

welcome

Save today. Save tomorrow.





Nuclear New Build: What's new?

Safety Message – Documents & Records

**Where should I store
my documents and records?**

Event Agenda

- 09:30** **Welcome to Nuclear New Build Event**
Introduction by Andy Spurr, Existing Nuclear Managing Director
- 10:00** **NucSIG**
Geoff Edmondson and Mike Underwood
- 10:15** **Regulatory Approach to New Build: What's New?**
Dave Watson, Head of Programme Management Office Division 6
Steve Gibson, Head of New Build Inspection Division 1
- 11:15** **Coffee break**
- 11:30** **International fleet approach: Advantages & Challenges**
EDF Energy – Nigel Cann HPC site Construction Director

Event Agenda

- 12:30** **Lunch**
- 13:30** **How to win NB supply chain challenges?**
AREVA – Robert Davies, Vice President New Builds
- 15:00** **Coffee break**
- 15:15** **Assessment & Development of Quality in supply chain**
Rolls-Royce - Klaids Lafon de Ribeyrolles, VP Supply Chain for Nuclear
Tim Jackson, Supplier Quality Executive
- 16:30** **Wrap-up**

Introduction

Andy Spurr
Existing Nuclear Managing Director



A new chapter begins...



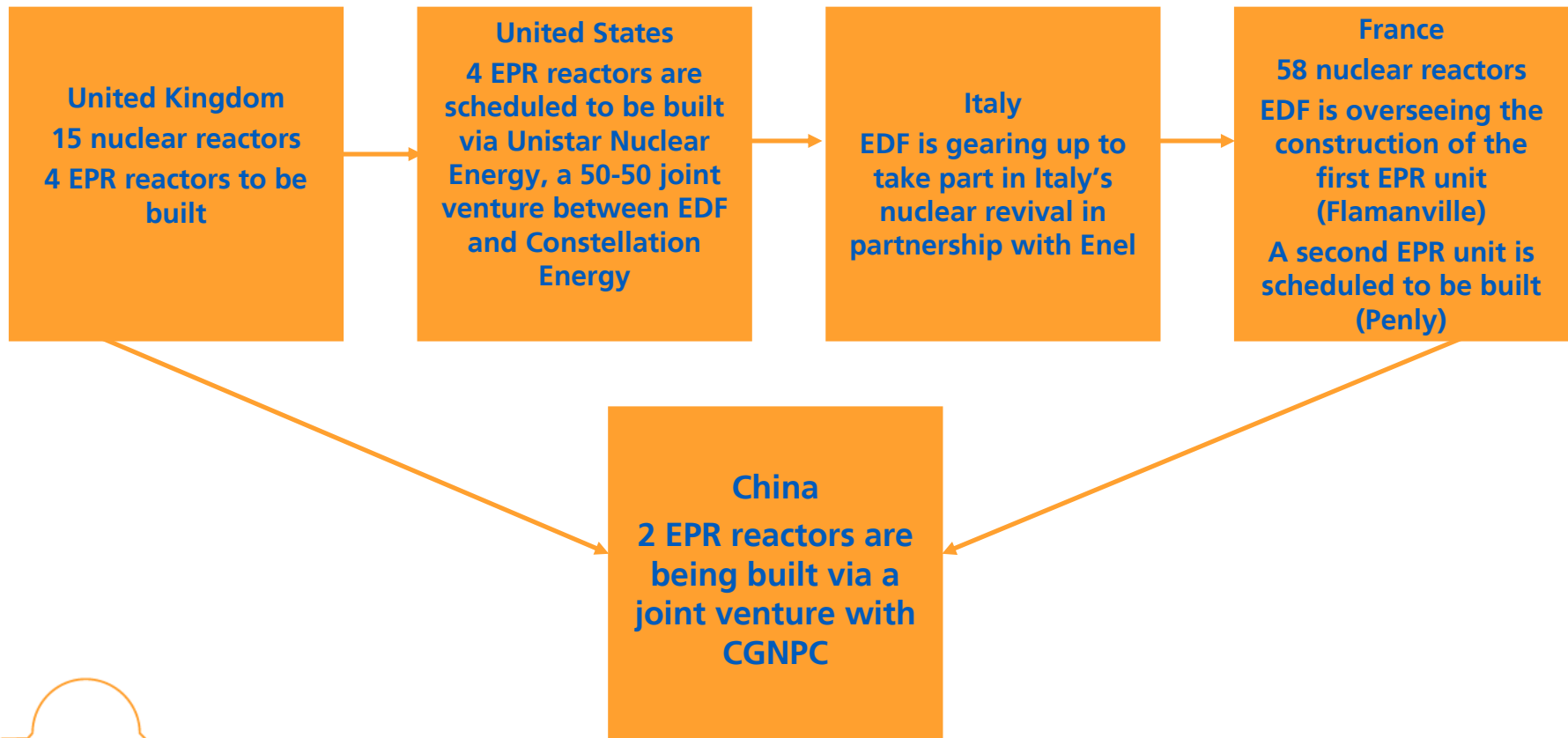
British Energy became part EDF Energy on 5 January 2009

