Energy Ideathon resulting ideas

The Innovation Network has been working with the States of Guernsey Energy Team to design and carry out a couple of innovative workshops as part of the engagement project for the future energy policy. Using design thinking and creative problem solving techniques, we developed a mini ideathon format to get the groups to work collaboratively to generate ideas and gather feedback that can be used to help develop and define future energy policy.

We held two sessions using the same format:

- one with States of Guernsey Graduate Officers and Trainees Executive Officers at the Digital Greenhouse;
- and the other with post-16 students studying Geography and Environmental Science at the Grammar School.

Below is the schedule for the workshop and overleaf are the resulting ideas and suggestions collated from each session.

WORKSHOP SCHEDULE:

4 steps to focus on hydrocarbons and how we can reduce our use of them

Asking you to think deeply about hydrocarbon uses, we are going to explore the roles and the responsibilities we have as energy consumers.

Intoduction to hydrocarbons & the energy 'trilemma'
Identifying uses of hydrocarbons in daily lives
100 ideas to reduce reliance on hydrocarbons
Refine ideas
Workshop round-up

This workshop has be co-created by the States of Guernsey Energy & Infrastructure team and the Innovation Network. Exercises have been put together and adpted from the following sources: Digital Greenhouse Innovation.

Toolkit, a Design Thinking Toolkit and the book Edupreneur: Unleashing teacher-led innovation in schools by Aaron Tait & Dave Faulkner.







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| + | Monday 25th February | + | | Graduate Officers & Trainee Executive Officers |
|----|--|----------|-----------|---|
| + | at the Digital Greenhouse | | | The future of the States of Guernsey. |
| 1 | Cycle buses for schoolchildren | 26 | Ind | crease pedestrianisation and increase cycling lanes |
| 2 | Tax breaks/incentives for solar panels on domestic properties | 27 | Во | an non-LED lighting |
| 3 | Abolish private ownership of cars | 28 | | co-friendly legislation for all new businesses oming to Guernsey |
| 4 | Paid parking | 29 | Pa | ay as you pollute |
| 5 | Improved compulsory building standards for energy savings | 30 | | ollow/adopt French fire laws pay for environmentally friendly fires |
| 6 | Investigate why public transport is under used/unpopular | 31 | Во | an single use plastics |
| 7 | Subsidise double glazing in domestic properties | 32 | Su | ıbsidise heat pumps |
| 8 | Subsidise wall/loft insulation or free loft insulation | 33 | ln۱ | vest in battery storage |
| 9 | Everybody should have a SMART meter to analyse electricity usage | 34 | | ubsidised appliance efficiency testing domestic and business |
| 10 | Implement car sharing app – good for mental health and | 35 | <u>Ve</u> | ertical farming |
| | wellbeing to be sociable, good for the ageing population/young parents who could feel more isolated/vulnerable | 36 | M | acro renewable energy |
| 11 | Shop local – to reduce carbon emissions | 37 | Ge | et more people to cycle |
| 12 | Active travel – walk, bike, sail to work | 38 | So | plar thermal energy plant |
| 13 | Green business policies – e.g. skype into a meeting instead of flying them | 39 40 | | utomated lights — mandatory/legislation for business |
| 14 | 'Green Finance' policies – finance firms that operate in Guernsey adopt environmentally friendly policies/initiatives | 41 | | educe car parking spaces in town |
| 15 | Carbon Capture – plant more trees | 42 | Ind | crease/improve direct flights – reduce the need to travel |
| 16 | Pedestrianize St Peter Port | 43 | Inc | crease the number of farms on the island and |
| 17 | Ban ICE cars | | su | bsidise local growers |
| 18 | Invest in renewable energy – tidal, wind, solar and subsidise renewable energy companies | 44 | | assenger tax |
| 19 | Build the direct cable link from Guernsey to France (GF1) | 45 46 | Ind | ini wind farms in windy areas of the island crease the number of windows in buildings to let |
| 20 | Solar/wind powered street lamps | | | ore light in and negate the need for artificial lighting |
| 21 | Running tracks that generate kinetic energy | 45 46 | | ydro energy reservoir |
| 20 | - case 1 / case 2 | 47 | | ollect rain to power water mills |
| 22 | Electric car legislation – see idea no.3 | 47 | | educe or limit the number of cars per household se licence plate registration to set what days people |
| 23 | Free from plastic shop | 40 | | in drive their cars - case 1 |
| 25 | Upcycle instead of buying new | 49 | Ele | ectric bikes |
| 23 | Roof gardens | l | | |







