Good Energy's proposed solar farm at Trefronick and Trevalso Farms

Presentation to St Allen Parish Council
On 21st January 2013

Good Energy

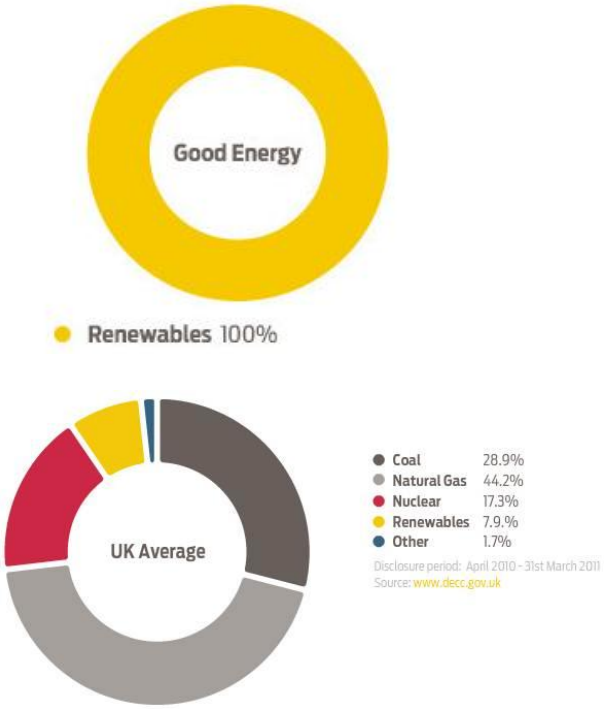
Together we do this

Good Energy – what we do

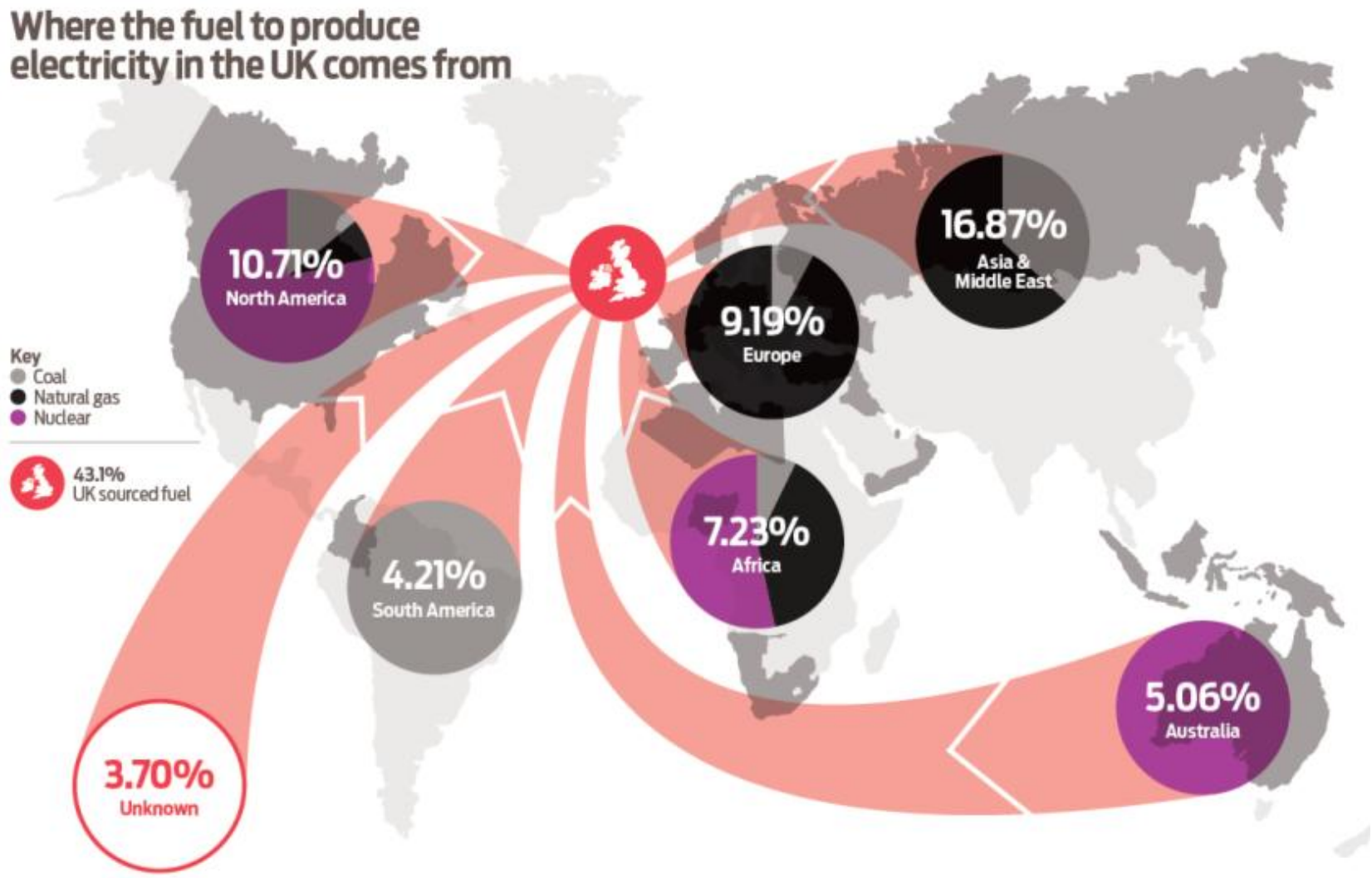
Good Energy is the **UK's leading 100% renewable electricity supplier**:

