



# **Report to the Partnership for Urban South Hampshire Joint Committee**

Date: **23 September 2014**

Report of: **Alex Parmley, Corporate Director, Eastleigh Borough Council  
The Energy and Green Economy Delivery Panel**

Subject: **Future Solent – Progress to date and developing a ‘Cleantech’  
cluster**

## **SUMMARY**

At the meeting of 26 March 2012, the Joint Committee agreed a strategy and approach to developing a low carbon economy. This sector was recognised as a strong growth market for the area. The agreement included setting up a partnership group which has subsequently been branded “Future Solent”. The approach was supported by Solent LEP at their board meeting in July 2012 and has the active involvement and support of the Hampshire Chamber of Commerce. Currently PUSH is represented at Officer level by Alex Parmley, support lead for the ‘Green Economy’ arm of the Energy and Green Economy Delivery Panel. This report sets out the progress made with the Future Solent partnership approach and proposals for the next steps which includes formally establishing a Cleantech Cluster. The report, which is supported by the Delivery Panel (Chairman Cllr. Martin Hatley), recommends PUSH supports the ambitions for a Cleantech Cluster and considers financial support to assist in its development.

## **RECOMMENDATION**

PUSH Joint Committee is recommended to:

- a) Note the contents of this report
- b) Support the proposals for advancing the development of a Cleantech Cluster as set out in this report
- c) Support the employment or secondment of a Project Manager by Eastleigh Borough Council on behalf of the Future Solent partnership, to take forward the

concept of the Solent Cleantech Cluster utilising the funding available through the LoToNo Programme.

- d) Consider financial support of £20,000 to appoint a Project Manager with the skills needed to take forward the Cluster development or to have them employed for sufficient period to complete the project.

## **BACKGROUND**

1. At its meeting of 26 March 2012, the Joint Committee agreed a strategy and approach to developing a low carbon economy. This included setting up a partnership group which has subsequently been branded “Future Solent”. The approach was supported by Solent LEP at their board meeting in July 2012 and has the active involvement and support of the Hampshire Chamber of Commerce.
2. The report highlighted the opportunity to secure jobs and business growth from the growing green / low carbon economy.

## **DEFINITION OR TERMINOLOGY**

3. The Green Economy and Low Carbon Economy are interchangeable terms that refer to a number of goods and services that span across a range of sectors. Other terminology used can include Environmental, Eco, Renewables, Sustainable, Clean Tech, No Carbon but often these can take on slightly different meanings. For the purpose of this report the Green / Low Carbon Economy includes businesses providing goods and services related to:

### **Environmental**

- Air Pollution
- Contaminated Land
- Environmental Consultancy
- Environmental Monitoring
- Marine Pollution Control
- Noise & Vibration Control
- Recovery and Recycling
- Waste Management
- Water Supply and Waste Water Treatment

### **Renewable Energy**

- Biomass
- Geothermal
- Hydro
- Photovoltaic
- Wave & Tidal
- Wind
- Renewable Consulting

## Low Carbon

- Additional Energy Sources
- Alternative Fuel/ Vehicle
- Alternative Fuels
- Building Technologies
- Energy Management
- Carbon Capture & Storage
- Carbon Finance

4. **Cleantech**, also referred to as clean technology, and often used interchangeably with the term greentech, has emerged as an umbrella term encompassing the investment asset class, technology, and business sectors which include clean energy, environmental, and sustainable or green, products and services. Cleantech refers to technology, products and services which generate superior commercial benefits to customers while addressing significant environmental concerns such as global warming, sustainability of natural resources and energy security.
5. Cleantech technologies include renewable energy generation, energy storage, energy efficiency, biofuels, cleaner fossil fuel processes, water purification and management, waste water treatment, recycling, pollution reduction and advanced materials (including nanotechnologies). Cleantech spans many industry verticals and is defined by the following eleven segments, Energy Generation, Energy Storage, Energy Infrastructure, Energy Efficiency, Transportation, Water & Wastewater, Air & Environment, Materials Manufacturing/Industrial, Agriculture, Recycling & Waste.

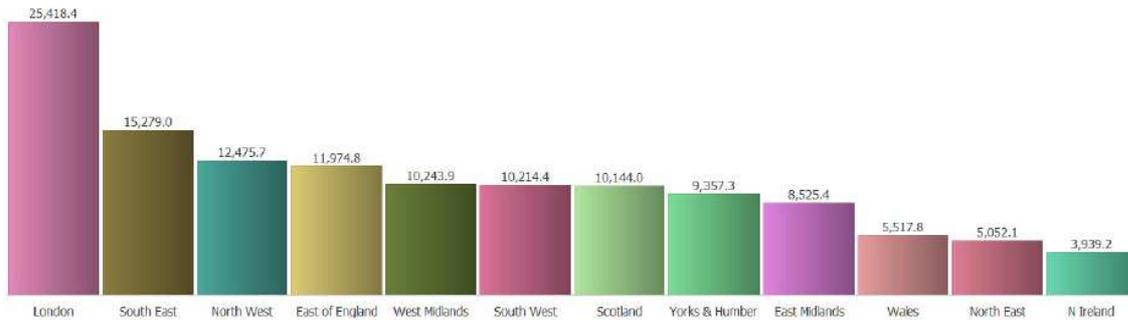
## LATEST ECONOMIC TRENDS IN THE GREEN ECONOMY

