Cornwall’s Aerospace industry is ready for take off. Whether it’s providing a testbed for exciting new technologies such as the Bloodhound rocket car, acting as a launch pad for zero-gravity space tourism, or providing expertise in engineering, now’s the time to make the most of what Cornwall has to offer – with a plan for growth that means the sky’s the limit.

Over the next 10 to 15 years we want to help Cornwall’s businesses connect, collaborate, incubate and excel with access to the skills development they need, when they need it.

And it starts here.

On the Ground

The UK Aerospace sector is flying high. With 20,000 new passenger aircraft set to be manufactured in the next 10 years, it’s seeing rapid growth in the civil sector. It employs 100,000 people in the UK and 75% of UK Aerospace output is exported.

In Cornwall and the South too, the Aerospace sector is off to a soaring start. With an estimated annual turnover of £10bn, it provides 400,000 jobs across the South, incl. 3,700 sector and related jobs in Cornwall.

With a significant number of Aerospace assets, Cornwall has the potential to join the high fliers as part of the UK and global Aerospace supply chains. High profile facilities such as the Aerohub Enterprise Zone, Newquay Cornwall Airport, and Culdrose Naval Air Station Aerospace, teamed with burgeoning involvement in Unmanned Air Systems (in partnership with West Wales NAC), uncrowded airspace, and expanding marine and advanced engineering sectors give wings to Cornwall’s ambitions in the industry.

The Aerospace sector depends on advanced engineering and links to high-tech sectors including precision manufacturing, composites and software. Cornwall has a long tradition of engineering and a workforce that is already used to Aerospace and Marine Advanced industries. However, the success of expanding the Aerospace industry in the county depends on fully exploiting the assets represented by Newquay Cornwall Airport, Aerohub Enterprise Zone, EU and UK funding and the current national focus on manufacturing. It all adds up to a short window of opportunity.

Boosting manufacturing and engineering skills is a national priority. Government bodies and representatives like CBI, ADS, and the Royal Academy of Engineering are tackling this on a national basis, and we should follow suit.

By acting now, we can grow Cornwall’s advanced engineering capacity and build on its already excellent base of education provision. We can shape a future based on high level skills and the knowledge economy. A future founded on the Aerospace, Advanced Marine and Advanced Engineering sectors.
Setting Our Flight Path

For a future like this we need to build on the engineering skills of our workforce and attract new talent.

“We’ll need to develop aspirational new initiatives to attract young talent to the sector.”

We need to develop skills – from better STEM skills progression in the early stages to flexible delivery of new high level advanced engineering programmes. We need to expand our apprenticeship offer. We need to develop aspirational new initiatives to attract young talent to the sector and build Cornwall’s capacity.

Which is where a Cornwall Institute for Advanced Aerospace Technology and the Advanced Technology Experience Centre come in. By drawing these strands together and providing a focus for Cornwall’s Aerospace activities we can shift things up a gear, harness our potential and start shaping the Aerospace sector Cornwall deserves.

Time for Take Off

Awareness. Skills. Support. The development of our Aerospace industry depends on us raising awareness of the sector and the opportunities it offers.

We should encourage more young women to consider aviation and aerospace as an exciting career. Linking up with the Royal Aeronautical Society’s Women in Aviation and Aerospace Committee is one way to do this.

What’s Next?

By focussing on increasing Cornwall’s advanced engineering capacity, raising awareness, attracting new talent and developing our existing excellent base of education, the sky’s the limit for Cornwall’s potential in the Aerospace sector.

This isn't 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. Together we can see Cornwall’s Aerospace ambition take flight.

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
From field to fork, deep sea to dinner table, Cornwall's Agri-food industry is bursting with potential. Whether it's growing, catching, selling and serving up in county, or processing and shipping around the world, now's the time to make the most of what Cornwall has to offer – with a plan for growth that will make a real difference.

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

And it starts here.

**The Lay of the Land**

The UK Agri-food landscape is on solid ground. As the single most important area of manufacturing, it delivers an annual turnover of around £80bn and leads the way in the rising demand for healthier products.

