# FIEE Conference

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Smart ecosystems in Britain: an energy case study
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#### **CONTENTS**

- Who we are
- Smart grid in Britain: what it means and what's driving it
- The challenges
- How is the UK facing up to these challenges?
- What is SmartGrid GB doing to help?



#### **WHO WE ARE**



Launched 23 June 2011 by former Energy Minister, Charles Hendry MP, at the Royal Society of Engineering in London

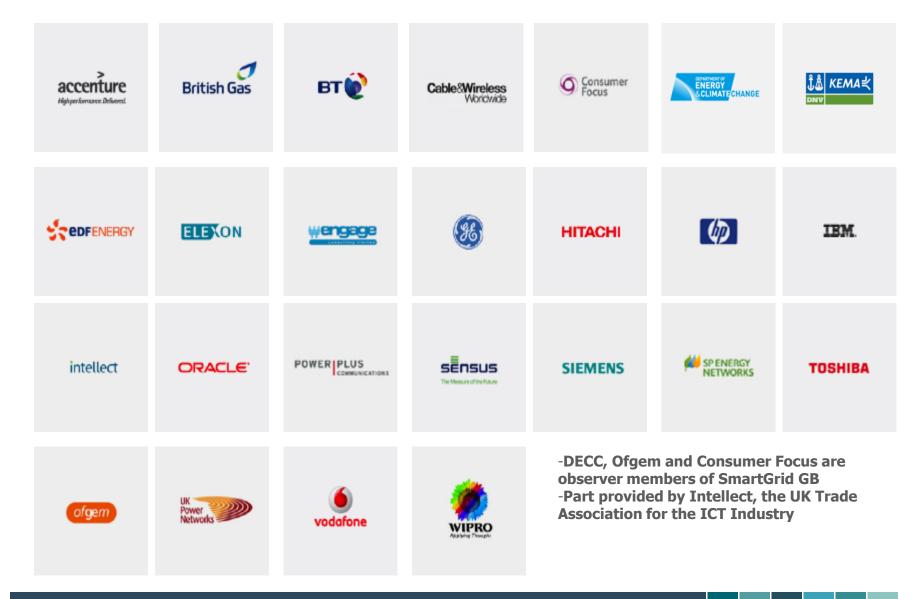
## Overarching objectives as approved in 2013 Business Plan:

- 1. Promotion of economic benefits
- 2. Policy & regulation
- 3. Creation of an industry
- 4. Promotion of consumer benefits
- 5. Bringing the value chain together
- 6. Information dissemination

#### Two campaign points for 2013:

- 1.To develop the Economic Benefits case for smart grid development.
- 2.To develop a compelling Consumer Benefits case for smart grid development.

#### **WHO WE ARE**



#### SMART GRID IN BRITAIN: WHAT IT MEANS AND WHAT'S DRIVING IT

#### **Definition**

A smart grid as part of an electricity power system can intelligently integrate the actions of all users connected to – generators, consumers and those that do both – in order to efficiently deliver sustainable, economic and secure electricity supplies [ENSG, November 2009]