- Supply 30,000 customers in the UK
- 70% of the power we source on behalf of our customers comes from small & medium-sized renewable generators spread the length and breadth of the UK
- Support a community of 40,000 small-scale renewable electricity generators
- Owner of Delabole Wind Farm, the UK's first commercial wind farm
- Launched the UK's first local electricity tariff in November 2012

Fuel mix comparison



Where our energy comes from



Our proposed project at Land at Trefronick and Trevalso Farms

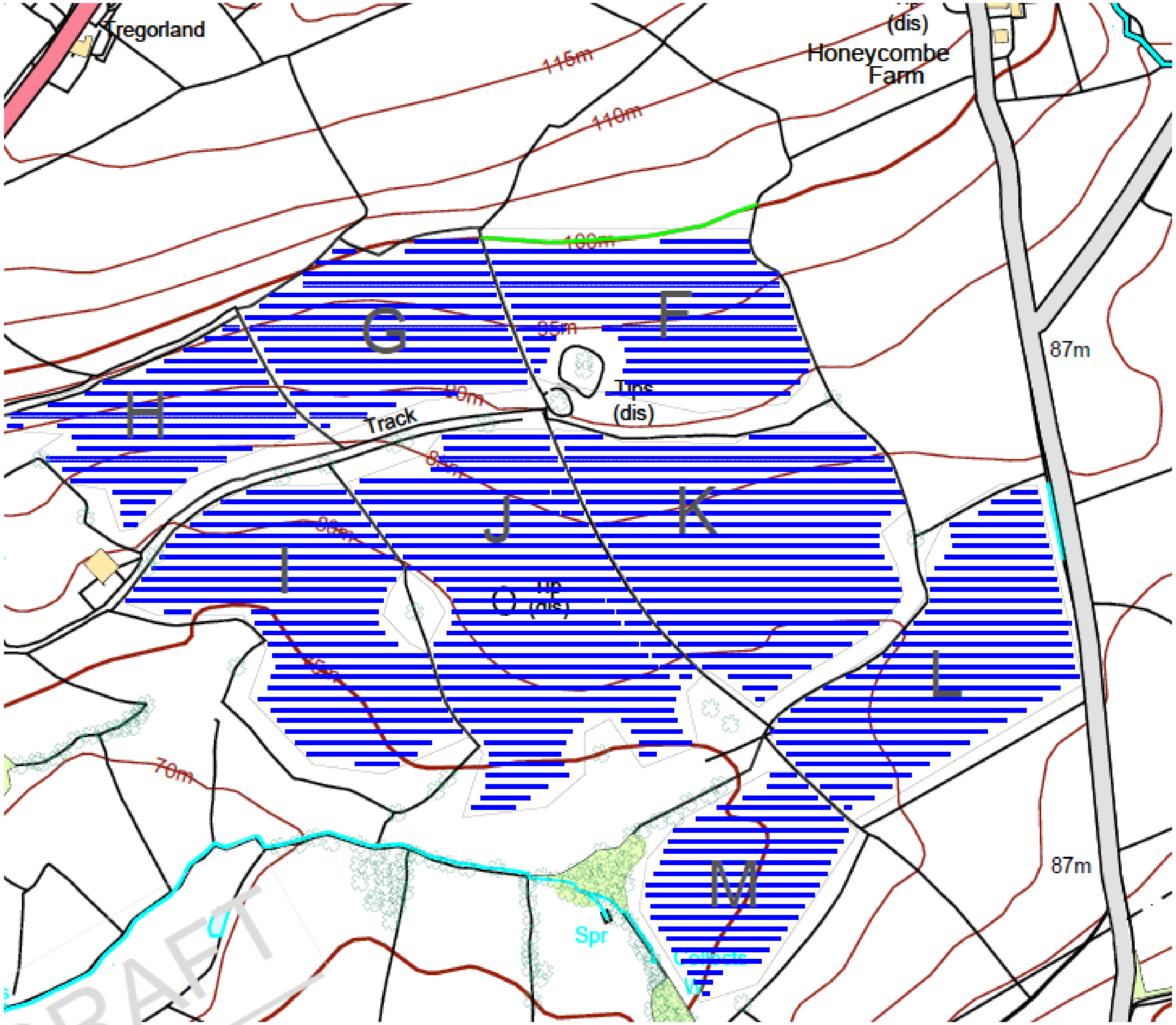
We are proposing a project here because:

- Cornwall is the county where we have most of our generation (we buy power from over 500 generators in Cornwall) and many of our customers are also in the county.
- Sun hours – the sun hours in Cornwall are the best in the country.
- Landscape and visual impact – The site is roughly 70 acres and sits in a natural bowl in the landscape. We have adjusted the layout accordingly to make it as hidden as possible. To achieve this we have removed certain fields from the original plan.
- Landscape designations (green belt, AONB) – there are no landscape designations on this area of land.
- Grid connection – at 132kv, there is still capacity on the grid in Cornwall. We propose to connect into the high voltage power line which is located to the North of the site. It is important to find a hidden site next to Grid.
- Land grading – the land is all Grade 3.

The facts and figures

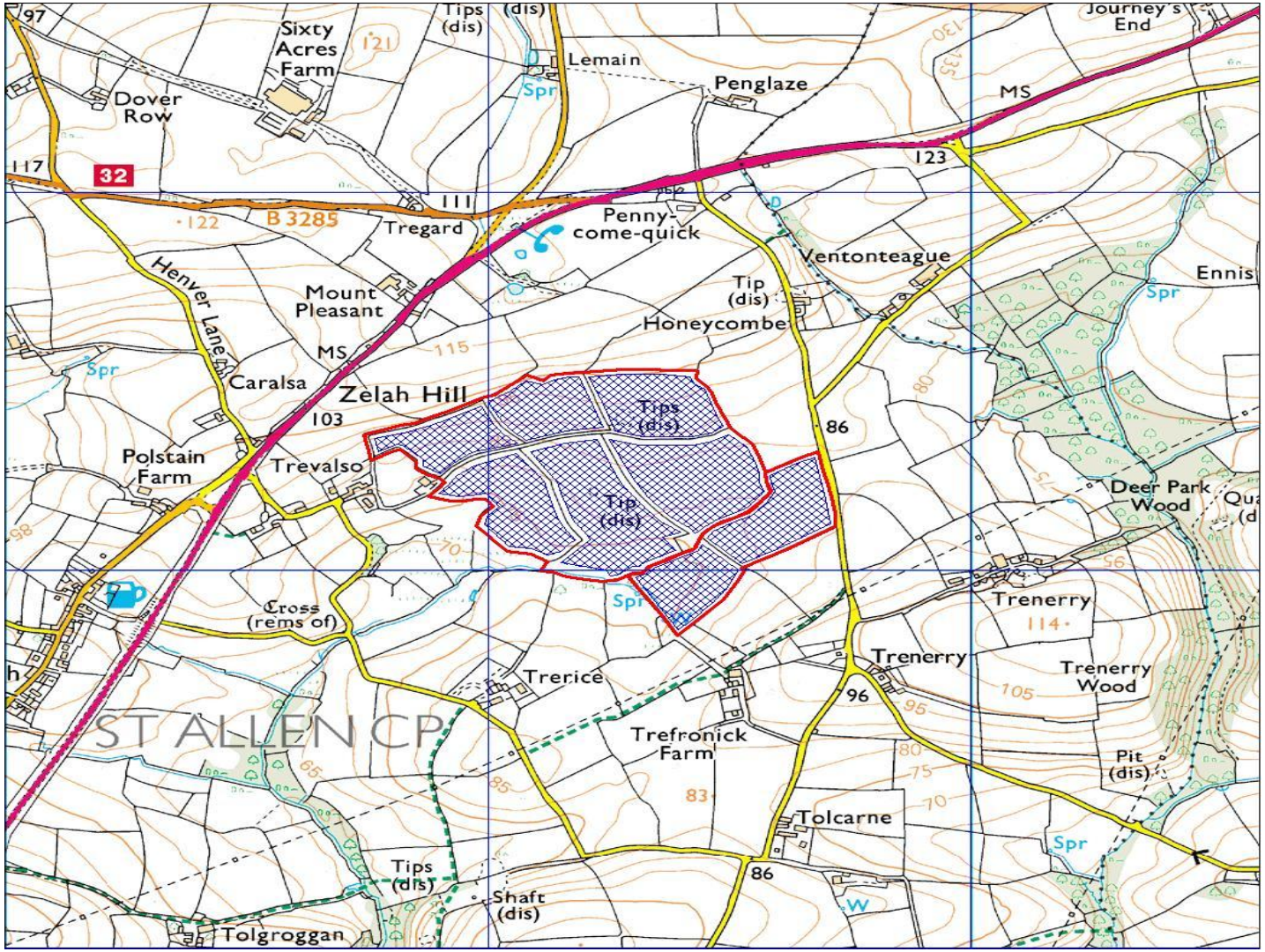
- Total installed capacity: 13.4 MegaWatts peak
- Total acreage: 71.7 acres
- MegaWatt hours produced each year: 14,070 MWh pa
- Approximate number of homes supplied: 2,814 homes
- Carbon saved per year: 7,063 tonnes per year (average person in UK has an annual carbon footprint of 10 tonnes)
- Cornwall's renewable energy target: 20% renewable generation by 2020