Cornwall's Agri-food sector too, is sure-footed – with an estimated annual turnover of £1.17bn. Businesses are mainly spread across bakery, meat and dairy products, with an increasing number of businesses sourcing their raw ingredients locally, which in turn helps to encourage an integrated supply chain. Our food festivals also help many of these businesses connect with each other on Cornish soil, while up to 80 businesses in the county take products further afield, to customers worldwide.

But it's far from plain sailing. From weather and legislation, to changing consumer tastes, external factors all have significant impact on our producers, retailers and hospitality businesses. What's more, many of Cornwall's Food and Drink businesses are tourism-driven, which affects employment levels across the year.

We have a large number of domestic and international stakeholders here, from local authorities to chambers of commerce, education institutions to government bodies and agencies. Add to that the shifting sands of technology, in production and communication, along-side rising energy costs, transport costs and raw materials, and the pressures on our Agri-food industry quickly mount up.

However, this is a sector that knows how to adapt. BIS (Department for Business Innovation and skills), Defra, UKTI (UK Trade and Investment) and FDF (Food and Drink Federation), have developed strategies to keep Agri-food buoyant in the face of such challenges.

Whether it's reaching out to over 60,000 young people to raise awareness of careers options (supported by 50,000 apprenticeships), developing an industry-sponsored technical degree offering work experience, internships and the potential for full-time employment on completion, or awareness weeks like Food is Great, the Government has set an ambitious path, which will see 20% growth by 2020.

**Plotting Our Course**

In line with this, Cornwall will need to boost its workforce by over 2000 to see a stronger, bigger and further reaching Agri-food sector by 2020.

8% of graduate entrants to the Agri-food sector took jobs in the South West of England and 1.2% took jobs in Cornwall

We'll need 500 more employees at senior level bringing their know how into the sector mix. We'll need more skills, from quality assurance, audit skills and STEM subjects, to specialist knowledge like butchery, bakery, fish filleting and winemaking.
Which means we’ll need to tackle recruitment, shifting from just upskilling and promotion internally, to building the reputation and desirability of the sector externally.

Spreading the word and showing just what our sector has to offer will attract young talent, deepen the skills pool and ensure we have the best in the business, shaping our future.

**Stepping Forward**

Connections. Awareness. Support. Our Agri-food industry depends on us being able to encourage and guide businesses on how to grow; through the people they recruit and the skills they have.

“Our Agri-food industry depends on us being able to encourage and guide businesses to grow, through the people they recruit and the skills they have.”

To make this happen, there are a number of recommended steps we can take. We should research and better understand the shape and ambition of Agri-food businesses so we can match skills to needs. We should use that information to design and develop appropriate specialist support.

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 a central space, which draws all this together and offers a focus for Cornwall’s Agri-food sector.

From arranging for specialists 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, learn and make more of the business of food and drink.

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

- **Collaboration:** by encouraging businesses to learn from each other, connect and work together to reach higher, we can build significant skills advantages across the sector.

- **Cohesion:** led by Agri-food specialists, a one stop shop for all things food and drink will help families, schools, councils and businesses understand, recognise and benefit from the opportunities and scope of the Agri-food sector.

- **Upskilling:** whether it’s assessing skills requirements or offering advice on solving skills needs, improved connections and opportunities between businesses and training suppliers, will help businesses develop and grow through their people.

- **Exports:** Brand Cornwall is a hit overseas – and local food and drink specialities are at the heart of it. By sharing and showcasing case studies of businesses that have capitalised on this and grown as a result, more businesses can be encouraged to look beyond the often crowded UK market to new, global customers.

**What’s Next?**

Cornwall’s wider Agri-food industry has long been recognised as a priority sector by the Cornwall Local Enterprise Partnership (LEP) and Cornwall Council, with Food and Drink businesses making up a key part of this overall business sector. And now a new piece of work is aiming to push it forward.

A sector strategy and action plan is currently underway, with the hope of uncovering a whole range of exciting investment opportunities designed to encourage continued growth and development in the sector. With careful consideration of the recommendations made by the Food and Drink Skills Report, we’ll make sure that the requirements for people and skills development remain at the heart of all of our investment options.

The report will be complete and available for review by summer 2014.

This is not about complicated technology, over-whelming 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
Whether it's new job opportunities, developing support and skills or innovating new ways to work, the care sector in Cornwall has the potential to boost its positive impact. Painting a clear picture of the issues at hand and weighing up the figures is key to plotting a path forward.