6. The information in this section is taken from the latest report published by BIS on the Green Economy Sector.
7. The UK's green goods and services market increased almost five per cent to more than £128bn during 2011/12. While the rest of the economy remained virtually flat during this period, sales in green markets grew by almost £6bn, while the sector produced a trade surplus of £5.2bn. The group of industries classified as providing green goods and services employs approximately 940,000 people in the UK.
8. In addition, the UK's green economy is enhancing its international competitiveness and boosting its export prospects. The UK now accounts for a 3.7 per cent share of the global Low Carbon Environmental Goods and Services (LCEGS) market. The global market is valued at £3.4tr and has grown by 3.8 per cent since last year. The UK currently lies 6<sup>th</sup> in the league table of national economies for its green economy sector based on value of sales.
9. Global Growth rates of the sector are forecast to be between 4 and 5% annually for the next three years. In the UK growth has been 5.4% in 2012-13 and 5.5 %

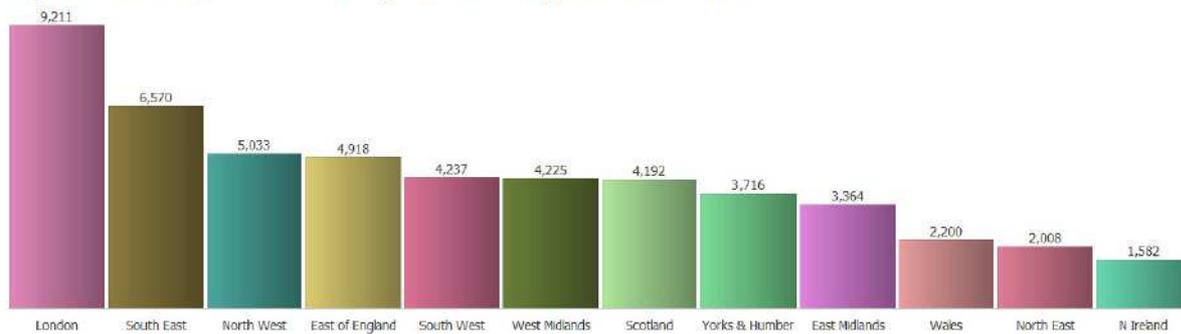
in 2013-14, way outperforming the rest of the economy. The growth in the UK of the green economy is expected to be more rapid than the global growth, rising to 5.9% by 2015/16.

- The charts below show that the South East accounts for 12% of the UK Green Economy in terms of sales, second behind London, with 13% of UK Green Economy businesses and 13% of Green Economy employment.

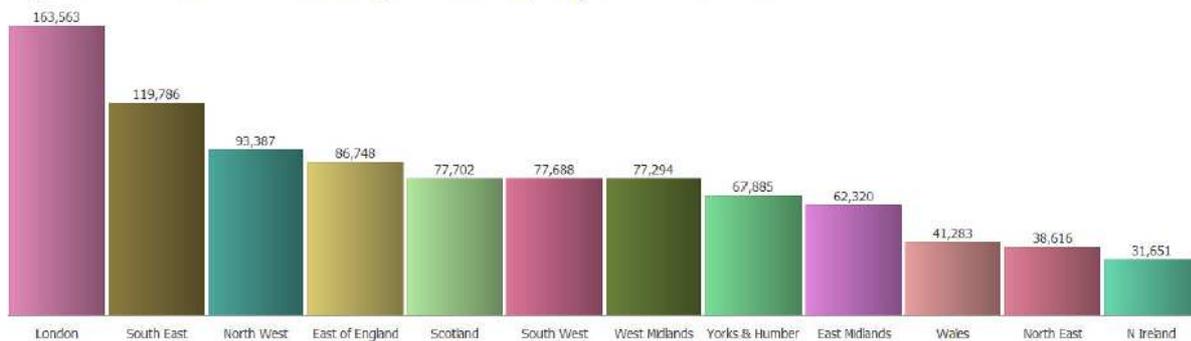
**Figure 12: UK LCEGS Regional Sales 2011/12 (£m)**



**Figure 13: UK LCEGS Regional Companies 2011/12**



**Figure 14: UK LCEGS Regional Employment 2011/12**



## THE SOLENT GREEN ECONOMY

- Research undertaken on the low carbon economy across South Hampshire in 2012 estimated that the area supports around 1300 businesses and c.15,200 jobs with particular clusterings around Southampton, Portsmouth and the Isle of Wight.

