Smart Energy: Plugging in to a Better Future

Above average growth forecast. Local political support. Significant funding drivers. Cornwall's Smart energy systems industry is supercharged with potential. Whether it's home energy management, Smart data storage and analytics, Smart appliances, Smart metering, or Smart grid technology for energy distribution, now's the time to switch on to what Cornwall has to offer – with a turbocharged plan for a better, smarter future.

Over the next 10 years we want to help Cornwall's Smart energy systems businesses connect, collaborate, incubate and excel with access to the skills development they need, when they need it.

And it starts here.

On Standby

Globally, the Smart grid market is powering up fast.

Smart energy UK: The Facts

- £3-5 billion market by 2020
- 10% growth rate

Government Smart meter 2020 plans:

- 28 million households
- 2 million non-domestic sites

Smart energy Cornwall: The Facts

- 61% uptake of Smart technology by LCEGS businesses
- £10m EDRF funding
- £2.5m local government funding
- 10% businesses with potential to move into Smart energy supply chain

the market is forecast to surpass \$400 billion by 2020, with an average compound annual growth rate of over 8%, (Green Tech Media). The EU has given the green light to investment in Smart Grids as a key enabler for a low carbon electricity system and the European Commission has stated that future policy must foster investment in the sector. The UK has been identified as a 'dynamic mover' in Smart technology (Smart Regions Project, 2012), with the government setting an ambitious target for Smart meters in

The cumulative value of

28 million households and 2 million non-domestic sites by the end of 2020, with mass roll out slated for 2015. It all points to big opportunities for leading lights in the Smart energy sector.



In Cornwall, Superfast Broadband, high levels of strategic backing and EU funding add up to a fully charged Smart energy sector – ready to soar.

But there are potential hazards ahead. With national energy suppliers responsible for implementing the government's Smart meter roll out, there is a risk that the supply and installation of meters will be procured through national rather than local supply chains. So it's crucial for Cornwall to establish its credentials as a key player in the Smart energy sector, fast.

The sector already has the strategic support for Smart energy initiatives from 2 Unitary Authorities, the region's Local Enterprise Partnership (LEP), Cornwall Development Company, Cornwall Council's Green Cornwall Team and the Smart Cornwall Team. Now's the time to leverage that support for a positive, greener tomorrow.

The Smart Cornwall Programme is poised to flick the switch to "develop the U.K.'s first fully integrated Smart Energy network, providing new high value jobs, creating wealth and opportunities for future



generations and leading the way into a prosperous, resource efficient future," (RegenSW, 2013).

From taking part in one of the UK's largest Low Carbon Network Funded trials to planning for a 'smart campus', Cornwall is already switched on to the possibilities of the Smart energy industry. Whether it's developing skills for the future, educating consumers about the value of Smart systems and technologies, or providing science parks to trial new innovations, Cornwall has ambitious plans to establish a sustainable Smart market, with the potential to become a torchbearer for Smart energy best practice in the UK and beyond.

Powering Up

For a better, smarter future, Cornwall will need to build on the success of its existing Smart energy initiatives, increase skills provision and raise awareness of the benefits and value of Smart energy systems and technology.

We'll need more skills, from communications, telecoms

"The local Smart energy sector is more positive about the future than national and multi-national stakeholders" and STEM subjects, to specialist IT, digital, software, systems integration and Cloudbased skills. We'll need to educate high-energy users about the value and benefits of Smart systems and technologies. And we'll

need to work with pioneering businesses to provide role models and attract young talent to the sector.

All Systems Go

Connections. Awareness. Support. The successful, robust development of our Smart energy sector depends on us being able to encourage and guide businesses on how to grow; through the people they recruit and the skills they have.

"By providing support and skills and raising awareness, Cornwall can become a torchbearer of Smart energy best practice for the UK and beyond."

> To make this happen, there are a number of recommended steps we can take. We should build on the successes of existing community energy schemes and systems and investigate how they can be 'scaled up' to roll out elsewhere.

We should promote and support new business

collaboration groups and develop case studies to show how these sorts of collaborations can be most effective. And we should look to establish spaces to trial innovations and promote the value of Smart services and goods in Cornwall's Smart energy sector.

From arranging for demonstration classes for businesses and bringing specialists in to schools to get classes excited about career options, to clustering businesses together so they can tap into new opportunities, this work will help everyone discover, explore and engage with the business of Smart energy.

To get started, we need to focus on three specific areas:

- Support: by encouraging businesses and LEPS to learn from each other, connect and work together to reach higher, we can build significant skills advantages across the sector.
- Awareness: by facilitating demonstration classes, energy advisors, case studies and exemplar Smart businesses, we can demonstrate the value and cost effectiveness of Smart systems, driving engagement with the sector and increasing uptake of Smart technologies.
- Skills: by assessing skills requirements, offering advice on solving skills needs, and reaching out to schools to attract the next generation of talent to the sector, we can help businesses develop and grow through their people.

What's Next?

Cornwall's emerging Smart energy industry has been recognised as a priority sub-sector for which there are significant funding drivers, local political support and an above average growth forecast. By providing support and skills and raising awareness of this emerging and rapidly growing sector, Cornwall can tap its unique potential to become a torchbearer of Smart energy best practice for the UK and beyond.

This is not about complicated technology, overwhelming resources or impenetrable reports. It's about bringing businesses together and helping them reach higher by collaborating, building their skills and sharing their insights.

Find out more about the thinking behind this Skills Action Plan and read the full report by visiting

http://www.cornwallandislesofscillylep.com/ employment-and-skills.html