#### SMART GRID IN BRITAIN: WHAT IT MEANS AND WHAT'S DRIVING IT

Sustainability



Affordability



Security of supply



Existing powerstation closures

~25%

of total capacity by 2020



Gas from UK sources

~25%

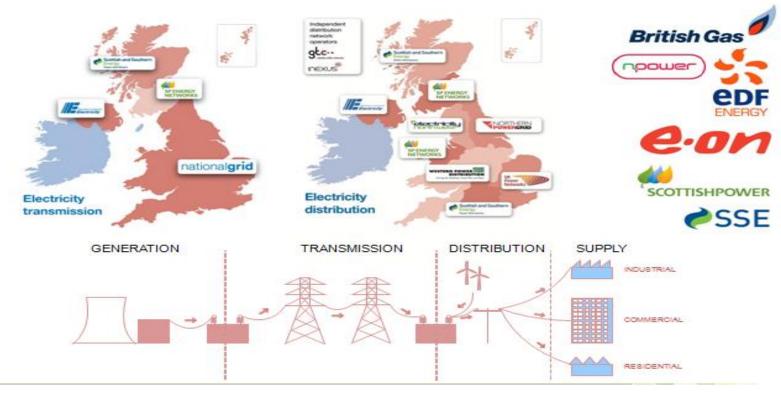
of total supplies by 2020



**Source: National Grid** 

### THE CHALLENGES...

#### 1. UK ENERGY MARKET STRUCTURE



- 2. TECHNICAL / COMMERCIAL
- 3. POLICY & REGULATORY
- 4. CONSUMER ACCEPTANCE

#### **HOW IS BRITAIN FACING UP TO THESE CHALLENGES?**

### GB is world leading

- Smart meter rollout
- Low Carbon Networks Fund
- New Regulatory Frameworks
- DECC/Ofgem Smart Grid Forum

# Local initiatives increasing in prominence

- Eco Island
- Smart Cornwall and Wadebridge
- Manchester
- Ashton Hayes
- Glasgow

Government



Local

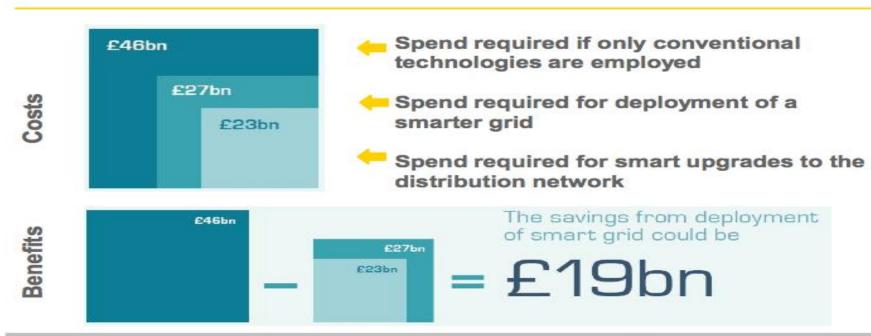


#### WHAT IS SMARTGRID GB DOING TO HELP?

SGGB published a report in April 2012 called 'Smart grid: a race worth winning'

Launched by former Energy Minister, Charles Hendry MP, at the Royal Academy of Engineering

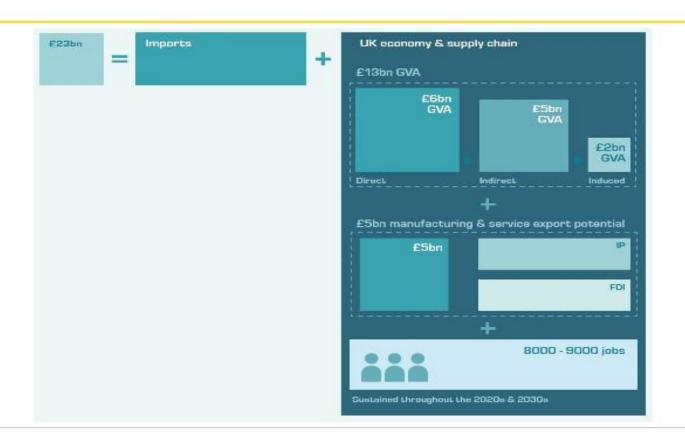
#### Core costs and benefits



Early-stage research from SGF evaluation framework plus EY assumptions All expenditure figures are NPV (2012-2050)

#### WHAT IS SMARTGRID GB DOING TO HELP

### Supply chain benefits



Source: Smart Grid: A Race Worth Winning? SmartGrid GB

#### WHAT IS SMARTGRID GB DOING TO HELP IN 2013?

- Appointing a 3<sup>rd</sup> party to explore the consumer benefits case for smart grid development in much more detail
- Energy Bill: feeding in industry views
- Bringing the value chain together:
  - Regular workshops with DNOs & suppliers
  - Conference with Energy Minister, John Hayes MP with ENA, Energy UK, BEAMA, and Intellect, 16<sup>th</sup> April at the British Academy
- Aiding international collaboration via Global Smart Grid Federation and UKTI
- Find out more: at www.smartgridgb.org

Muito obrigado!

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