

ENERGY ISLAND 2017 OUTCOMES OF THE WORKSHOP

25 OCTOBER 2017

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ENERGY ISLAND 2017 OUTCOMES OF THE WORKSHOP

1 INTRODUCTION

On Monday 3rd July 2017, 80 people gathered at the Eden Project to discuss the progress on the Cornwall Energy Island initiative that has taken place over the last two years, following the Energy Island 2015 event. Two years ago, 130 people attended for two days, thinking deeply together about what Cornwall's energy future should look like. We wanted to bring that community back together and see what had happened.

This report presents the outcomes of the workshop, as a contribution to the ongoing energy vision for Cornwall.

Many thanks to all of the participants for bringing energy and enthusiasm to the day, to our lunch sponsor Cornwall New Energy and event sponsor Good Energy.



Photo of the participants at the end of the day

“ THROUGH THE ORIGINAL ENERGY ISLAND WE SOUGHT TO HELP CORNWALL ORGANISE ITS ENERGY INDEPENDENCE. THERE WERE ALREADY MANY GREAT INITIATIVES, AND THE CONTINUED PACE OF COORDINATED CHANGE SINCE THEN HAS BEEN INSPIRING. WE ARE VERY HAPPY THAT WE CAN CONTINUE TO SUPPORT THIS SHARED GOAL.”

**ROGER NICKELLS, PARTNER
BUROHAPPOLD ENGINEERING**

2 KEY EVENTS IN CORNWALL SINCE ENERGY ISLAND 2015

There has been significant progress on low carbon energy in Cornwall since the Energy Island 2015 event:

- Cornwall Council and the Isles of Scilly (CloS) have secured a Devolution Deal with a strong energy theme, including support for community energy, grid reinforcement, geothermally heated Enterprise Zones, and locally delivered energy efficiency.
- ERDF low carbon investments totalling circa £91.8m have been invested into low carbon initiatives across Cornwall and the Isles of Scilly, including £24m of match funding, and 200 jobs created to date:
 - CETO Wave Energy UK Ltd £14.7m
 - Local Energy Market £13m
 - Cornwall New Energy £6.5m
 - Jubilee Pool Geothermal Heat £1.8m
 - Smart Islands £11m
 - Wave Hub cable extensions £3.2m
 - Marine Technology RD&I Hub £9.3m
 - United Downs Deep Geothermal £10.6m
- Ambitious targets for Cornwall's Energy Future published by Cornwall Council, including:
 - Reduce fuel poverty to 5% (from 15%)
 - 50% locally owned generation
 - 100% electricity demand met by renewables
 - 30% of energy spend retained in the Cornish economy
 - 4000 green jobs
 - 20% reduction in fuel bills
- A number of innovative pilot projects have been developed, for example the Sunshine Tariff trial in Wadebridge, with WPD, RegenSW, WREN and Tempus Energy.
- Cornwall Council has commissioned a number of studies relating to sustainable energy, including:
 - A county wide strategic heat opportunities study
 - Energy storage masterplan
- Cornwall Council has started the process of setting up a Cornwall Energy Company.
- Successful joint funding application from BEIS to deliver a 3 Local Enterprise Partnerships (LEPs) energy strategy with the Heart of South West LEP and Dorset LEP.

3 THE PROGRAMME

The day started with a welcome from Councillor Bob Egerton, the new portfolio holder for Planning and Economy. He set the scene in terms of Cornwall Council's ambition and the progress that has been made at a Local Enterprise Partnership and Council level in the past two years.

We then wanted to give participants the chance to share their reflections on what has happened in the past two years. This first workshop was structured around the seven key actions identified in the Cornwall Energy Island 2015 White Paper and to highlight what further action is needed.

Following the first workshop session, we heard from people involved in cutting-edge energy projects in Cornwall, with speaker sessions before and after lunch. Each of the speaker sessions was following by a panel discussion and Q&A session with all the presenters.

We ended the day with a focus on action. This included an interactive session where participants voted for the actions they thought would be most strategic, based upon the first workshop session, and then made a personal commitment to take action following the event. Finally we closed with some summary reflections.

WELCOME: Cllr Egerton, Cornwall Council

WORKSHOP SESSION 1: What has happened in Cornwall's energy development since 2015, and where is more progress needed?