Checking the Pulse of Care

Over the past two decades, the care sector has seen a seismic shift. From its NHS and local authority roots to delivery by private sector organisations, the twists and turns in its journey have been far from smooth sailing. With lower wages, increased demand and now government pressures brought in by 2014’s Care Act, the care industry in the UK is now under immense strain.

And it all boils down to the fact that we’re living longer. While this is great news for us, it also puts more pressure than ever before on health and social care resources. Care providers in Cornwall and beyond are facing many challenges in tackling this ever-growing demand; including a lack of skilled workers, increases to minimum wage and reduced health and social care funding.

With hundreds of registered care providers across CIoS (Cornwall and the Isles of Scilly), the health and care industry is a key player in the business landscape. Delivering quality care in deeply rural and disparate communities with relatively poor transport links can prove quite a headache. Health and care provisions in these locations are often fragmented, and establishing a business can be difficult and costly. What’s more, with the region’s population aged 80 and over set to double across the next fifteen years the hurdles seem to be lining up.

So how can we navigate these issues?

Pioneering Different

Being rural doesn’t have to mean we in CIoS are worse off. Cornwall is set to thrive in its community-based care services, with extra care housing and increased availability of self-funded care residences to help take the strain. By employing all of our problem solving skills, we need to communicate closely with local planning authorities to make sure all locations are covered. And thinking like pioneers will help.

Over the next five years, the Government has put in place a ‘pioneers programme’, which will see seamless health and social care systems available wherever people are found. Working with fifteen organisations across CIoS, we’re bidding for ‘pioneer’ status from the Department of Health. With this behind us, partners in Cornwall will receive access to expert help allowing us to become one of the first to integrate its services, well ahead of the government’s deadline.

---

UK: The Facts
- 92% of care providers are in the private sector
- There are 1.52 million adult social care jobs in England
- The care sector industry in England contributes a Gross Value Added (GVA) of £20 billion

Cornwall: The Facts
- 357 private care providers are registered in the county
- There are 135,000 full-time employees in the care sector in Cornwall
- The care sector in Cornwall contributes a GVA of £230
While the figures for employment in the care sector are matching the average in the UK, most people working in this industry in CloS are currently paid less than the recommended UK living wage of £7.85. But pay isn’t the only issue in the recruitment of workers. Fewer people are applying for each vacancy than they were ten years ago. And with staff turnover stretching above the national average of 27.5% to 28.7%, the desire to commit to a career in the care sector seems to be somewhat waning.

So how do we turn the careers in this sector into an attractive proposition? We create a plan to improve education, create new roles and upskill staff.

Breathing new life into care in CloS means inspiring and reigniting the passions of the current workforce, as well as the next generation of staff and volunteers. With a plethora of training organisations, delivering a wide range of different skill levels and qualifications, there’s a huge opportunity for staff to improve not only the way they work, but the way they think too.

To make sure we’re really facing the issues at hand, we need to work with companies in the skills sector to identify skills gaps. This means we can put programmes in place to address the shifting needs of people in the community.

But it doesn’t stop there. Stimulating the volunteer culture will be paramount to a healthy future. Not only does recruitment of volunteers lead to a wider, more diverse workforce, it also brings people on board with similar positive values, which is vital to the future of the industry.

Investment leads to innovation.

Encouraging people to see the value of the care sector and its potential for growth is key for the industry’s survival. One opportunity that could be explored is the potential of social impact bonds, designed to help reform public service delivery. This means that investors can pay for a project at the start and then receive payment based on positive results. Not only does this attract tax benefits to the giver if it’s developed as venture capital, it also means investors will have a more vested interest in seeing their projects thrive.

Opening up technology.

Advancements in health care and patient interactions mean technology will play an integral part in the advancement of the care sector. To make sure we’re up to speed, we need to share these tech innovations with employees; opening up access to relevant health care apps and illuminating the experiences of patient and health care professionals.

By shifting perceptions and channeling our resourcefulness, we can get behind the future of CloS’s care sector so it can achieve more than ever before.