12. In Southampton, the largest sub-sectors are Building Technologies and Environmental Consulting followed by Waste Management and Recovery and Recycling. In Portsmouth, the largest company figures are Building Technologies followed by Recovery and Recycling with Environmental Consulting and Waste Management jointly holding third position.
13. By employment the largest sub-sectors in Southampton are Wave & Tidal, Environmental Consultancy followed by Waste Management. In Portsmouth, the figures show that Building Technologies has the largest number of employees, then Wind followed by Additional Energy Sources. An assessment of the market opportunities shows particular Solent strengths and opportunities for continued growth in the following areas:
  - **Offshore renewable energy:** There is a growing domestic and continental renewable energy market that Solent firms are well placed to exploit. The scale of the opportunity can be gauged by estimating the potential size of energy contracts that the local supply chain could aspire to capture. The Rampion offshore budget is worth c£2Bn, with a regional share of c20% (or £400m) of which Solent firms could capture 10% to 20% this, which would equate to a market opportunity of £40m to £80m. Participation in this supply chain would position firms for future contracts such as Navitus Bay and continental contracts. For example the French Government recently announced approval of €3.5bn offshore wind investment. Solent firms could aim to win a 10% of the 20% regional content of this contract which would be worth £60m. However, if not prepared for this opportunity, the business benefits could be captured elsewhere outside of the Solent and UK, in particular by continental Europe where plans are advancing to service the Chanel offshore renewables.
  - **Energy and waste efficiency:** there are opportunities to increase the local supply chain content of energy efficiency measures being promoted through the Green Deal and other initiatives. The local public sector are placing greater obligations on contractors to increase local content in delivering energy efficiency in the housing sector. To maximise this opportunity there is a need to upgrade the firms in the supply chain and the skills base. Hitherto public sector contracts had led to significant leakage of expenditure from the local economy. It is estimated that market size of Green Deal and Eco is worth some £250m. If the local supply chain can capture 20% of this market it would be worth an additional £50m to local firms.
  - **Marine monitoring:** an example of a high value market that Solent firms are well placed to expand is that of marine survey and data monitoring – building on skills developed through Naval contracts and sensor research. This value chain encompasses sensor fabrication, system engineering, monitoring and survey companies and serves a growing domestic and international market. There are other product innovations (e.g. for surveillance) that can be developed in the marine sector through enhancing knowledge transfer from the Solent HEIs to company base.

14. In addition, the universities in the sub-region represent a source of strength and potential in developing the green economy. The University of Southampton has key expertise in the following disciplines:
- Bio-energy- including energy from biomass and waste and bio algae for bio fuel
  - Energy in the built environment – including the impact of Climate Change (eco-City region work with China), and microgeneration through photovoltaic and wind
  - Sustainable transport- through public transport, hybrid and electric cars, bio fuels and high speed rail
  - Wind turbines
  - Wave – tidal and low head hydro power
  - Fuel cells and storage – lithium batteries
  - Clean combustion
15. Southampton's National Oceanography Centre, collaboration between the Natural Environment Research Council and the University of Southampton, is the country's focus for oceanography. The centre houses around 500 staff and 750 undergraduate and postgraduate students and represents an unparalleled investment in marine and earth sciences and technology in the UK.
16. The University of Portsmouth has key expertise in the following areas:

***School of Biological Science***

- Aquatic Environmental Chemistry
- Biodiversity
- Human Impact on the Aquatic Environment
- Marine Sciences
- Materials and the Environment
- Standardized Aquatic Monitoring of Priority Pollutants by Passive Sampling
- Wastewater Treatment (with the Department of Civil Engineering)
- Microbiology and Bioremediation

***School of Earth and Environmental Science***

- Palaeontology and Sedimentology
- Crystal Dynamics
- Geohazard Assessment
- Environmental Modelling and Monitoring

### ***Department of Mechanical and Design Engineering***

- Advanced Polymer & Composites Research Group

### ***School of Architecture, Department of Civil Engineering and School of Environmental Design and Management***

- Sustainability and planning issues
- Sustainable buildings
- Sustainable communities

17. More research in to the sector and its economic potential locally is being conducted by Future Solent in the form of a “Mini Stern report” which should be available in the autumn.
18. In addition, it is proposed that the position of Cleantech Cluster Project Manager commission further research on the position and strengths of cleantech industries including innovative and R&D companies and institutions. However, there is an emerging picture of local strengths from the Future Solent Green Growth RGF Programme and the associated, Environmental iNet programme run by WSX (please see below)

### **FUTURE SOLENT– PROGRESS AND ACHIEVEMENTS**

19. One of the aims of the Future Solent partnership initiative was to engender a business led approach to developing a low carbon economy. This has been reflected in the membership and nature of the Future Solent Board which has representatives from the following organisations:
  - Bouygues (nominated representative of Philippe Jouy, Solent LEP)
  - IBM
  - Hampshire Chamber of Commerce
  - SSE Power Distribution
  - Southern Water
  - Sustrans
  - GEP Environmental
  - University of Portsmouth
  - University of Southampton
  - PUSH
20. The Partnership has put together a programme which consists of a mixture of projects that Future Solent is either taking forward directly, has direct involvement in supporting or is endorsing. The programme is set out in Appendix A.

## **RESOURCES**

21. PUSH initially committed resources to the establishment of Future Solent in the form of a temporary and part-time Programme Manager and an intern position. Subsequently Future Solent has appointed a full-time Programme Manager supported by the award of RGF funds.
22. Future Solent has had some success in attracting external resources to support the development of a low carbon economy, and delivery of its programme, notably:

**Future Solent Green Growth RGF Programme** - £18m programme with £3m of government RGF which is:

- Providing SMEs in the green economy with grants, loans and access to the sub-region's universities' R&D assets, laboratories space and networks to boost enterprise, business formation and growth.
- Commencing the development of an Environmental Technologies / Cleantech Hub and Cluster in the Solent.
- Providing a lasting legacy and asset to the sub-regional economy through the establishment of a Hampshire Community Bank, thus addressing market failure in loan funding to SMEs.
- Aiming to create at least 315 new jobs.