SPEAKER SESSION 1:

- Hazel Williams – Regen
- Sophie Orme – Centrica
- Diana Mompoloki – Isles of Scilly Council
- Andy O'Brien – Zero Carbon West of England
- Lunch Sponsor: Christine Coonick – Cornwall New Energy/BRE National Solar Centre

Event Sponsor presentation: Will Heinzelmänn Good Energy

SPEAKER SESSION 2:

- Tim Sawyer - Carnegie Clean Energy Limited
- Helen Fitzgerald - Wales and West Utilities
- Ben Smallwood – BuroHappold Engineering
- Lucy Cotton – Geothermal Engineering Ltd
- Peter Armstrong – Mixergy

WORKSHOP SESSION 2: Identifying priorities for action

ACTION COMMITMENT

SUMMING UP AND CLOSE

4 SPEAKER SESSIONS

Participants heard from twelve speakers through the day, each providing a concise ten minute summary about their projects, followed by discussion with questions from the chair and from the audience. A short summary of each speaker's talk is provided below.

COUNCILLOR BOB EGERTON, CORNWALL COUNCIL

Bob reflected on the task of progressing the low carbon agenda, and the progress that has been made since 2009. The 2030 target for 100% renewable electricity is a challenging target. If it is to be met, marine renewables and deep geothermal will have to be successful and the government's restrictive planning rules relating to onshore wind will have to be changed. Even if Cornwall achieved 100% renewable electricity, there would still be a demand for oil and gas in heating and transport. Cllr Egerton also promised to promote the outcomes of the Energy Island workshop within Cornwall Council.

HAZEL WILLIAMS, REGEN

Hazel described the Sunshine Tariff trial, a research project carried out with WPD, WREN and Tempus Energy. This looked at incentivising people to use more electricity during the day in summer months, when solar output is greatest. Key insights from the trial were that customer recruitment was very challenging. Households' perception of swift in demand was bigger than the actual, with around a 13% shift on average. She also described Regen's work on local supply models with a focus on the options of a local energy club and a Cornwall generation tariff. There was also discussion of Regen's ongoing work in relation to electricity storage and the commercial market for this.

SOPHIE ORME, CENTRICA

Sophie spoke about Centrica's Cornwall Local Energy Market project, which is trialling an 'ebay style' platform for selling and buying flexibility on the distribution network. This aims to put consumers at the heart of reducing grid constraints, enabling greater renewable capacity to be connected. Centrica are working with delivery partners Wester Power Distribution, National Grid and the University of Exeter. They are learning by doing to try to build a future energy system, and make it easier for consumers to access DSO, TSO and wholesale market revenues. Key challenges include current regulatory constraints, planning permission for new renewable energy and having sufficient grid capacity to trade flexibility.

DIANA MOMPOLOKI, ISLES OF SCILLY COUNCIL

Diana talked about the Smart Islands initiative for the Isles of Scilly. The IoS has the highest carbon intensity in the UK, high fuel poverty and the highest rate of domestic electricity usage at 6,610KWh in 2014. The smart island project is developing a replicable model for Cornwall, the UK and beyond, with solar panels on 100 homes, pilot of 10 smart homes with heat pumps, solar PV and batteries, two solar gardens, updated energy controls for 200 businesses with support and energy efficiency advice, and island-wide energy control system providing cheaper, reliable connections for renewable power. This will alleviate a number of current 'pain points', and provide opportunities for work and STEM skill development for young people.

ANDY O'BRIEN, ZERO CARBON WEST OF ENGLAND INITIATIVE

Andy described the Zero Carbon West of England initiative, a collaboration aiming to accelerate the transition to a low carbon society in the West of England area. This is bringing together renewables developers, community groups, the four West of England local authorities, financiers, lawyers, IT specialists, PR companies and other interested parties. There has been a positive response to the project, and care is being taken not to re-invent the wheel but rather to build on the work of existing organisations. An early win for the initiative is an agreed appetite to re-assess the feasibility of the Atlantic Array offshore wind farm which was previously mothballed. The first meeting of the sub-group for this will take place shortly.