Site area



Tregorland
(dis)
Honeycombe
Farm
115m
110m
100m
G
F
95m
H
Tips
(dis)
Track
90m
87m
J
K
I
L
70m
M
Spr
87m
DRAFT

Site area in context



Preparing our planning application

- We complete a series of surveys and research prior to tabling a planning application. This includes:
    - Ascertaining where there are affordable grid connections
    - Seeking friendly communities
    - Finding suitable, well screened sites near those potential grid connection points and friendly communities
    - Seeking to achieve a design that will deliver an 8% return with all costs included
    - Approaching the landowner
    - Approaching the council and parish council
    - Screening report. We submit this to the planning department, detailing our proposed project and asking them to recommend the scope of our surveying and research, which then leads to:
    - An archaeological survey; a landscape and visual impact assessment; Ecological surveys; a geophysical survey

The design of a13.4MW solar farm

- The site will comprise approx. 53,855 panels
- The arrays of panels will have a maximum height of 3 metres
- The bottom of the panels will be a minimum of 800mm from the ground - this will allow sheep to graze amongst the panels
- The structure does not require concrete foundations and will be piled or screwed into the ground,
- Between each array of panels, there will be an avenue of approximately five to seven metres
- An inverter house will be situated on site
- A security fence will surround the site and CCTV or security monitoring equipment will be installed. The fencing will be a type of deer fencing