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
From the artists that light up its history, to the spark of new ideas today, Cornwall’s creative and digital industries shine bright. Whether it’s designing, making, thinking or inventing, through its arts organisations, education institutions and sharp young businesses, the county is making its mark – in the UK and beyond. Creative, digital Cornwall today has an undeniable energy, which could drive us all forward – if we harness that energy in a plan for growth.

Over the next 10 years, we want to help Cornwall’s creative and digital businesses connect, collaborate, incubate and excel with access to the skills development they need, when they need it. And the journey starts here.

In the Spotlight

Inventive outlook. Adventurous approach. Desire to succeed. The UK’s creative and digital industries are on the right track. Now adding up to 11% of the country’s total workforce, the sector has stayed buoyant in the face of economic difficulties, with a stream of graduate talent flowing in.

In Cornwall too, we’re switched on to the high value of the creative and digital sectors. With super-fast broadband guiding the way, businesses have grown rapidly, less reliant on physical location and able to capitalise on the incubation opportunities of the innovation centres in Falmouth, Pool and Truro.

There are 10,700 people working in the county’s creative and digital sectors, 14,300 employed in ICT digital and creative roles across all sectors.

- 6% of all business
- 6% growth between 2008-2011

In Cornwall too, we’re switched on to the high value of the creative and digital sectors. With super-fast broadband guiding the way, businesses have grown rapidly, less reliant on physical location and able to capitalise on the incubation opportunities of the innovation centres in Falmouth, Pool and Truro.

There are 10,700 people working in the county’s creative and digital sectors, 14,300 counting people in ICT, digital and creative jobs in other sectors. Around 400 new jobs have been created over the last four years and 5.4% growth is expected in the next five years. With game changing projects like Krowji – an ERDF-funded creative hub in Redruth that plays home to 60 businesses – supporting the creative entrepreneurs that are supercharging the sector, the outlook is positive.

But challenges still lie ahead. With businesses expanding and technology developing so fast, the national demand for digital know how is voracious. We must cultivate, attract and retain creative and digital talent if we’re going to stay ahead of the curve.

It’s essential we bridge the skills gap and boost our businesses.

We need to use the same problem-solving skills inherent in our creative and digital industries to reach out to businesses, schools, universities and training providers – creating a network of skills and training opportunities that support the sector’s specific requirements.

Lighting Our Path

For a brighter future, we need to support creative and digital businesses in ways that work for them. With 76% of creative businesses in Cornwall either freelance or self-employed we face a huge challenge when it comes to upskilling.

“...the national demand for digital know-how is voracious. We must cultivate, attract and retain creative and digital talent if we’re going to keep growing.”

Which means we have to work from the ground up. We need to help our creative and digital businesses better assess their own needs. Over 80% don’t have a
skills training plan, which is vital for recognising barriers to growth. Empowering them to spot the gaps they have and fill them with training and skills development will make a huge difference, boosting new product and service development, and shaping a sector that’s fit for purpose in a fast-paced, digital world.

Cornwall is already a hotbed for the creative and digital industries. We have innovation centres. We have the deep talent pool and world-class facilities of Falmouth University. We have growing sub-sectors in software development (software activities now account for 30% of all creative and digital business in the county), video, film and photography. And we have funding. We need to draw this together, fuelling collaboration, growth and excellence.

**A Bright Future**

**Awareness. Skills. Support.** The development of our creative and digital industries hinges on how we help our businesses to nurture the skills they have and bring in the new skills they need.

To make this happen, there are a number of recommended steps we can take.

We should work with businesses to identify and fill skills gaps, developing and looking for workers who fuse high level creative and IT skills, to set the sector alight.

We should help sole traders and microbusinesses make more of what they have, nurturing them with marketing and business support so they can focus on what they do best – innovating in products and services.

We should encourage collaboration at every level, capitalising on the hubs and clusters that exist to help individuals and businesses connect, forge partnerships and think differently.

**To get started we should focus on the following areas:**

- **Skills:** by working closely with schools, colleges and universities, we’ll encourage fresh young talent to shape their own paths – while ensuring they develop the specialist skills needed to propel our industries forward. We need to show that a career in IT is on the creative frontline of the digital revolution, simultaneously addressing the gender imbalance to encourage more women into the industry.