**Environmental iNet** - £1.2m programme with £600k from ERDF - fostering links between 3 universities with expertise in environmental / Cleantech fields and 150 businesses operating in or wishing to move into Low Carbon and Environmental Goods and Services (LCEGS) markets. It is creating an innovation ecosystem that encourages knowledge transfer, collaborative R&D and commercialisation projects and produces world class LCEGS companies in the SE region. Also providing practical business advice, targeted sectoral events, innovative business support mechanisms and local and sector network development.

**LoToNo** - €750k programme with €696k from European Commission. Led by WSX with Future Solent, Dorset CC, Borough of Poole and Pôle Mer Méditerranée. LoToNo is being delivered across Dorset and the Solent. LoToNo is a two-year project promoting emerging industries in the low carbon sector helping them to:

- Connect with a wide network of expert international resources
- Access and share innovation
- Find low carbon solutions to business challenges
- Improve environmental standing and shorten supply chains

The Project is supporting a range of activities including international study trips to learn from best practice elsewhere; Innovation Labs which focus on tackling single issues such as the use of water or materials or smart technology; Supply Chain Boot Camps which bring together different levels of the supply chain to

tackle a common challenge and seek out innovative results; and business mentoring.

**SAVE** – Solent Achieving Value from Efficiency - £10 m programme with £7m from Ofgem, led by SSE as DNO. The project aims to trial and establish to what extent energy efficiency measures can be considered cost effective and predictable and a sustainable tool for managing peak demand as an alternative to network reinforcement. The project is a pilot that if successful, could lead to national roll out and case study.

## **PROGRAMME DELIVERY**

23. The award of the RGF funds and the Environmental iNet funding has given a significant boost to the delivery of the programme.

## **ENVIRONMENTAL TECHNOLOGIES (CLEANTECH) HUB AND CLUSTER**

24. Through the EiNet innovative and R&D companies delivering Cleantech goods and services are being identified and then provided with support in development of business plans, marketing plans and sourcing funding. They are also being linked in to the Solent's universities (the most appropriate one depending on their specialism rather than location) and provided with support to developing further their product or service.
25. Suitable companies are then being referred to the Future Solent Green Grants programme. Their applications are assessed by a panel of local business leaders. The programme has awarded almost all of the £1.1 million of grants in its first seven months, way ahead of schedule. Indeed such has been its success and so impressed have government monitoring officers been, that Future Solent is one of a small number of successful programmes nationally to be invited to apply for more funding that has been made available. It is hoped that by October, Future Solent will be in a position to announce further funds available for grants.
26. A flavour of the sorts of businesses being assisted is set out in Appendix B. It should be noted that whilst the cost per job is significantly more compared to other programmes in the Solent, the calibre of the job and therefore the salaries attracted are also significantly higher. Typically the sort of jobs being created are graduate and post graduate such as engineers and experienced researchers with the average salary per job being created being circa £40,000. The value added to the local economy by supporting these businesses and these types of jobs is therefore significant.
27. A portion of the RGF funding is also being invested in starting to develop a Cleantech Hub. This will consist of linked facilities at both the University of Portsmouth and University of Southampton that small and new Cleantech firms can access on an "as and when" basis, together with support services. It will provide state of the art facilities and equipment to rent that new and small business could not possibly afford on their own and will help in the development

of new products and services. Businesses will also be able to link in to the university research networks.

## **HAMPSHIRE COMMUNITY BANK**

28. The RGF programme is also assisting in the development of the Hampshire Community Bank. The bank has been provided with £250,000 of RGF funds to assist with start-up and licence application costs and a £950,000 revolving loan fund has been established for green economy companies and projects. The fund is administered by Eastleigh BC with Local First CIC involved in assessing companies. The fund will assist in creating jobs as well as in capitalising the bank and providing Local First with a track record of lending for the FCA licence application.
29. Local First have secured commitments of £7.45 million towards the capitalisation of the bank together with £1 million worth of free legal support in taking forward their licence application from a top city legal firm. Discussions are ongoing with BIS officials to formalise the Secretary of State's commitment to match the funds raised pound for pound.

## **DEVELOPING A CLEANTECH CLUSTER**

30. The development of a Cleantech Cluster in South Hampshire was first considered by PUSH in 2009. Whilst further work needs to be undertaken to firm up the business case, it is apparent that, from the work undertaken under the auspices of Future Solent, the sub-region has the ingredients to develop a successful Cleantech Cluster in the form of strong research institutions within cleantech fields, a growing network of cleantech companies which offer the potential to grow and many to export also, and an appetite amongst the local business sector for the development of a cluster.
31. The progress to date made by Future Solent is being regarded by many as a burgeoning Cleantech cluster and is attracting interest from government and neighbouring sub-regions. However, currently Future Solent is reliant on grant support from the public sector and to be truly successful it will need to be self-sustaining and have the commitment and support of the business sector.
32. The challenge therefore is, given the positive progress over the past year, how will the Future Solent partnership continue to ensure progress in meeting its aims, sustain the current activities and crucially, ensure the partnership and the Cleantech Cluster which it represents, is placed on a sustainable footing?