Energy Ideathon resulting ideas continued.

| + | Monday 25th February | + | |
|----|---|----------|---|
| + | at the Digital Greenhouse | | Trainee Executive Officers The future of the States of Guernsey. |
| 50 | Tuk tuks in St Peter Port/along the West coast | 76 | Build the tunnel to Alderney and close Alderney airport |
| 51 | Boris Bikes – free public bicycles to hire | 77 | Link all of the Channel Islands to France via tunnels – shared resources (airport) |
| 52 | Improve public transport | 78 | Limit/restrict population growth |
| 53 | Reduce imports – more home production | 79 | Buy local second-hand clothes |
| 54 | Pollution tax for car journey's with only one passenger | 80 | Alderney becomes a utility island |
| 55 | Get postmen back on bicycles | 81 | Tax on imported foods |
| 56 | Waste to energy plant on island | 82 | Hydrocarbons from CO ₂ |
| 57 | Only sell local grown veg – reduce importing vegetables (eating seasonally could improve health and wellbeing) | 83 | Harvest the gas (methane) from cows |
| 58 | Congestion charges | 84 | Power domestic properties with kinetic, self-generated energy |
| 59 | Car free roads | 85 | Using waste (human/animal) as source of energy |
| 60 | Build a coastal cycle path (all the way around Guernsey) for eco tourism/improve local health, encourage more people to cycle | 86 | Invest in hydrogen energy |
| 61 | Pollution tax for all cruise ship passengers who | 87 | Use bamboo instead of plastic – grow bamboo on-island |
| 01 | disembark | 88 | Solar powered e-books |
| 62 | Communal living farms/growing/simple living | 89 | Encourage better critical thinking skills in the |
| 63 | Paperless island – no paper money | 90 | community (at schools) Build an incinerator – on island energy generation from |
| 64 | Ban parking on piers in town | 30 | rubbish |
| 65 | Ban using cars for small journey's | 91 | Increase Fuel Duty |
| 66 | Tax relief for owners of electric cars | 92 | Build sea wind farms |
| 67 | Pay as you pollute tax – cars a microchipped to measure mileage and passenger numbers | 93 | Build a wind farm by Alderney |
| 68 | Under desk cycle generators | 94 | Encourage more people to walk to work |
| 69 | Set up community energy hubs for solar/wind/tidal - Clos/Estate Power, Parish Power etc. | 95 96 | Kinetic street lights Electric trams from the parishes into St Peter Port (e.g. |
| 70 | Incentives for businesses/individuals to reduce energy usage | | The Forest Road Tram) Electric railways/trams using a sustainable energy |
| 71 | Set up local/community food growing | 97 | source |
| | co-operatives – community greenhouses | 98 | Put a tram from The Aquarium to The Bridge |
| 72 | Ban single-use plastics | 99 | Harness energy from cyclists |
| 73 | Harness energy from the gym | 100 | Solar powered public phone charging points. |
| 74 | Invest in tidal power/Build a tidal power plant | | |
| 75 | Build the tunnel to Jersey and close Guernsey airport | | |







Energy Ideathon resulting ideas continued.











