Renewable Plus

Latest News in Solar PV

4th November 2015

www.cambridge-solar.co.uk
Summary

- Intro to Cambridge Solar
- Solar PV the basics
- The feed-in tariffs
- Trends / Innovations
- Questions
Our Solar Panel Installations

www.cambridge-solar.co.uk
Cambridge Solar Ltd

- Set up in 2009
- Carried out 100’s of installs around Cambridgeshire
- Our own local installation teams
- Strong emphasis on quality of our products and the quality of our workmanship
- Great customer relationships, lots of happy customers

www.cambridge-solar.co.uk
Owen Morgan, MSc

- MD of Cambridge Solar
- In the industry since 1999
- Worked for:
  - The Centre For Alternative Technology
  - Dulas Ltd
  - Bright Light Solar / TRUE Energy
- Education
  - BEng: Engineering & Business Management from Warwick
  - MSc: Architecture: Advanced Energy & Environmental Studies - CAT
- Designed solar panel systems that have been installed all over the world!

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Solar PV – The basics

- Install solar panels
- Generate your own electricity
- Get paid for the electricity you generate
- Save on your annual electricity bills
The Feed-in Tariffs

Ideas to make it work for homes
• PPA’s?
• Batteries
• Smart Homes

And for the industry generally
• Developers
• New builds
• Off grid systems
Trends / Innovations

- Panel-by-panel optimisation
- Micro inverters
- Power Optimisers
- Flexibility in design
- Higher yields
- Better warranties and monitoring
- Aftercare and ongoing support

- Not ideal if on a three story building or inaccessible
Panel Efficiency

- Standard panels tend to be 250 Wp
- 16 x 250 Wp = 4kWp
- Higher efficiency panels, same dimensions mean:
  - 14 x 285 Wp = 3.99 kWp
  - 12 x 315 Wp = 3.78 kWp
- 25% less work, 25% less room, 5% less output
Energy Storage

• Hot water storage systems
  – Hot water cylinder

• Battery systems
  – Cost
  – Maturity of technology
Monitoring systems

• Instant feed-back

• Trends
  – Daily
  – Monthly
  – Annually

• Better energy use
Smart Homes

- Monitor generation & production
- Weather monitoring
- Smart plugs
- Smart devices
- Batteries / hot water storage