CHRISTINE COONICK, BRE NATIONAL SOLAR CENTRE, CORNWALL NEW ENERGY – LUNCH SPONSOR

Cornwall New Energy is a part funded ERDF project being delivered under the ESIF Growth Programme 2014-2020. The project provides support to businesses and community groups in Cornwall and the Isles of Scilly to develop, promote and install renewable energy solutions. It also ensures that CIOs enterprises and communities benefit from more local ownership and operation of energy generation and supply. More information can be found on the Cornwall New Energy website: www.cornwallnewenergy.com

WILL HEINZELMANN, GOOD ENERGY – EVENT SPONSOR

Good Energy is a 100% renewable electricity and green gas supplier helping UK homes and businesses to be part of a sustainable solution to climate change. Last year, Good Energy launched Selectricity, the UK's first peer to peer platform allowing business customers to purchase 100% renewable electricity from local generators.

Battery storage will be key to enabling a transition to a smart, flexible energy system. Domestic battery storage systems are likely to be underutilised as they have a storage capacity that far exceeds the needs of the average household. A 'community' storage system would take advantage of different individual consumption profiles and allow a smaller battery to be installed and worked harder. Community storage would help the local grid and allow a greater range of households to leverage the benefits of storage through a range of ownership models.

TIM SAWYER, CARNEGIE CLEAN ENERGY LIMITED

Tim described the CETO 6 wave project being developed at the Wave Hub site, which includes a single 1MW CETO unit in stage 1 in 2018, to be expanded to 15MW in 2021. The second stage is planned to prove economic viability. Tim also outlined a number of case studies in Australia, including the world's first wave integrated renewable microgrid on an island; an off grid solar/storage/diesel power system; and several grid-connected microgrid projects combining a variety of technologies including storage and renewables.

HELEN FITZGERALD, WALES AND WEST UTILITIES

Helen presented Wales and West Utilities work studying future energy scenarios. This includes modelling electricity and heat supply and demand together, with an hourly simulation for Swansea, including electric vehicle charging profiles and wind tidal and solar generation; a previous case study for a renewable Cornwall using wind, solar, geothermal and battery storage; the 'Freedom Project' testing hybrid gas/electricity domestic heating systems in 75 homes in Bridgend; and evaluating the potential for green gas feedstock which could meet 33% of domestic heat demand in the UK. Overall, with a combination of hybrid heating, and green gas, and hydrogen, there is a potential for 87% carbon reduction from domestic heating

BEN SMALLWOOD, BUROHAPPOLD ENGINEERING

Ben talked about Cornwall's strategic opportunities for heat. Challenges include Cornwall's constrained gas and electricity infrastructure, with a high summer demand imbalance for electricity; the poor thermal efficiency of Cornwall's buildings stock which has the highest level of pre-1990 housing in the UK, and high proportion of houses with no central heating or no gas central heating. There are opportunities to make use of Cornwall's heat resources, including deep geothermal, abandoned mines, water source heat pumps and waste heat from industry. This could make use of district heating, with viability strongly affected by pipework costs and the type of system being replaced. There may be opportunities for heat networks to aid electricity grid balancing. A number of opportunities have been identified, including in Porthleven, Bodmin, Falmouth and Camborne/Pool/Redruth, which are shown on an interactive map.

LUCY COTTON, GEOTHERMAL ENGINEERING LTD

Cornwall offers the best deep geothermal resource in the UK. GEL is exploiting this by developing a 1MWe deep geothermal power plant at United Downs, using natural permeability and existing fracture networks to create a reservoir. This is a system with a 2500m injection well and 4500 production well, hoping for 175°C injection temperature and 80°C return temperature. The system will produce electricity, and a large amount of heat as a by-product. This heat could be used for bathing, aquaculture, process heat, greenhouses, space heating, or other purposes. It is a challenging project due to lack of policy support for geothermal electricity generation in the UK, its perception as risky by private investors, and uncertainty about public perception. This is a three year project part funded by the EU, and work on the first well is expected to take place in the first quarter of 2018.

PETER ARMSTRONG, MIXERGY

Peter presented the mixergy tank, an advanced hot water tank which is optimised to absorb surplus renewable electricity. It has high levels of insulation, reducing heat losses, avoids mixing of hot and cold water, leading to a stratified tanks, which maximises the amount of useful hot water stored and avoids bacterial growth at the bottom of the tank. They estimate that an additional 50% of solar PV connection would be enabled through the use of intelligent and stratified hot water tanks, which provide distributed energy storage to the system. Hot water is an effective type of storage as demand is relatively constant throughout the year.