## **FUTURE DIRECTION AND LEARNING FROM COPENHAGEN, GRAZ AND BERLIN**

33. In considering the next steps for Future Solent, there are some clear lessons from the recent LoToNo sponsored visits to Copenhagen, Graz and Berlin which were attended by Future Solent partners. These locations were chosen as they are regarded as the leading Cleantech Clusters and innovation agencies in Europe.

34. The lessons can be summarised as:
- a. There are successful business models for operating self-sustaining Cleantech Clusters (and clusters more generally) that we can learn from.
  - b. Successful models have at their heart the “triple helix” of businesses, universities and the public sector working collaboratively – a model that already underpins Future Solent.
  - c. There is more support and funding that we could be tapping in to including programmes such as Horizon 2020 and the EU Cluster Excellence Programme, to support the development of Cleantech in the Solent.
  - d. There is a network of other Cleantech Clusters which are willing to support us – certainly Copenhagen, Graz and Berlin are interested in cooperation and are already cooperating in the development of other clusters in the EU and globally.
  - e. There are more opportunities for Solent Universities and Solent cleantech businesses to exploit through greater cooperation with EU cleantech clusters.
  - f. Cleantech is a big and growing pie with more than enough for a number of EU Cleantech Clusters, but with different specialisms.
  - g. A Cleantech Cluster can be a driver of growth in business and jobs (1000 new jobs per year in Styria – an area similar in size to the Solent) and the jobs created are high value added, well paid roles.
  - h. A Cleantech Cluster can help fulfil the Solent LEP SEP, in particular, addressing innovation and low carbon ambitions.
  - i. We have the ingredients already in the Solent, in the form of Future Solent, to formally establish a Cleantech Cluster and to gain accreditation as a Cleantech Cluster (see CCC below) with the European Cluster Excellence Initiative which may open the door to further funding.
  - j. There are a common set of tools for assisting Cleantech companies in existing clusters, namely:
    - Development of networks and matchmaking
    - Innovation platforms – support for companies to participate in finding solutions to real local problems / issues
    - Internationalisation – fostering collaboration and generating exports
35. There is an opportunity provided by the LoToNo project to help Future Solent continue to move forward with the Cleantech Cluster. Hampshire Chamber of Commerce signed up to the LoToNo Programme on behalf of the FS partnership. In return, there is a small amount of funding (€23,000) within the programme that can be used to help develop a business proposal, funding

model and bid for additional funds to support the development of a cluster. However, these resources are only available for a short period and will be lost if they are not used soon. It is also questionable whether this resource is sufficient to undertake the work necessary thoroughly and in a timely manner.

36. Eastleigh Borough Council has agreed with Hampshire Chamber that it will use the resources available to put in place a Cleantech Cluster Project Manager in the form of a part-time direct employee, a secondee from a partner organisation or a contractor. They would work alongside the Future Solent Programme Manager and the FS partners, including members of PUSH, as well as working with the wider LoToNo partners to specifically:

### **Stage 1**

- Refine the business case for a Cleantech hub and Cluster.
- Engage with stakeholders – businesses, universities, Solent LEP, local authorities / PUSH – on the business case and potential business models.
- Define a sustainable business model and develop a business plan.
- Set out what steps need to be taken to secure accreditation.
- Explore the most relevant funding opportunities including EU funding, support from BIS and how a Cluster can support the Solent LEP's plans.

### **Stage 2**

Following and subject to findings and agreement from the Future Solent partners, including PUSH:

- Establish the Cleantech Cluster (possibly as a company but this is to be explored).
- Secure EU accreditation (and become the first accredited Cleantech Cluster in the UK).
- Submit funding bids – primarily to support start-up costs but also to continue support for businesses.
- Set out how the model can be applied to the rest of Hampshire and Dorset or how Future Solent Cleantech Cluster can expand to the rest of Hampshire and Dorset.

37. One of the concerns of Future Solent partners is that these funds are insufficient to be able to recruit the person with the skills needed to take forward the Cluster development or to have them employed for sufficient period to complete the project. Based on the plan above, the partners are seeking to appoint someone with a mix of skills including research skills and being able to develop a business

case; business planning; governance; bid writing; and crucially the ability to engage with the business community. The resources only allow for the employment of a person on a relatively modest grade, for up to two days a week for a maximum of twelve months.

38. As a result, partners have considered what other resources are available. This includes exploring the other funds Future Solent has secured. However, unfortunately the proposed work does not qualify for funding support, mainly because at this stage of the project, direct jobs will not be created. Discussions have been had with the BIS Green Economy Team who, whilst supportive, are unable to offer funding towards what is the feasibility and business development stage of the project. Therefore a request has been made to PUSH as a founding member of Future Solent, for support of £20,000 to assist in moving the project forward and realising the benefits for South Hampshire.