Brought together two organisations committed to nuclear new build in the UK

Combined nuclear expertise is a powerful combination

- **58 Reactors in France**
- **15 Reactors in Britain**

EDF Group – a leader in the global nuclear revival



EDF Energy

- One of the UK's largest energy companies.
- The UK's largest producer of low-carbon electricity.
- Around one-fifth of the nation's electricity produced from our nuclear, coal and gas power stations, as well as combined heat and power plants and wind farms.
- More than 5.5 millions of business & residential customers
- Together nearly 20,000 people employed at locations across the UK.
- The official energy utilities partner and sustainability partner of the London 2012 Olympic and Paralympic Games

Our Vision

**We aspire to
lead the energy
change**

Our Mission

**Our purpose is to
bring affordable,
low carbon
energy solutions
home to
everyone**

EDF Energy

The company is organised into the following business units:

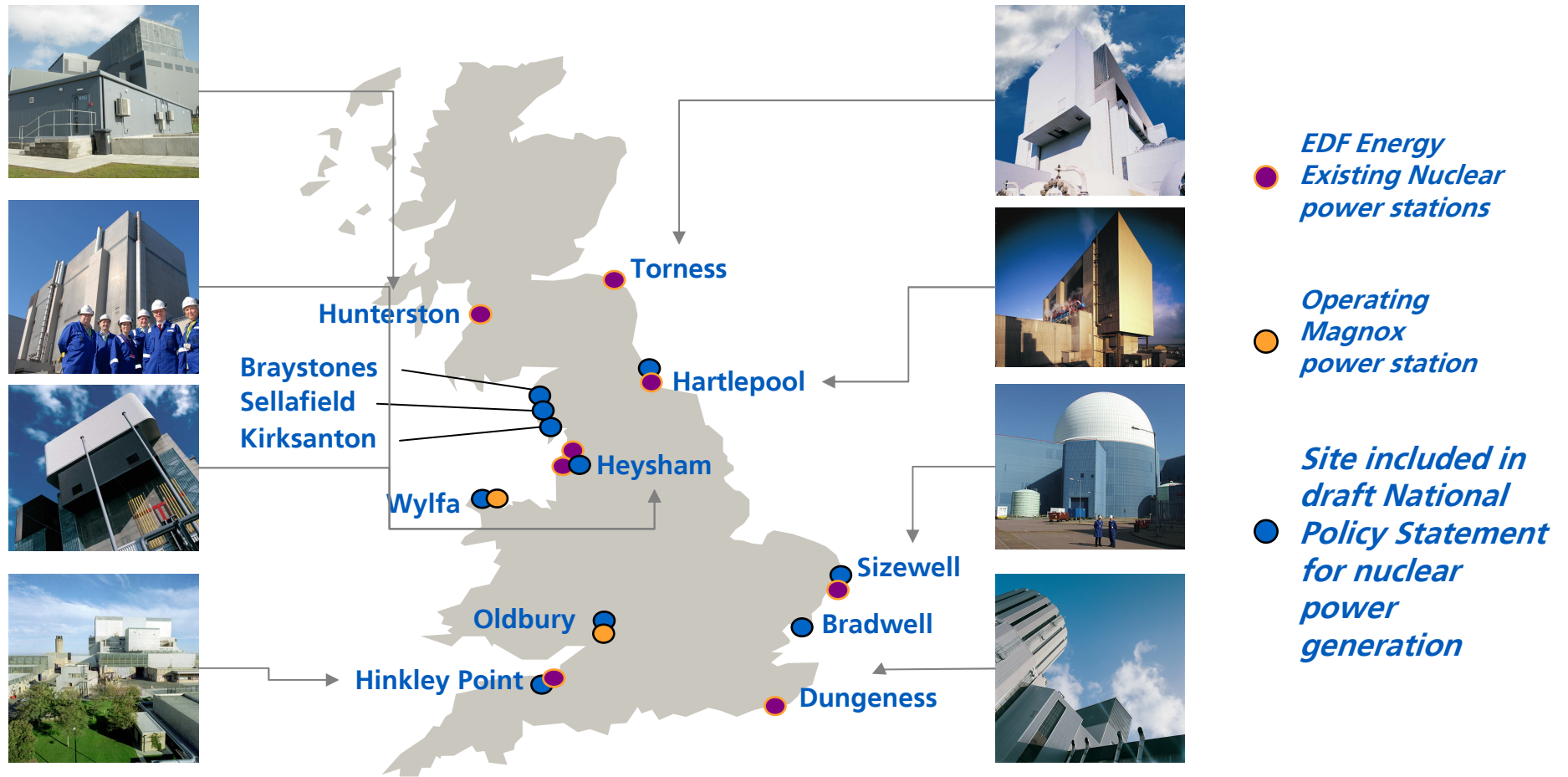
- **Existing Nuclear** - operates eight nuclear power stations in the UK
- **New Nuclear Build** - tasked with the delivery of the new generation of nuclear plants
- **Energy Sourcing and Customer Supply** - runs power stations and wind farms, buys and sells power to meet future generation and customer needs and deals with all our energy customers
- **Networks Branch** - develops, constructs and operates public and private power networks
- **CSS&I** – provide support services to EDF Energy with the optimum combination of cost and quality