5 WORKSHOP SESSIONS

The day was bookended by two interactive workshop sessions. In the first session, participants were invited to reflect on what progress has been made in Cornwall in the last two years, framed around the seven key actions identified in the Cornwall Energy Island White Paper.

5.1 ACTION THEMES

THEME 1 CREATE A POWERFUL VISION FOR A CORNWALL ENERGY ISLAND FUTURE

Stories are powerful, and this story should be told consistently by Cornwall Council, the LEP, community energy groups, businesses investing in the region, and others, in the media and through publications and public speaking opportunities.

THEME 2 BUILD ON THE STRENGTH OF COORDINATED LEADERSHIP

There are many people leading the creation of Cornwall's energy future. The involvement of a diversity of stakeholders, and the distributed nature of leadership is a strength, but greater data sharing and coordination would be valuable. Coordination activities should be valued and resourced.

THEME 3 INFRASTRUCTURE PLANNING

Develop a detailed understanding of a future energy system in Cornwall to incorporate demand, generation and distribution. This study will inform a strategic plan alongside detailed research into the future management of these systems such as funding, legislation and ownership of electricity, gas and heat to address the issues of the status quo.

THEME 4 TRAIN, ATTRACT AND RETAIN MORE SKILLED WORKERS

Colleges and universities play an important role in developing the next generation of skills. There is also a 'demand side' challenge to overcome: the low wages, lack of public transport, distance from the rest of the UK, and cost of living make it difficult to attract and retain skilled people in the county.

THEME 5 JUST DO IT

Develop a series of projects which support the actions and help to deliver project-based progress within Cornwall. Working collaboratively on projects is an excellent way to build relationships and develop a strategic understanding through learning about other's perspectives.

THEME 6 PROVIDE FUNDING AND FINANCE TO PROJECTS

Ensure availability of development funding, address the cost of capital, interest levels on loans, and support small projects to access larger pots of funding through aggregation.

THEME 7 POLICY AND REGULATION REFORM

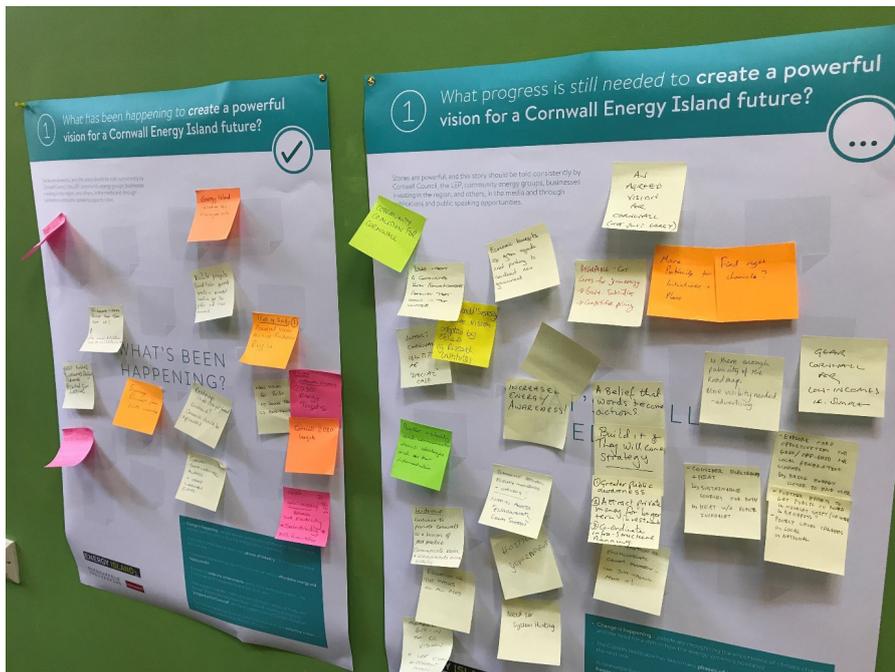
Identify the ways in which policy and regulation blocks the Energy Island vision and find solutions. Also identify pro-active policy that does and could support the Energy Island vision, at national and local levels.