Energy Ideathon resulting ideas

| + | Tuesday 5th March | + | | Geography & Environmental Science Students |
|----|--|----|----|---|
| + | at the Grammar School | | | Sixth Form - Years 12 and 13 |
| 1 | Automatic lights in schools and offices | 27 | Re | ewards for cycling / green modes of transport |
| 2 | Automatic windows linked to air conditioning system | 28 | W | orking from home instead of driving to work |
| 3 | Solar panels on schools and offices | 29 | Su | ıbsidise local growing |
| 4 | Small wind turbines on schools and offices | 30 | Та | ax on imported food |
| 5 | More efficient heating systems – ie. underfloor heating in homes | 31 | | ear thicker jumpers/warmer clothes to reduce eating usage |
| 6 | Not heating swimming pools - privately owned/outdoor | 32 | Us | se/heat less rooms |
| 7 | Harness energy from weather (lightning power) | 33 | | ncourage students to stay at school at lunch rather |
| 8 | Increase taxation of fuel (petrol and diesel) | 7/ | | an driving to the shops se more grey water - you don't need to treat all water |
| 9 | Larger port for boats and cruise ships - no need for tender transport to get passengers on and off | 34 | | make it drinkable |
| | - can take larger ferries for importing goods and therefore less journies made | 35 | | egulations on conditions of boats - prevent them falling o disrepair and sinking in harbours |
| 10 | Investigate tidal power | 36 | In | crease the price of plastic bags / ban them |
| 11 | Fix and re-use items - a place that offer repair services | 37 | | ata limits – encouraging people to use internet/laptops/ |
| 12 | Introduce a plastics tax on supermarkets | 38 | | ffshore wind turbines |
| 13 | Educate/persuade people to buy loose vegetables | 39 | | se eco-friendly alternative to generate power |
| 14 | More options to buy loose foods – reduce packaging | 40 | | ive workers free trainers to jog to work |
| 15 | Sell less disposable products | 41 | | nowers at work reduce the need to heat water |
| 16 | Reduce online ordering habits as there is often more packaging associated with it | 42 | | dividually at home edicated running tracks/routes in busy areas |
| 17 | Reduce heat loss in homes – e.g. installing double glazing | 43 | | chemes to encourage active travel - walking/cycling |
| 18 | Heat efficient design in new housing developments | 44 | | ar sharing/pooling scheme |
| 19 | Use less lighting | 45 | | creased bus services - more accessible with varied routes, |
| 20 | More energy efficient appliances | 43 | av | roid coming into town and then going back out again to get |
| 21 | Recyle water in public buildings | 46 | In | ter-island zorbes/pedalos - make travel fun |
| 22 | Where you can fit raised pavements introduce whitelines for pedestrians/bicycles | 45 | In | crease fuel prices as a deterrent to using them |
| 23 | Allow cyclists on pavements | 46 | Μ | ake green lanes/paths more accessible to cycle on |
| 24 | Reduce plastic | 47 | Re | emove cars from certain routes |
| 25 | Solar panels on new housing developments | 48 | Gi | ive bikes dedicated roads / routes |
| 26 | Mandatory building rules on new housing | 49 | Oı | ne way road system to end congestion |
| | developments - must be energy efficient | 50 | En | ncourage people to buy electric cars - subsidisies |
| 27 | Recycling schemes in schools and public buildings | | | |







Energy Ideathon resulting ideas continued.

| + | Tuesday 5th March | + | Geography & Environmental |
|-----------|---|----|--|
| + | at the Grammar School | | Science Students Sixth Form - years 12 and 13 |
| 51 | More charging points for electric cars | 67 | Make your own fertilisers - no need to import, no need to use chemicals |
| 52 | More electric bikes | 68 | Grouped cycling - great for young people who might want to |
| 53 | Only sell rechargable batteries | | cycle alone |
| 54 | Heat water less | 69 | Build wave power generators into the base of offshore wind turbines and link to Guernsey |
| 55 | Dedicate more space to farming | 70 | Express bus routes |
| 56 | Vertical farming | 71 | Use buses instead of cars |
| 57 | Grow plants/food on roof tops | 72 | Only use LED lighting |
| 58 | More locally grown food | 73 | Scheme to improve loft insulation in older houses |
| 59 | Let animals graze the common land so fields can be used for crops | 74 | Offer to clear peoples lofts FOC so they can be insulated |
| 60 | BYOD - Bring your own device rather than using paper | 75 | Direct energy cable from France |
| 61 | Subsidies for eco-friendly developments | 76 | Plant more trees |
| 62 | Solar powered street lights | 77 | Use biofuels |
| 63 | One wind turbine for every 10 houses | 78 | Less overseas holiday |
| 64 | HEP – sea, reservoir (Guernsey Water) | 79 | Harness geothermal energy |
| 65 | Turn off lights when not needed | 80 | Increase the age limit for driving - can't get a license until |
| 66 | Free public transport | | you turn 21? |