Existing Nuclear

- **The Existing Nuclear Business Unit operates eight nuclear power stations in the UK with a combined capacity of almost 9,000 megawatts – electricity that is vital to the UK economy.**
- **Between them, our nuclear stations generate around a sixth of the UK's electricity virtually carbon-free**
- **The provision of low carbon electricity helped the UK avoid the release of more than 30 million tonnes of CO2 being emitted into the atmosphere. That is equivalent to taking half the cars off the UK's roads.**
- **We operate two types of nuclear reactor: the advanced gas-cooled reactor (AGR); and a pressurised water reactor (PWR)**
- **Sizewell B is the only PWR nuclear power station in our portfolio**



Existing Nuclear & other nuclear power stations in the UK

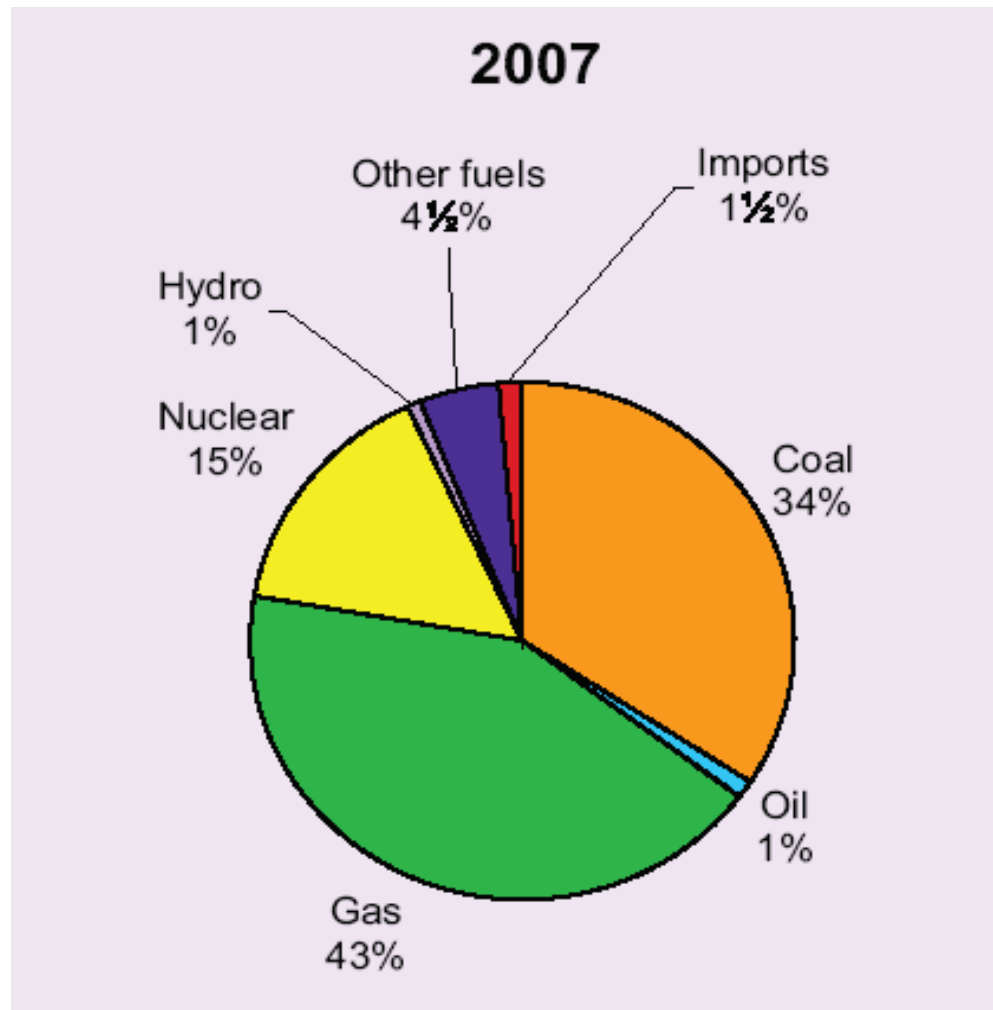


EDF Energy is the UK's largest nuclear generator, supplying 11 million homes – virtually carbon free