5.2 WORKSHOP APPROACH

Each action was presented in two posters, one reflecting on what has been happening, and the second considering what progress is still needed. Each poster included information from the outputs of the 2015 Energy Island event.

In the first workshop session, participants were invited to write on post-it notes to identify what has been happening since the first Cornwall Energy Island Event and what still needs to happen in this space. the image below shows the completed poster for Action Theme 1.

During the speaker sessions, the post-it note comments on the 'What progress is still needed' posters were grouped into themes. In the second workshop session, each participant was given five sticky dots and invited to use these to vote for the actions on the 'What progress is still needed' posters that they thought were most important. They could either vote for individual post-it note comments or for themes.



Posters for Action Theme 1: Create a powerful vision for a Cornwall Energy Island future

5.3 OUTCOMES OF THE WORKSHOP SESSIONS

Overall, 234 unique comments were made across the seven action themes both in terms of what has been happening and what needs to happen. A total of 145 sticky dots were placed as votes, on the 'still needed' actions identified in participant comments.

The posters with the greatest number of votes were Funding and finance; Infrastructure planning; Policy and regulation reform; and Attract and retain skilled workers. These are therefore the areas of action which workshop participants considered most important to take forward. This may be because the other action themes have already made good progress over the past two years.

Total number of comments and votes per action theme



Total number of comments and votes per action theme

The following sections summarise the post-it note contributions to each theme.

THEME 1 VISION

The Cornwall Energy Island vision has been well developed over the past two years, with several comments noting Cornwall Council's 2030 energy targets and others commenting on energy in the CloS Devolution Deal. Also mentioned were the summary document from Energy Island 2015, a powerful vision with active partnership and buy in on the Isles of Scilly and a new environment strategy in the Truro Diocese.

Most of the actions proposed were about disseminating and sharing the vision that has already been created and has broad consensus. This included general public awareness, and disseminating the vision through adoption by other organisations such as research institutes. There is also a need for greater buy-in to the vision from elected Council members and the LEP. This vision can also be powerful in promoting the unique identity of Cornwall as a centre of energy leadership.

THEME 2 COORDINATED LEADERSHIP

Cornwall Council continues to be at the centre of coordinated leadership in energy in Cornwall. It has coordinated the low carbon ERDF calls for CIOs LEP, developed ambitious plans for Cornwall's Energy Future, and coordinated with other South West LEPs to secure funding from BEIS for a regional energy strategy study. Committed councillors have helped to drive this agenda forward. In the Isles of Scilly, there is a partnership of all major stakeholders with a shared vision and the early talks for the Hitachi smart islands project have brought people together. Cornwall Council has supported the Wave Hub, and WWU has developed energy scenarios for Cornwall and elsewhere, inspired by the last event.

Ongoing collaboration and coordination is needed at three levels:

- Within Cornwall, where suggestions for next steps included setting up an ongoing 'energy board' or 'forum' that could continue to coordinate and support progress. This needs to be structured to foster openness and collaboration, in a context where competitiveness is incentivised.
- Horizontally beyond Cornwall, with other localities and peers. Organisations with wider geographical remit are well-placed to share learning across different localities. This is happening already, through organisations which operate both in Cornwall and elsewhere, e.g. WWU study in Swansea and Leeds and with the planned strategic energy study across three South West LEPs.

- Vertically, between local and national organisations. In particular, achieving both appropriate levels of devolution and a supportive national policy and regulatory framework are important for local energy development. This involves having good relationships with central government, BEIS and Ofgem.

By bringing people together and continuing to develop a collegial identity among the individuals working towards this agenda in various organisations, the Energy Island Initiative supports this coordination.

THEME 3 INFRASTRUCTURE PLANNING

Infrastructure planning has moved forward substantially in the last two years, with several studies and monthly updated maps published by WPD; an infrastructure plan published and adopted by the Isles of Scilly; long term scenarios for South-West electricity infrastructure developed by WPD in collaboration with National Grid; the development of a whole system energy model by WWU; and an energy system and storage masterplan and a strategic heat opportunities study published by Cornwall Council.

Participants felt that further progress was needed on storage, data sharing, and further studies building on the work that has been carried out so far. Further studies proposed focused on integration and coordination in a number of areas, between:

- Different forms of energy demand
- Energy and other issues
- Renewable, fossil fuel and nuclear energy.