Westmill Solar Farm

This 4.99MWp Solar park was energised on the 15th July 2012

A solar site under construction

Construction

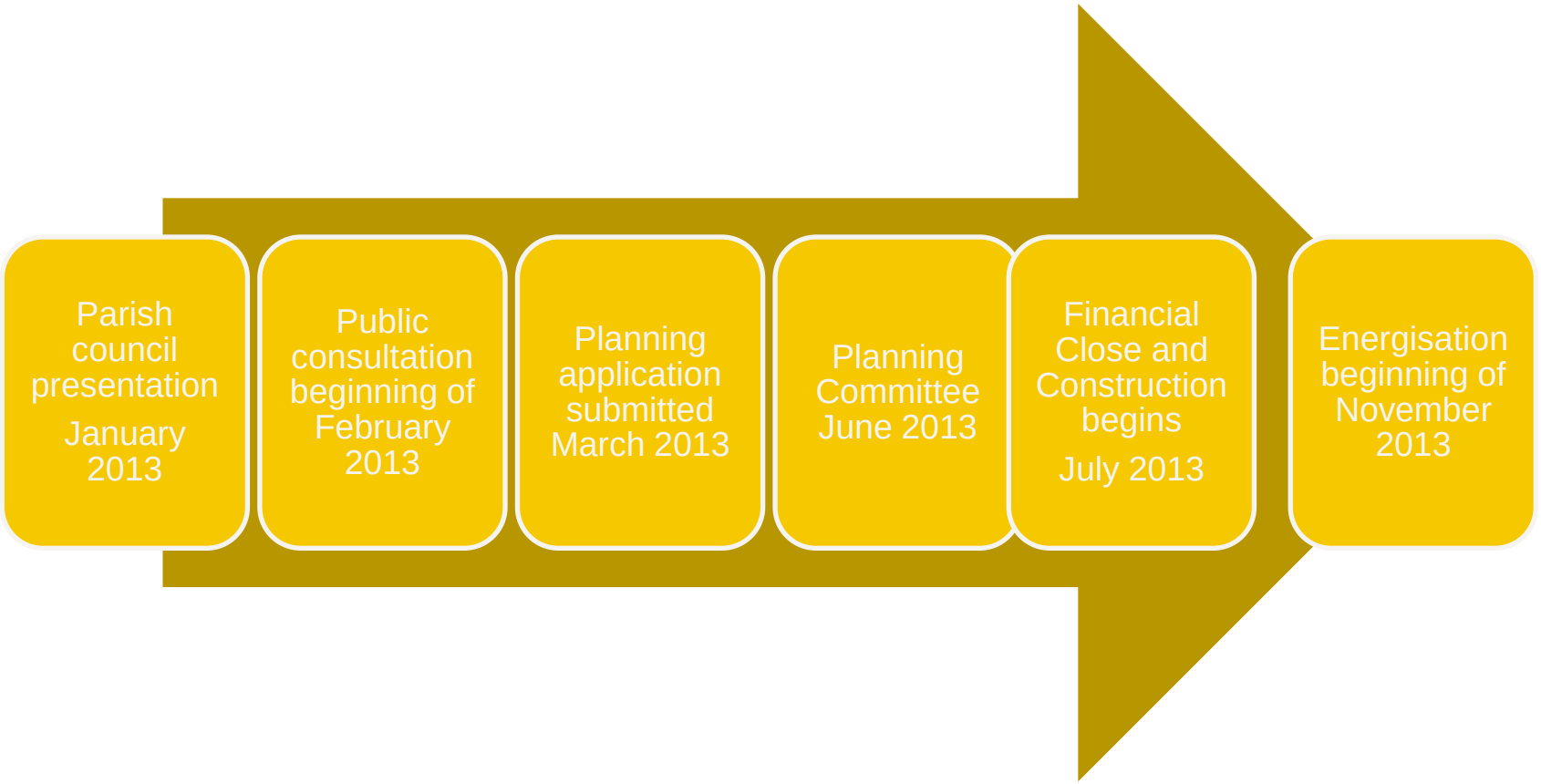
Views of completed sites

Completion & Generation

We would like to provide funding for outdoor learning schemes with the local schools

Our ambition: Developing the environmental and educational potential of the site with local schools

Our proposed timescale



During construction

- We expect the construction to last between 8 to 12 weeks
- Traffic to site will consist of two articulated lorries per day plus vehicles bringing the workforce to and from site.
- There will be noise in the first weeks caused by the piling machinery
- We will aim to use local contractors for the civil engineering works: tracks, trenching and fencing etc
- The work force will require accommodation and sustenance during the build that will create local income
- Building materials, such as aggregates will be sourced locally

Benefit to the community

- Good Energy will set up a community fund scheme
- £1,000 per MW (index linked to RPI) per year will be donated to the local community for the lifespan of the site.
- The fund is available to be used for whatever the local community feels appropriate and doesn’t have to be spent on other renewable energy products.
- We will ask that a committee of local residents is set up to administer the fund and decide what it is to be spent on each year.
- We have a similar scheme at our Delabole Wind Farm site which has been well received and working well.
- How would you like it spent?

Questions & Thank you

Please feel free to ask any questions

Thank you for your time & we hope that this has been informative