## **CONCLUSION**

39. Considerable progress has been made through the Future Solent initiative in supporting the development of a low carbon green economy, including the development of a Cleantech Cluster. Work to date has shown that a strong business case is emerging for the development of a Cleantech Cluster based on local business and research strengths, and that this could form an important driver of innovation, business growth and new high skilled, high value added jobs in the sub-region. However, to establish a cluster and realise the benefits, investment is required. Some time-limited resources already exist to assist with this through the LoToNo Project. However, the initiative to establish a Cleantech Cluster on a sustainable footing would benefit from greater investment if it is to be successful and move forward more quickly.

## **RECOMMENDATION**

40. PUSH Joint Committee Group is recommended to:
- Note the contents of this report
  - Support the proposals for advancing the development of a Cleantech Cluster as set out in this report
  - Support the employment or secondment of a Project Manager by Eastleigh Borough Council on behalf of the Future Solent partnership, to take forward the concept of the Solent Cleantech Cluster utilising the funding available through the LoToNo Programme.
  - Consider financial support of £20,000 for the project by PUSH to ensure the success of the project and enable it to move forward more quickly.

## Future Solent Vision

The Solent area will generate economic and business growth together with new jobs by developing a Low Carbon Green Economy. The Solent Area will become the National leader and internationally recognised for its low carbon green Economy. Sustainability will be at the heart of the sub-regions success in generating economic growth, prosperity and improving quality of life.

## Priorities

### 1. New Low Carbon & Green Technology

Capitalising on the world class research in the sub-region into green technologies and turning these into business opportunities, growth and jobs as well as supporting strong manufacturing.

### 2. Resource Efficiency in Homes and Businesses

Ensuring our homes and businesses minimise waste including waste of energy, to support household disposable income and business competitiveness.

### 3. Generation of Secure, Renewable & Low Carbon Energy in the Solent Area

Developing large scale renewable energy such as tidal and offshore wind, together with small scale on homes and businesses and renewable and district energy schemes incorporated into new development where practical.

## Outcomes (which projects are judged against)

- Business growth
- New/safeguarded jobs
- Develop appropriate skills base
- Measurable carbon reductions

## Programme

- **Environmental Technologies & Service Hub and Cluster**  
Supporting the development of Green Technology businesses and eventually a cluster of green tech firms.

- **Greening Business Scheme**  
To support businesses in becoming more competitive through reducing resource inputs.
- **Solent Green Deal Scheme**  
A locally administered scheme, backed by local authorities, which will require providers to utilise local SMEs to undertake installations and create apprenticeships.
- **Green Deal & ECO Supply Chain Development**  
Supplying Solent businesses with the right knowledge and skills to take advantage of the Green Deal and the Energy Company Obligation.
- **Solent Energy Strategy**  
Meeting energy needs of the Solent region into the future, ensuring energy security for businesses and homes, and for securing investment into the optimum renewable and low carbon energy projects.
- **Hampshire Community Bank (HCB)**  
Development of a vehicle to address the lack of lending to SMEs in the Solent by the big banks, in particular within the green economy and green projects and to ensure local funds are invested in local productive capacity.
- **Solent Low Carbon Economy Business Case Development / Solent Mini Stern**  
Mapping of the current position with the Green Economy in the Solent, evidencing of strengths and identification of key opportunities for the Solent economy.
- **Navitus Bay Wind Farm**  
Support for the development of an offshore wind farm between the Isle of Wight and Dorset to support more secure, renewable energy together with exploitation of economic benefits through the development of the supply chains.
- **North of Fareham Development Area**  
Development of a model, sustainable development which encourages innovation in sustainable design and construction.

- **Warmer Wight**

The Warmer Wight scheme delivers Energy Company Obligation (ECO) funding to residents on the Isle of Wight to keep homes warm enough in the winter. Meaning free or highly subsidised replacement boilers and insulation.

- **SAVE – Solent Achieving Value from Energy**

Piloting new ways of engaging communities in saving energy to lower energy bills, carbon and peak demand.

### Future Solent Green Growth Programme Sample of businesses assisted

#### **Business Edge**

Waterloo based air conditioning manufacturer developing a new system that will reduce energy consumption by up to 40%.

Grant - £100,000

New Jobs - 8

#### **Gemma Lighting**

Portsmouth based innovating LED lighting company developing new LED street lighting for the UK and solar powered street lighting for the Middle East.

Grant – £100,000

New Jobs - 5

#### **Global Pollution Solutions**

Southampton based developer of a new oil pollution response craft.

Grant – £100,000

New Jobs - 10

#### **KCC**

Southampton based packaging company developing new ready-meals packaging both made of a waste product and compostable, to replace plastic packaging.

Grant - £100,000

New Jobs - 8

#### **SAL**

Developer of new life sciences research techniques which save significantly on resources including energy and therefore on costs, located at Southampton Science Park.

Grant - £66,000

New Jobs - 3

#### **SEAB**

Developer and manufacturer of “Muckbuster” mini AD plants located at Southampton Science Park.

Grant – £100,000

New Jobs - 21

#### **Senical**

Portsmouth based developer of smart fuse technology.

Grant – £70,000

New Jobs - 6

#### **SME**

Isle of Wight based tidal energy company developing new suspension system for tidal generation systems to ensure optimum positioning in tidal flow.