- **Collaboration:** using our wealth of facilities, networks and creative hubs, we’ll encourage our many microbusinesses to learn from each other, igniting new passions and sparking ideas that could cement Cornwall’s reputation as a leading light.

- **Training:** by offering informal and flexible support options, like train-the-trainer programmes, mentoring support, peer learning groups and cascade learning, we’ll help our smaller businesses to grow solid and strong, ready to take grasp opportunity with both hands.

**What’s Next?**

Our creative and digital industries are resilient. More than 70% of Cornwall’s creative and digital businesses have been trading for over five years. But they don’t exist in isolation. Their success has a direct impact on businesses across the county, which means developing their skills and responding to their training needs is paramount.

The next leg of the journey needs to be one of superboosted growth; a highly-charged drive to create industries that not only lead the way in their own sectors, but illuminate everyone else’s too.

This isn’t about complicated technology, overwhelming resources or impenetrable reports. It’s about bringing businesses together and helping them move forward by collaborating, building their skills and sharing their insights.

Together we can see Cornwall’s creative and digital industries burn even brighter, sparking a new era creative and digital growth.

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](http://www.cornwallandislesofscillylep.com/employment-and-skills.html).
Waves. Wind. Sun. Cornwall is a natural leader when it comes to developing renewable energy technologies. Situated among some of the best natural resources in the UK, in a setting that attracts international interest, Cornwall’s Low Carbon Environmental Goods and Services (LCEGS) industry is pointing the way to a greener, more sustainable future. Now’s the time to make the most of what the region has to offer— with a plan to make Cornwall the natural place to do green business.

Over the next 10 to 15 years we want to help Cornwall’s businesses connect, collaborate, incubate and excel with access to the skills development they need, when they need it.

And the journey starts here.

**Base Camp**

The LCEGS industry attracts a highly skilled, specialist workforce, with about 60% of qualifications held in STEM or sector-relevant subjects. This highly qualified workforce commands high earnings, with mean average pay in the LCEGS industry greater than the fulltime average for Cornwall as a whole. Which adds up to big opportunities for a workforce armed with the right skill set.

However, the UK as a whole is lacking the necessary skills to compete successfully in an increasingly globalised market. The Leitch Review recognised that “low carbon skills” should be at the centre of the overall drive to improve skills. Just as all businesses will need to take part in the transition to a green economy, all workers need to have skill sets that will enable businesses to achieve their environmental and sustainability goals. In Cornwall, the sector is predicted to expand over the next 1-2 years, with a 19% growth rate, creating 750 new jobs. There are a wide and growing range of LCEGS skills provision options across Cornwall and many providers are currently expanding or investing more in the green business sector. However, there are challenges to face. Economically, as part of the only Less Developed Region in England. Politically, as a result of indecisive policy development. And environmentally, in the face of a rapidly changing climate. Our research has found that unless more is done to improve skills and promote higher skills development, a number of factors are likely to combine over the next 10 years to produce a substantial skills and employee deficit in Cornwall. This could greatly limit the sector’s ability to grow and develop successfully. Which means a short window of opportunity to take action.

Even faced with these obstacles, Cornish businesses in the LCEGS sector have a positive outlook, are optimistic about future growth and are ready to embrace training in the context of future growth and investment. Whether it’s reaching out to young people to raise awareness of green careers options, developing hands-on skills and innovation through training, placements and green apprenticeships, or creating Green Centres of Excellence to showcase Cornwall’s burgeoning green credentials, the region has ambitious plans, with the potential for creating many more well paid, high quality jobs.

**Scanning the Horizon**

For a greener future, Cornwall needs to address the gap between business skills need and current skills provision, streamline the process of matching the right training to individuals and business and raise awareness of the opportunities and value that a career in green business offers.

We’ll need to focus on improving the skills of the people working Green Business and promoting higher skills development, rather than investment in infrastructure.
and ‘big ticket’ building projects. We’ll need more skills, from marketing, PR and sales skills and STEM subjects, to funding packages for green apprenticeship programmes. We’ll need to work with pioneering businesses and local schools to attract aspirational young talent to secure the future of the sector.

In both mature and emerging sectors the future development of low carbon and environmental goods and services depends on access to an ever-deepening pool of talent and innovation - to boost skills and foster collaboration.