THEME 4 TRAIN, ATTRACT AND RETAIN SKILLED WORKERS

There are training courses for sustainable energy and construction in several educational institutions in Cornwall, including Exeter University, Cornwall College and the Eden Project. This includes apprenticeships and local college programmes, degrees in renewable energy, public guidance on energy efficiency, and training in deep geothermal engineering at Rosemanowes. Potential future training opportunities include new courses at the Eden Project, and training opportunities in sustainable and traditional construction in St Austell through a townscape heritage programme.

There was strong support in the workshop for a greater focus on higher education, including STEM degrees and promoting the work of the Energy Policy Group at the University of Exeter, as well as more industry-academia partnerships. There was also a suggestion for specialist training in smart networks and power systems.

Participants also noted the challenge of retention of talent and job security to encourage people to relocate to Cornwall or remain and build a life in Cornwall following training. This involves having a thriving energy sector rather than individual jobs, with jobs in different organisations that people can move between. Many R&D roles are dependent on short term project funding, and these need to be longer term, beyond two to three years, to provide stable lifestyles for skilled people.

THEME 5 JUST DO IT

A lot of 'just doing it' has been happening, partly thanks to the ERDF low carbon projects which are now under way. These include new initiatives and physical projects.

New initiatives include PRP and National Solar Centre's Cornwall New Energy project; Centrica's Cornwall local energy market; WREN, WPD, Tempus and Regen SW's Sunshine Tariff; and Hitachi and Isles of Scilly Smart Islands. The United Downs deep geothermal project has obtained funding and electric vehicle charging infrastructure has been developed throughout Cornwall as part of the Drive EV project. There are now 16 rapid charge points and 25 fast charge points.

Future projects could include biogas heavy goods vehicles; vehicle-to-grid technology for electric vehicles; compression of green gasses into gas grid storage facilities; hybrid heating (such as the WPD and WWU FREEDOM project); and further fast charging point installations.

Implementing physical projects and initiatives is essential to drive the Energy Island agenda forward. This is where new jobs are created, where energy system actually changes and the energy system becomes low carbon. Projects also provide opportunities for development of collaborative relationships, learning and data collection, which can be shared and lead to new initiatives.

THEME 6 FUNDING AND FINANCE

In the past two years, Cornwall has seen £90m invested in ERDF low carbon projects. Cornwall Council has also signed an ECO contract with SSE and WPD has contributed innovation funding to the 'sunshine tariff' project in Wadebridge. The Energyfund Cornwall crowdfunder raised £100,000 for community energy projects. These funds have provided jobs and enabled a step-change in energy innovation in Cornwall.

However, the Brexit process creates uncertainty for inward grant funding for Cornwall. Proposals for future funding included consideration of both revenue streams and capital funding. In terms of revenue, there is a need for stable income streams and innovation to create viable business models in the current context.

Suggestions for sources of future funding and finance included Green Bond issues; use of crowdfunder expertise; further funding from BEIS; potentially attracting funding by setting up an energy storage centre of excellence in Cornwall. Consistent and long term development and R&D funding is needed, as well as rapid funding availability and flexibility in funding that recognises the shifting nature of innovation projects.

Directing existing and future income into investment in energy projects could also be a way forward. A Cornwall Energy Company could be part of this, as well as locally owned private developments, and potentially some form of localisation of profits from the electricity and gas networks.

THEME 7 POLICY AND REGULATION REFORM

The policy context for sustainable energy has changed substantially since the first Energy Island event in March 2015. Following the general election in May 2015, policy announcements from national government reduced support for onshore renewable energy, community energy, and energy efficiency. Support has been focused on nuclear, shale gas and offshore wind. The community energy sector has been searching for new viable business models due to a much reduced Feed-in-Tariff. The 2016 Brexit vote leads to uncertainty in the UK's approach to energy policies that have historically been developed in the context of EU directives including on renewable energy, energy efficiency and smart meters.