Grant – £100,000

New Jobs - 5

**Tapflo**

Pump Manufacturer based in Chandlers Ford developing a new highly efficient type of compressor which will save energy usage and costs.

Grant - £80,000

New Jobs – 7

## Copenhagen Cleantech Cluster

Copenhagen Cleantech Cluster (CCC) (recently renamed as CLEAN and expanded to cover the whole of Denmark) lies at the heart of the cleantech ecosystem in Denmark. Since launch in 2009, CCC has grown to become one of the prominent global cleantech networks.

### Mission

Our mission is threefold; We work to secure the continuous growth for existing cleantech companies, support entrepreneurs and growth in SME's and cleantech companies, and to increase international awareness of Danish competencies.

### Our principal activities are:

1. Innovation Platforms
2. Internationalization
3. Events and Matchmaking

### Our guiding principles are:

- CCC is **technology neutral** and focuses on the best solution to a specific problem rather than selected technologies
- CCC is a **demand driven organization** that facilitates the development of solutions to concrete challenges. The challenges are complex and can best be solved as a partnership between public, private research institutions
- CCC is a **politically neutral platform**, where public, private and research institutions meet on equal terms. CCC does not engage in political advocacy and lobbying
- CCC is „**born global**” and is a preferred entry point for Danish cleantech for international stakeholders. CCC also help internationalize Danish companies through overseas contacts and networks

**The “Triple Helix” of Public Bodies, Research Institutions and Business working together with a common aim is the key platform of our success.**

**Being a self-sustaining company with our own dedicated secretariat is equally important in ensuring we have the capacity to deliver.**

CCC currently operates three ***innovation platforms***, where stakeholders from the entire value chain are invited to join forces and create solutions.

1. **Big Data Infrastructure** – Aims to centralize and make public and private urban data - e.g. energy/heating/water consumption, weather and infrastructure data etc. - publicly available, allowing developers to create new innovative applications.
2. **Plastic Waste** – Explores new and better ways to collect, separate and sort plastics from household waste in order to create new business opportunities and a more sustainable handling of plastic waste.
3. **Building and Construction Waste** – Explores new and better ways to reuse building and construction waste in order to create new business opportunities and a more sustainable handling of building and construction waste.

With our dedicated ***international focus***, Copenhagen Cleantech Cluster acts as a gateway between Danish cleantech industry and the global market.

Through CCC you can showcase and promote products, services and research, access new markets and build international partnerships.

**Specifically, CCC members can explore global opportunities through:**

- **International Cleantech Network (ICN):** Direct access to international markets, new business partnerships and research institutes abroad.
- **Complex Cleantech Solutions (CCS):** Join forces with other Danish companies to co-create integrated and sustainable solutions for global cleantech market.
- **International Promotion:** Get priority access and floor space to international trade shows, showcase your products to visiting delegations or join an industry study-trip to learn from other global markets – we involve our members every step of the way



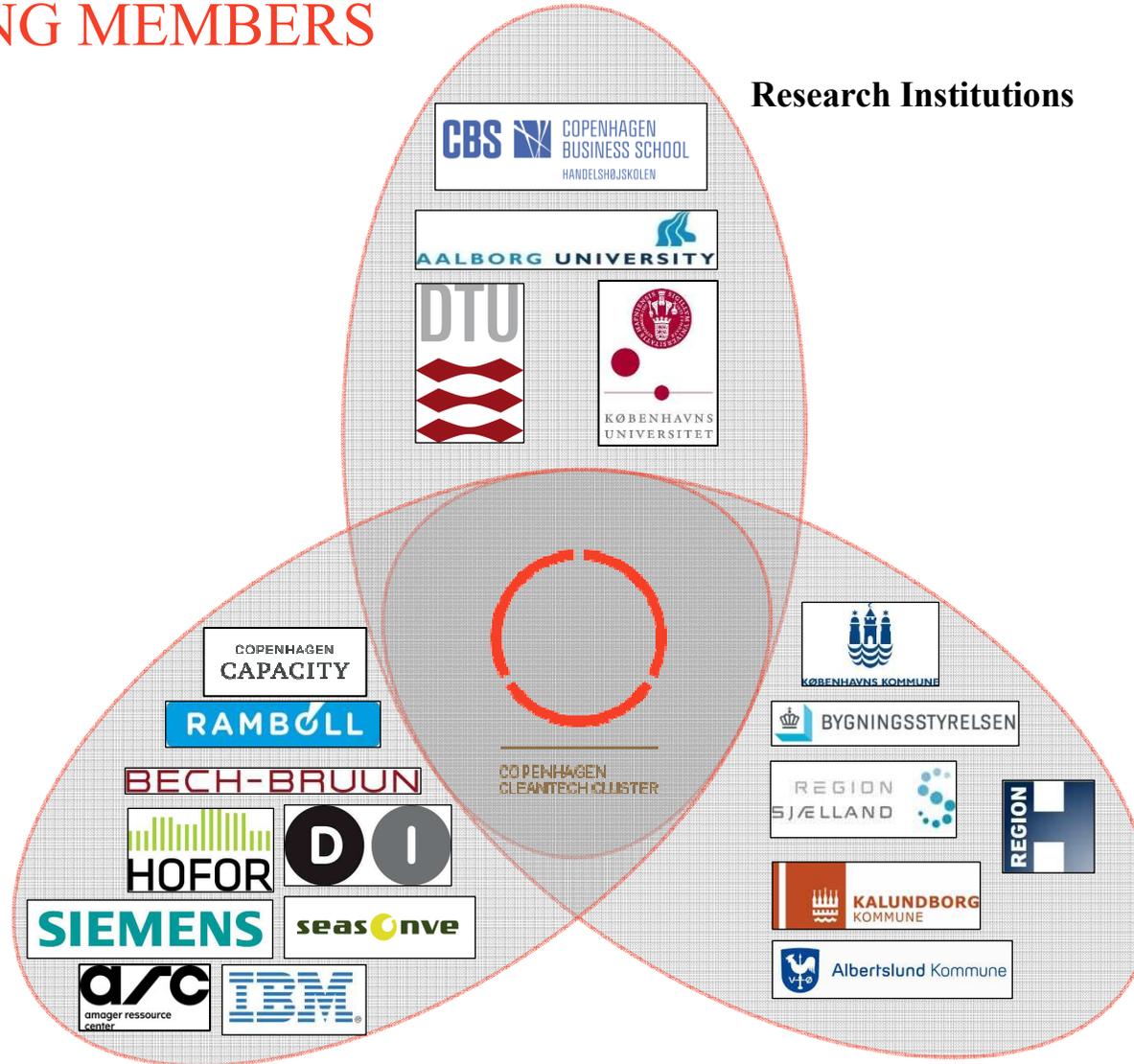
CCC works actively to **build the ties between companies** within, and across sector lines.