Which is where the Green Skills Portal, the Green Skills and Innovation Partnership and Green Centres of Excellence come in.

**Breaking New Ground**

Connections. Awareness. Support. Our LCEGS industry depends on us being able to encourage and guide businesses on how to grow; through the people they recruit and the skills they have.

To make this happen, there are a number of recommended steps we can take. We should provide a simplified, one-stop access route to learning. We should create a space to inspire, innovate, research and co-create solutions. We should connect businesses with local schools to close the gender gap by attracting more young women to the sector and increasing awareness of careers in green business.

We should nurture collaboration by establishing a network of green businesses to mentor and support emerging new businesses. And we should look to establish a central space, which draws all this together and offers a focus for Cornwall’s LCEGS sector.

From arranging for specialists to get classes excited about green career options, to clustering businesses together so they can tap into new opportunities, this work will help everyone discover, explore and value green business.

**To get started we should focus on the following areas:**

- **Collaboration**: by encouraging businesses to learn from each other, connect and work together to reach higher, The Green Skills Innovation Partnership will build significant skills advantages across the sector and provide a space for positive interaction between industry, education and the public sector.

- **Support**: by providing business to business mentoring for emerging parts of the sector, facilitating placements and developing a green apprenticeship programme, we can help to tap Cornwall’s unique resources and strive toward a low carbon future.

- **Skills**: by providing a clearinghouse of skills knowledge, The Green Skills Portal will offer a one-stop shop for information, advice and guidance for green skills, whether it’s assessing skills requirements or offering advice on solving skills needs, improved connections and training will help businesses develop and grow through their people.

**What’s Next?**

By addressing the gap between business skills need and current skills provision, streamlining the process of matching the right training to individuals and businesses and raising awareness of the opportunities and value that a career in green business offers, we’re pioneering a greener business future and harnessing Cornwall’s unique potential to play home to world-leading businesses that can tackle the global threat of climate change.

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
New builds or renovation, plumbing or plastering, roofing or heating – Cornwall’s construction industry has long played a huge part in our economy. Now it’s ready to turn green. With the UK’s green agenda at the fore, the transition to a low carbon economy means prime opportunities for construction in Cornwall.

Over the next 10 to 15 years, we want to help Cornwall’s construction industry connect, collaborate, incubate and excel with access to the skills development they need, when they need it.

And our plans for building green are already taking shape.

**Today’s Skyline**

Construction has long been one of the UK’s most vital sectors. It fuels our economy, provides millions of jobs and stimulates other sectors too – literally building the foundations for growth. Home to over 280,000 businesses and a workforce of almost three million, construction UK stands solid and strong.

Construction in Cornwall is just as valuable to the county, providing over 16,500 jobs across a range of specialisms. But recent years have been tough, to say the least. The recession of 2008 saw development and growth in the wider economy grind to a halt – downing tools across the construction industry that depends on it.

Despite these huge challenges, the future looks bright – full of potential and opportunity. And it looks a vibrant shade of green, too.

Legislative and policy targets to lower carbon emissions mean our homes, offices and other buildings of the future need to be efficient, sustainable and have the lowest possible impact on the environment. So the ever-increasing demand for renewable construction skills means many new opportunities for Cornwall’s construction industry.

Construction in Cornwall is just as valuable to the county, providing over 16,500 jobs across a range of specialisms. But recent years have been tough, to say the least. The recession of 2008 saw development and growth in the wider economy grind to a halt – downing tools across the construction industry that depends on it.

Legislative and policy targets to lower carbon emissions mean our homes, offices and other buildings of the future need to be efficient, sustainable and have the lowest possible impact on the environment. So the ever-increasing demand for renewable construction skills means many new opportunities for Cornwall’s construction industry.

The industry has always been keen and adaptable; happy to train and upskill if there’s proof that the demand is there. Exciting projects such as the St Austell and Clay Country ‘Eco-Communities’ – sustainable residential and commercial developments to be built – show that not only is the demand there, but also that Cornwall can lead the way in constructing a future that builds on the UK’s green vision.

**Laying the Foundations**

To make the most of the opportunities that the move to a low carbon economy presents, we need to ensure our construction workforce has the relevant skills and know-how.