On a more positive note, the reduction in support for renewable generation has led to a focus on the system level in electricity. This includes innovation in smart, flexible system operation, storage and demand response. The community energy sector has been forced to innovate, and it is becoming clear that local supply and local energy markets are needed for viability in a post-subsidy world. Brexit may lead to opportunities for greater local devolution of energy, with potential for changes in procurement rules and energy market rules to provide a greater focus on the local economy. Minimum EPC standards have been set for rental properties.

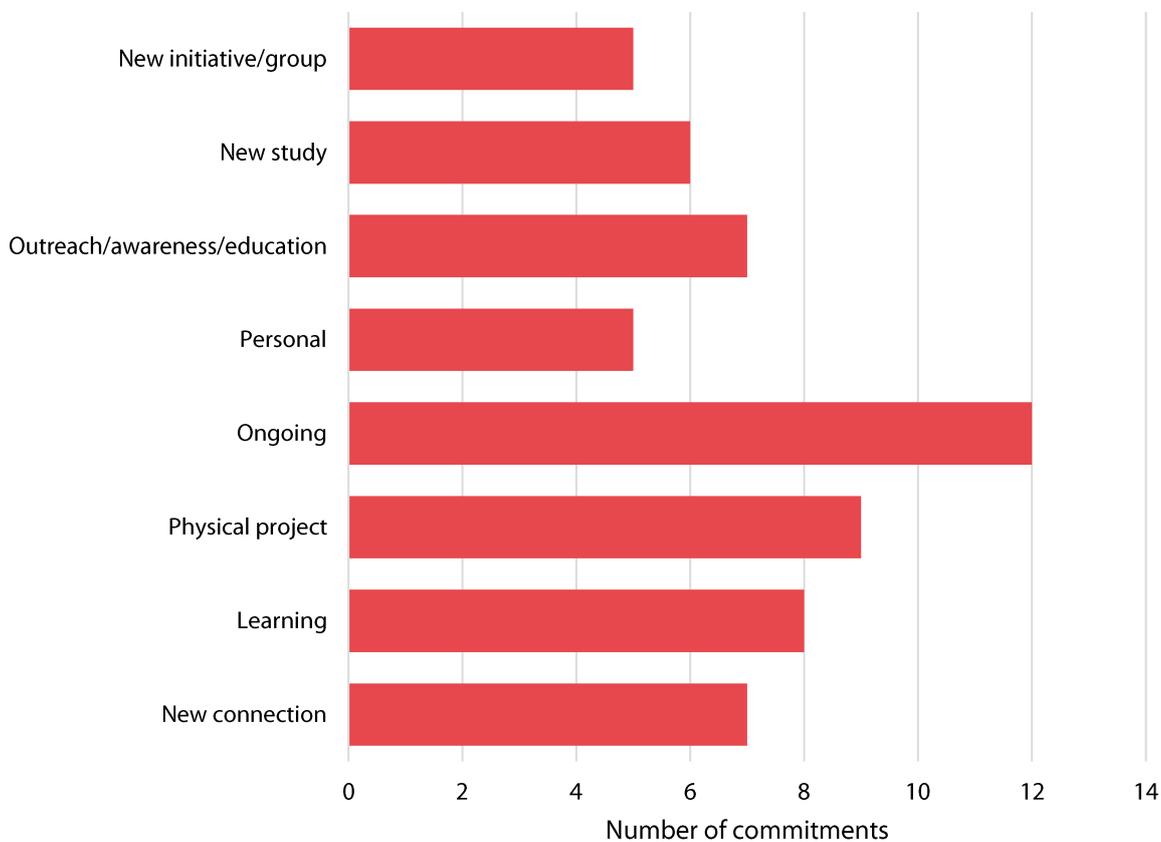
There has been good progress on policy at a local level:

- Cornwall Council have published challenging Cornwall Energy Future 2030 targets and renewable energy planning guidance
- In the Isles of Scilly there has been coordination with the Environment Agency, Ofgem and Marine Management Organisation as part of the Smart Island project.

Participants voiced strong desire for national policy continuity and consistency and concern about lack of joined up thinking between BEIS, Ofgem and DEFRA. There were also comments about local policy and devolution, with a desire for greater devolved powers and community led policy.

The policy and regulatory reform with the strongest support from participants related to energy market rules. This included changing the remit of Ofgem to include climate change targets and focus on universal access to energy services rather than the unit price of energy. There was also support for changing the energy regulations to allow local supply and support a more decentralised energy market.