**CCC members can expand their network through:**

- **Events:** CCC members are invited to specific knowledge sharing and matchmaking-events, throughout the year.
- **Partnering:** Member companies can benefit from CCCs broad local network when locating the right partner for specific projects.
- **Asset mappings:** CCC gives you access to in-depth analysis of the Danish cleantech industry through sector specific reports and asset mapping

# FOUNDING MEMBERS

## Research Institutions



Private Companies  
and Organizations

Public Authorities



### **Objectives: Growth through innovation**

1. To orient the location Styria to three sustainable topics with innovation and growth potential.
2. To increase the number of innovative Styrian companies and to expand the focus by the sector of services.
3. To create very good general conditions for young companies and company foundations with growth potential.
4. To prepare the companies and the location for the demographic developments and to implement new qualification measures for key and skilled employees.
5. To further internationalise the companies and the location Styria.
6. To orient funding and financing offers on the companies' growth phase and on the future investments.

### **Vision – “The World’s Green Tech Valley”**

Styrian companies already are international technology and market leaders in the areas of energy and environmental engineering. In order to strengthen and develop this position, ECO WORLD STYRIA supports the companies and the location Styria with basic services and projects with strategic levers along the growth drivers innovation, know-how, and new markets.

### **Mission**

ECO is the supporting organisation of the economic-political initiative in the areas of energy and environmental engineering of the province of Styria. With 173 members, ECO WORLD STYRIA is aiming at “E-C-O 20-20-20” in the strength fields of biomass, solar energy, mass flow and water/wastewater:

- **E “Employment”**: increase in the number of employees in Styrian environmental engineering companies to 20,000 by 2015

- **C “Competence”**: roughly doubling of the number of Styrian technology leaders to 20 by 2015

- **O “On top”**: increase in the international presentations in the media and at trade fairs to around 20 per year by 2015

## **The World's Green Tech Valley**

The companies of ECO WORLD STYRIA are world-class companies in the areas of renewable energy and environmental engineering. The ECO WORLD STYRIA cluster offers all companies focusing on the area of sustainable energies the possibility to become a member.

## **VITAMIN C FOR YOUR COMPANY**

The **activities** and **services** for **ECO CLUSTER companies** aim at increasing the competitiveness and establishing Styria as the No. 1 location for energy and environmental engineering with the design of significant trends.

### **Member of the world's best environmental engineering cluster**

The membership in the ECO cluster offers you an attractive range of services, including

**1) Participation in the design of the location of the future with new research topics, technological model projects, and cooperation with the ECO companies**

**2) Strategy support:** Consulting on the subjects of national and international markets, technologies, and cooperation partners tailored to your needs

**3) Innovation support:** Technology roundtable, innovation potential evaluation, technology and development partner identification, project development

**4) Funding support:** Appropriate funding as well as the exclusive funding map (Förderungslandkarte©), selective investors for your environmental engineering innovations

**5) Any further services** when it comes to the development and industry competence of ECO may be acquired at the cost price

**6) And of course!** ECO services, as for example: the Future Radar for free; events for free; your news in the NEWSletter, the ECO WORLD Magazine and on eco.at; 50% cost advantages for WIN consultants; knowledge edge due to active interlinking as well as further services according to the current annual schedule.

## Facts about the Green Tech Valley



Turnover  
**9.4 bill. €**

Growth per year  
**15% p.a.**

Export-quota  
**94 %**

R&D-quota  
**4.7%**

Greenjob growth  
**> 1,000 Jobs p.a.**

Green Tech turnover/BRP  
**>10%**