“It’s from renewable technologies such as solar PV, micro and small-scale wind turbines to micro-combined heat and power, solar thermal and biomass boilers, we’ll need to equip our workforce with specific skills.”

It starts with awareness. We’ll need to promote not just the green agenda, but the opportunities it opens up for Cornwall’s construction industry. We’ll need to convince the industry that any investment they make – in both time and money – will be well spent. And as many of our construction businesses are sole traders and micro-businesses that often face financial hurdles, we’ll need to make sure they understand the potential and have the appetite to invest.
Giving them the facts and communicating the opportunities clearly are vital. Making sure our construction industry knows about the many government initiatives that can help them will be key. Schemes like the Green Deal will really boost the sector – but we also need to lift any uncertainty or wariness among our construction workforce.

From renewable technologies such as solar PV, micro and small-scale wind turbines to micro-combined heat and power, solar thermal and biomass boilers, we’ll need to equip our workforce with specific skills. Knowledge of these areas isn’t just about installation in new buildings – energy advice and assessment to property owners and maintenance will be essential roles that need filling, too.

We also need to encourage more construction businesses to take on apprentices and trainees. Currently, 80% of employers surveyed for the Identification of Renewable Construction Skills Needs in the China Clay/St Austell Area Report (April 2013) don’t employ a trainee or an apprentice – so, all too often, any renewable skills that currently exist within a business aren’t passed on. But the good news is that the Department for Business, Innovation and Skills (BIS) has pledged to expand adult apprenticeships by 75,000 over the next two years alone.

Spreading the word about the huge potential and exciting opportunities that renewable construction means to Cornwall should also reach beyond the industry itself. The county’s colleges and universities are home to a hotbed of young talent that could help deepen the skills pool and go a long way to building a brighter and greener future for Cornwall.

**The Building Blocks**

**Awareness. Skills. Support.** Developing our construction industry depends on how we help businesses grow and to take full advantage of the opportunities the transition to a low carbon economy offers; through the people they recruit and the new skills they learn.

To make this happen, there are a number of steps we can take. These will help us to better match skills with the renewable construction’s specific demands.

“A shift to a low carbon economy affects the entire construction chain, from energy technology start-ups to architects to plumbers. The industry in Cornwall needs to work together to make the most of the opportunities in the pipeline.”

The current workforce is familiar with the ‘green agenda’, so we need to use this term across a range of marketing and educational tools, from newsletters to websites, and promote it across the industry.

**To get started, we should focus on these specific areas:**

- **Strengths:** by building on Cornwall’s established construction industry, we’ll ensure that the move to a greener way of building will be set on firm foundations, rooted in experience and tradition.

- **Skills:** renewable construction demands specific skills. By supporting businesses to undergo relevant training and upskilling, we’ll help them grow – and help Cornwall become an important part of the UK’s green vision.

- **Collaboration:** by encouraging businesses to learn from each other, we’ll better equip the industry across the entire construction chain – so the whole sector is ready to embrace the green agenda’s challenges.

**What’s Next?**

Cornwall’s construction industry has always been key to our economy, providing year-round employment across a range of trades. But as the UK economy continues shifting towards a low carbon approach, the Cornish sector is changing, too. We want to ensure that Cornwall is part of this exciting change and that our long-established construction industry is ready to reap the rewards.

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

Globally, the Smart grid market is powering up fast. The cumulative value of 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 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 leaders in the Smart energy sector.”
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 and STEM subjects, to specialist IT, digital, software, systems integration and Cloud-based 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.

“What the local Smart energy sector is more positive about the future than national and multi-national stakeholders”

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
Home to the iconic satellite dishes of Goonhilly Earth Station, Cornwall is ideally positioned as a launch pad to explore exciting new horizons, as part of the UK's growing Space sector.

From our heritage and future as a globally recognised communications hub, to our surging tech industries and rapidly expanding Aerospace sector, now’s the time to make the most of what Cornwall has to offer.

Over the next 10 years we want to help Cornwall’s Space Sector businesses connect, collaborate, incubate and excel with access to the skills development they need, when they need it.

And the mission starts here.

Ground Zero

The Space sector is booming. With the global market expected to grow to $400bn by 2020 and $600bn by 2030, the Space sector is “an engine of economic growth” (OCED report, 2011).