Continuing with ongoing work was a regular theme in the action commitments but there were also a large number of commitments relating to new studies, initiatives, projects and groups. Outreach and education was a theme mentioned by seven participants, echoing the strong prioritisation of outreach in the workshop sessions. Seven participants committed to following up a new connection with a person or organisation they met at the Energy Island event. Some made personal commitments, including never buying another water bottle, switching to a renewable energy provider and home retrofit.



Action commitment themes

7 NEXT STEPS

The workshop responses suggested some next steps that could be taken by the community brought together by the Energy Island events. These are as follows:

SHARING THE VISION

We already have a strong vision for Cornwall's energy future, supported by Cornwall Council's Energy Future 2030 and studies carried out by several organisations. Now, we need to share this vision widely within and beyond Cornwall, to the general public and key stakeholders. Securing buy-in and adoption of this vision by key stakeholders could be a way forward.

STUDIES

Many studies carried out over the past two years are clarifying pieces of the puzzle. Now what is needed is to bring them together, looking at heat, electricity and transport in an integrated way, and considering the interactions of multiple energy vectors. It is also important to link energy to community, economy and jobs, and other infrastructure and resource systems.

DATA SHARING

The potential for integrative studies that build on the exiting work can be substantially enhanced through strong data sharing across different organisations. ERDF funded projects could share their outcomes and learnings openly with Energy Island stakeholders in Cornwall, and the gas and electricity utilities could participate in ongoing data sharing, building on existing trends.

POLICY AND REGULATION

There is a need for a combination of greater and more consistent support for sustainable energy transition from a national level, and removal of restrictions to local initiatives through greater devolution of energy powers. At the national level, this could include changing the remit of Ofgem to include climate change. At the local level, this could include providing a right to local supply.

STORAGE

As the context for developing new renewable electricity generation has become increasingly challenging, attention has been focused on storage and system-management initiatives. Developing storage is a future 'just do it' action with a lot of promise.

FUNDING

Securing steady and flexible sources of funding is difficult to address directly, as it is affected by national policy, subsidy regimes for fossil fuels and renewable energy, and the outcomes of Brexit in terms of access to regional development funding. These issues should be borne in mind in national policy lobbying activities and could be coordinated with regions outside Cornwall.

CAREER SECURITY

Job security would be supported by a thriving energy sector in Cornwall, which the other actions would create. Plans for additional training and education are under way. Key issues highlighted included the need for a diversity of jobs in the energy sector, so that skilled workers would be able to make a life in Cornwall knowing that there would be work beyond a single organisation or research project. It is important to avoid creating monopolies, and for companies operating in Cornwall to provide apprenticeships, training and jobs for local people.

HOW TO DO IT

As we progress towards developing Cornwall's energy system, we need actions that are commensurate with the scale of the problem of climate change. This is a big challenge, and building momentum towards a more sustainable energy system is in all of our interests.

The Energy Island initiative has built on a long history of sustainable energy development in Cornwall, and contributes a gathering-space to a thriving community. To continue to take this forward, a more ongoing and directed approach may be needed as a next step.

Continuing the coordination that is provided by the Energy Island community could be done at a variety of different levels:

- An informal network for whoever wants to join, to share information, framings and narratives and coordinate activities. This could include an email discussion list.
- Creating a website as a central holding place for relevant studies by different organisations, which could be part of the network e.g. WWU, WPD, EnergyIsland, Cornwall Council
- Setting up an Energy Island steering group for Cornwall and IoS
- Commissioning a study into options for ongoing governance of an Energy Island organisation in Cornwall. This process would probably have parallels with the Zero West initiative in the West of England presented by Andy O'Brien
- Setting up a data sharing repository, which could be used for integrated studies.

There are already organisations in Cornwall contributing to this agenda, including the 'environmental growth strategy' developed by the Local Environment Partnership and others. It is important for an ongoing energy island organisation to find its niche, to add something to the existing organisational ecosystem rather than competing with what is already there. Please get in touch if you would like to be part of an ongoing energy island community, and if you have any resources to offer in to that process (e.g. hosting, pro bono, sponsorship, time).

CORNWALL ENERGY ISLAND
ENERGY ISLAND 2017
OUTCOMES OF THE WORKSHOP

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