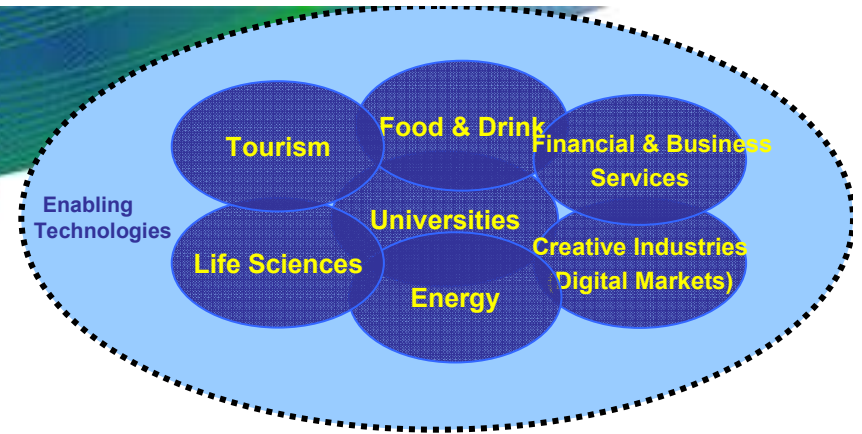
- **Sustainable Transport**
Focus on Low Carbon Vehicles & Intelligent Transport Systems in collaboration with the industry body the Sustainable Transport Group.
- **Building Technologies**
Design, build & test of new materials, products and methods to improve heat & energy efficiency in new build and existing building stock.
- **Recovery and Recycling**
Exploring the huge opportunity that new rules on commercial & municipal waste offer the existing players in the waste industry and innovative technology solutions.
- **Water and Waste Treatment**
Bringing together water utility organisations and technology companies with new approaches to detecting & treating pollutants.
- **Environmental Monitoring & Instrumentation**
New sensor & analysis technologies to detect a wide range of agents in our environment to allow treatment and longer term study.

Our low carbon focus

Energy sector

- **Wind – onshore and offshore**
Working with the industry to ensure that the necessary infrastructure and supply chains are in place – harnessing the offshore skills of the oil & gas industry.
- **Marine - Tidal and wave**
Providing support and encouragement to device developers through test facilities at EMEC, to assist them to develop innovative, cost-effective and reliable devices.
- **Bioenergy (woody biomass, energy from waste, biofuels)**
Supporting market and supply chain development, enabling technology development and deployment.
- **Cleaner Coal, Carbon Capture and Storage**
Developing Scottish networks in the thermal generation, academic and offshore sectors to work together to develop and demonstrate workable, safe and economic solutions.
- **Fuel cells and Hydrogen**
Supporting demonstration and commercialisation, getting more companies in Scotland engaged in sector.

Our low carbon focus



Other Key Sectors

- **Food & Drink:** resource efficiency, energy from waste, green branding etc
- **Tourism:** resource efficiency, 'green' tourism products, growing interest in adaptation
- **Financial services:** climate change opportunities through insurance sector data, green/ethical investment as a source of reputational enhancement
- **Life sciences:** sustainable health and clean technologies, regulatory compliance drivers

Other Growth Industries

- **Construction:** low carbon built environment in new build and retro-fit to existing buildings
- **Aerospace, Marine & Defence**
- **Chemical Sciences**
- **Forest Industries**
- **Textiles**