The UK’s Space sector too, is on an upward trajectory – with an estimated current annual turnover of £9bn and rising. Government strategy is to capture 10% of the global market by 2030, with a target of 100,000 new jobs. There’s astronomical potential for growth, for those with the vision to get onboard.

While Space sector activity in Cornwall is limited right now, Cornwall’s ambitions and current programmes have significant resonance and important synergies with the Space sector’s core technologies – including satellite communications, advanced avionics engineering, advanced composites, robotics and advanced software engineering.

In the Space sector, even the smallest regions can carve out a significant niche, as the Isle of Man has shown.

Global Space Sector: The Facts
- $200bn annual turnover
- Global market expected to double by 2020 and treble by 2030

UK Space Sector: The Facts
- £9bn annual turnover – targeted for significant growth
- 70,000 workforce
- 50% higher salaries than UK average

Growth depends on advanced engineering and manufacturing, software engineering and telecommunications. With established players such as Goonhilly Earth Station, GCHQ Bude, Avanti, and GES Limited alongside specialised high tech firms, centres of learning like Penryn campus, and strengths in related sectors like software design, marine sciences and advanced manufacturing, Cornwall’s poised to take a giant leap into the future.

Preparing for Lift Off

To boost our share and position ourselves as an essential element of the Government’s growth strategy, Cornwall needs to establish a mechanism to develop and maintain strong links with the main stakeholders and funders in the wider Space sector.

“The Space Sector could represent £15bn in turnover for the UK in satellite business alone by 2020.”

We’ll need to develop Cornwall’s presence in the sector by securing the future of Goonhilly Earth Station as one of the country’s key space centres and by developing the potential of centres of education and enterprise such as Penryn and the Aerohub.
We’ll need more skills, from reinforced STEM subjects and new advanced engineering courses, to enhanced IAG (Information, Advice and Guidance) education for high tech sectors, as well as courses to promote excellent operational, financial, marketing and managerial skills.

Extended lead-in times on space-related activities mean we’ll need to get initiatives for an overall Cornwall high-technology drive off the ground fast, for maximum impact.

**New Frontiers**

Connections. Awareness. Support. Cornwall’s Space Sector depends on being able to develop strong links with UK and European space stakeholders and funding bodies, playing to our existing strengths and seeking to attract new high-tech activities to the region.

“The development of the Space sector in Cornwall depends on us playing to our existing strengths and seeking to attract new high-tech activities to the region.”

To make this happen, there are a number of recommended steps we can take.

We should establish an executive group to support Cornish companies in engaging with the Space sector and its stakeholders.

We should develop educational and enterprise facilities at Penryn campus, the Aerohub and Goonhilly to establish a tripartite hub and develop an incubator strategy to offer a focus for space-related activities in Cornwall.

Space deploys high technologies to high value-added activities, which have the potential to add quickly to Cornwall’s existing strengths in telecoms, software development, marine engineering and its ambitions in the health and life sciences sector. Establishing a central hub will help everyone discover, explore, learn and make more of the potential for development in the Space industry.

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

- **Strengths:** by building on Cornwall’s existing strengths in telecommunications, advanced engineering, software engineering maintenance and Unmanned Aerial Systems (including space-planes, engines, avionics and electronics) industries, we’ll propel the region into prime position.
- **Opportunities:** by matching our existing strengths and skills to market opportunities in earth observation, navigation, precision farming, space science, traffic management, real time data and location-based services, e-commerce, e-working and telemedicine we’ll help Cornwall to carve out its niche.
- **Connections:** by cultivating strong links with funding bodies like Horizon 2020, CEOI-ST (Centre for Earth Observation Instrumentation), National Space Technology Programme and National Space Applications Programme, we’ll enable Cornwall to navigate a successful course into the heart of the sector.
- **Skills:** by supporting STEM development activities in schools, forging connections with established space academic centres and developing an educational and enterprise hub, we’ll encourage young people to gain the skills required to rocket their Space careers into orbit.

**What’s Next?**

By maximising the potential of existing facilities, fostering and encouraging new skills and connecting with leading academic and commercial organisations, we can supercharge Cornwall’s growth and see its Space sector ambition take off.

This isn’t 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.

Let’s work together to put Cornwall on the Space map.

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