Our low carbon focus

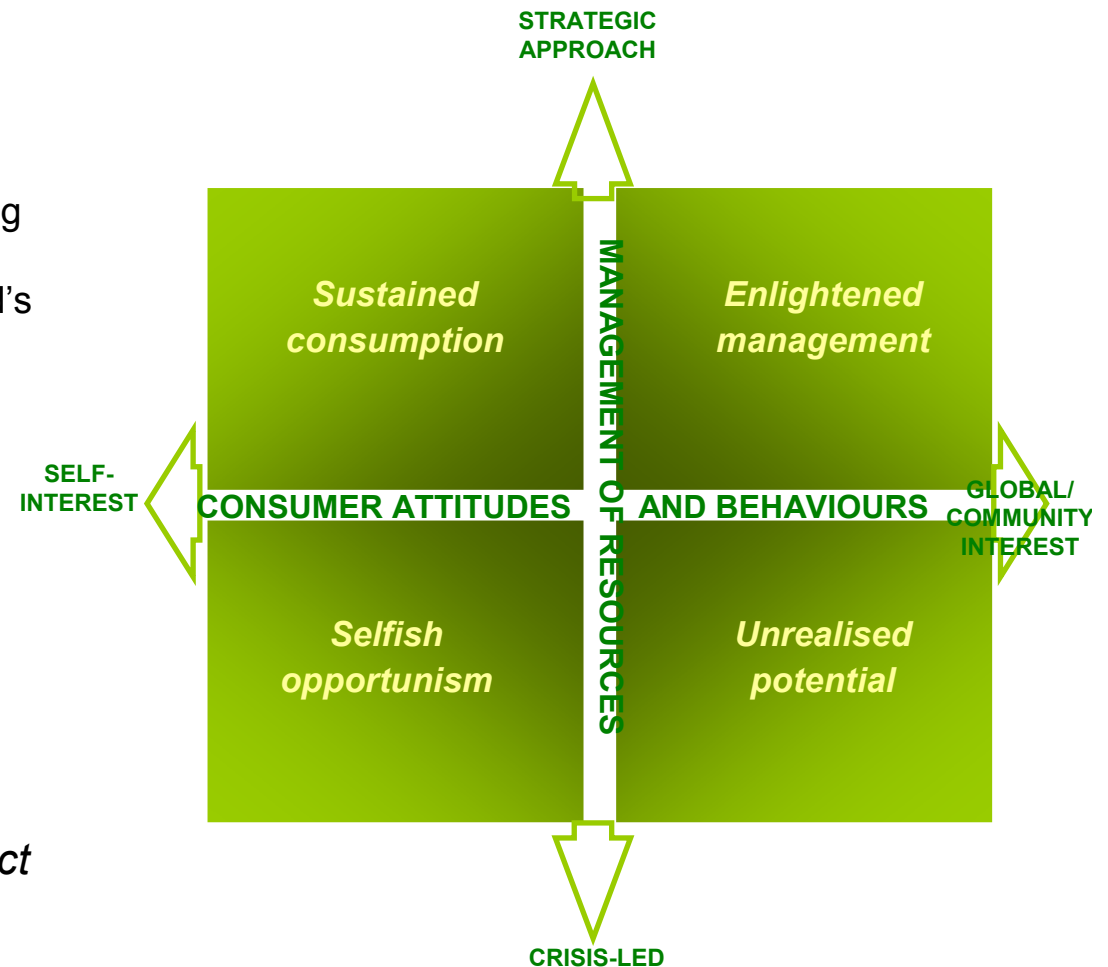
Business Support

- **Resource efficiency:**
 - SMAS, EMI, and LEAN support to growing companies
 - Strong fit with Scottish Government's Economic Recovery Plan
 - Joined up approach to low carbon business advice with SEPA
- **Innovation:**
 - Significant focus on R,D&D supporting lower carbon product development
- **Infrastructure:**
 - Buildings and transport a significant source of carbon emissions with opportunities to influence partners, developers and tenants
 - Progressing toward adopting BREEAM standards
 - CRC and Bio-diversity duty focus for tenanted property portfolio
- **Investment:**
 - Clean tech investments in response to market opportunities – links to specialist partners
- **International (SDI):**
 - Opportunity to promote Scotland as a low carbon investment proposition

Climate change scenarios - Food & Drink and Tourism sectors

Objectives

- To develop a robust, shared understanding of the likely impacts and opportunities resulting from climate change on Scotland's Tourism and Food & Drink industries
- To explore the implications of the climate change scenarios for each industry in Scotland (within a global context)
- To identify the key messages that should inform the development of wider industry strategies
- *How is climate change likely to impact on the Scottish Food & Drink and Tourism industries by 2030 ?*



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Insights

- Strong collaboration vital in responding effectively to the challenges and opportunities provided by climate change
- Enhancing food security and access to resources (energy, water, land) will increase in strategic importance
- Change is inevitable – and demands innovation, diversification and business agility
- A transformation on logistics and distribution networks will be needed
- Resource efficiency should be a key priority in the short-term
- Long-term and sustained investment in higher-level skills will be essential

Low Carbon – Now and next

Delivery

- Delivering the pipeline of current projects and activities
- SE/HIE/SEPA/SFC ECT Action Plan – forward plan to be developed by March 2010
- Business Council for Sustainable Development workshops eg water, food security

Clear policy direction on low carbon economic opportunities

- Stronger focus on low carbon ‘propositions’ within SE’s 2010/13 Business Plan
- Clarifying and communicating the low carbon propositions for each of the Key Sectors and Other Growth Industries – in conjunction with Industry Advisory Groups

Low carbon evidence base

- Undertaking a systematic assessment of low carbon business opportunities and market potential, together with Scotland’s comparative advantages
- Commissioning research to help develop an internal carbon assessment model (appraisal, evaluation)
- Scenario development – Tourism and Food & Drink sectors

Integrating carbon assessment into operational processes and activities

- Delivering a new online sustainable development training module to all SE staff and incorporating low carbon understanding into account managers’ CPD requirements
- Telling a compelling and positive story about Scotland’s low carbon economic opportunities