Nuclear New Build

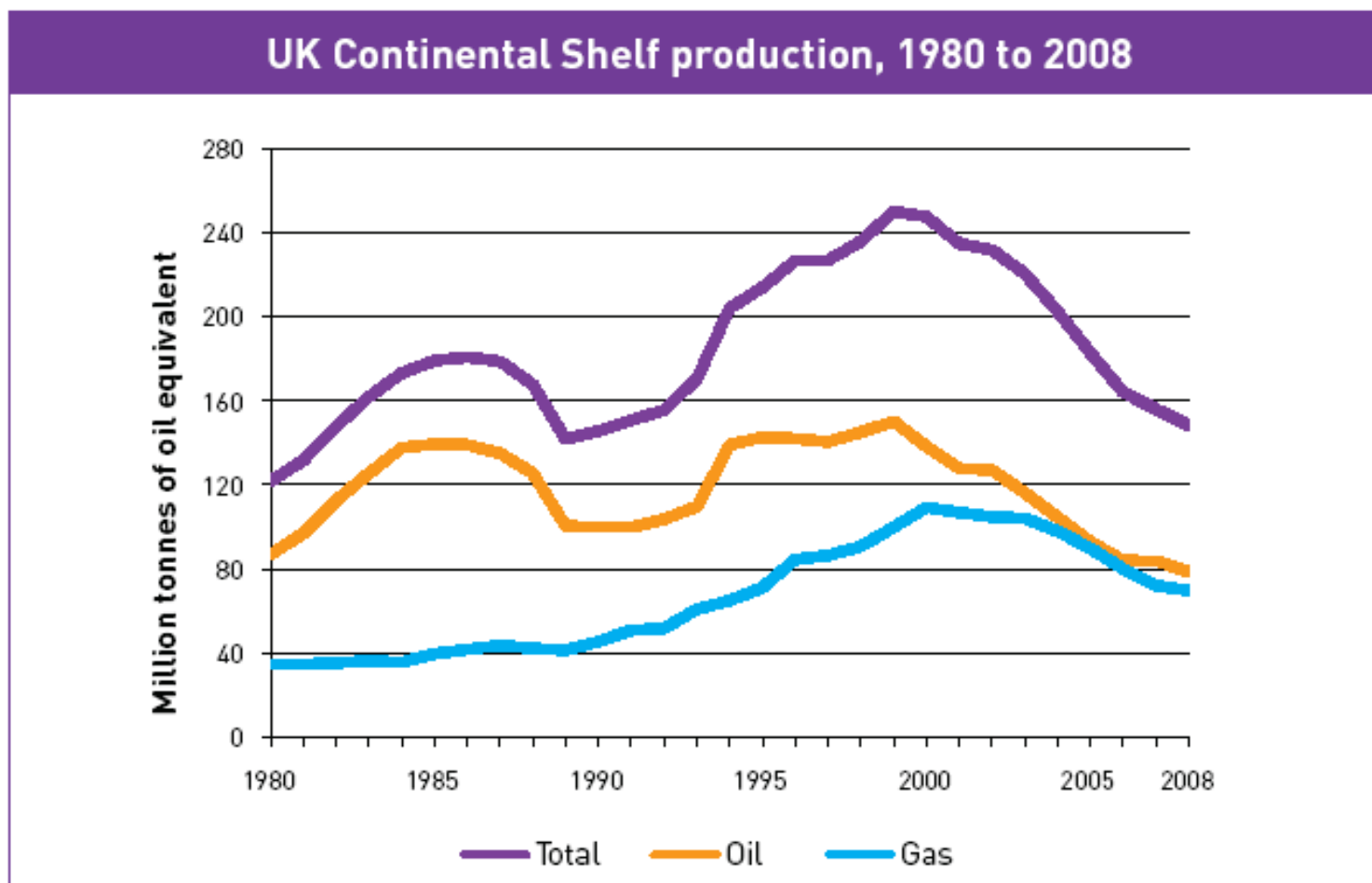
- New Nuclear has a key role to play as part of a diverse generation mix to meet the three energy challenges to provide clean, secure and affordable energy
- Our expertise as the world's most experienced nuclear operator, safely running 58 reactors in France and 15 in the UK means we can play a leading role in new nuclear in this country
- We plan to build 4 new EPR reactors in the UK with the first operational by the end of 2017
- Plan to build two reactors at Hinkley Point and two at Sizewell
- Our template for this is the EPR plant we are currently building in Normandy.

Increasing reliance on gas to generate electricity



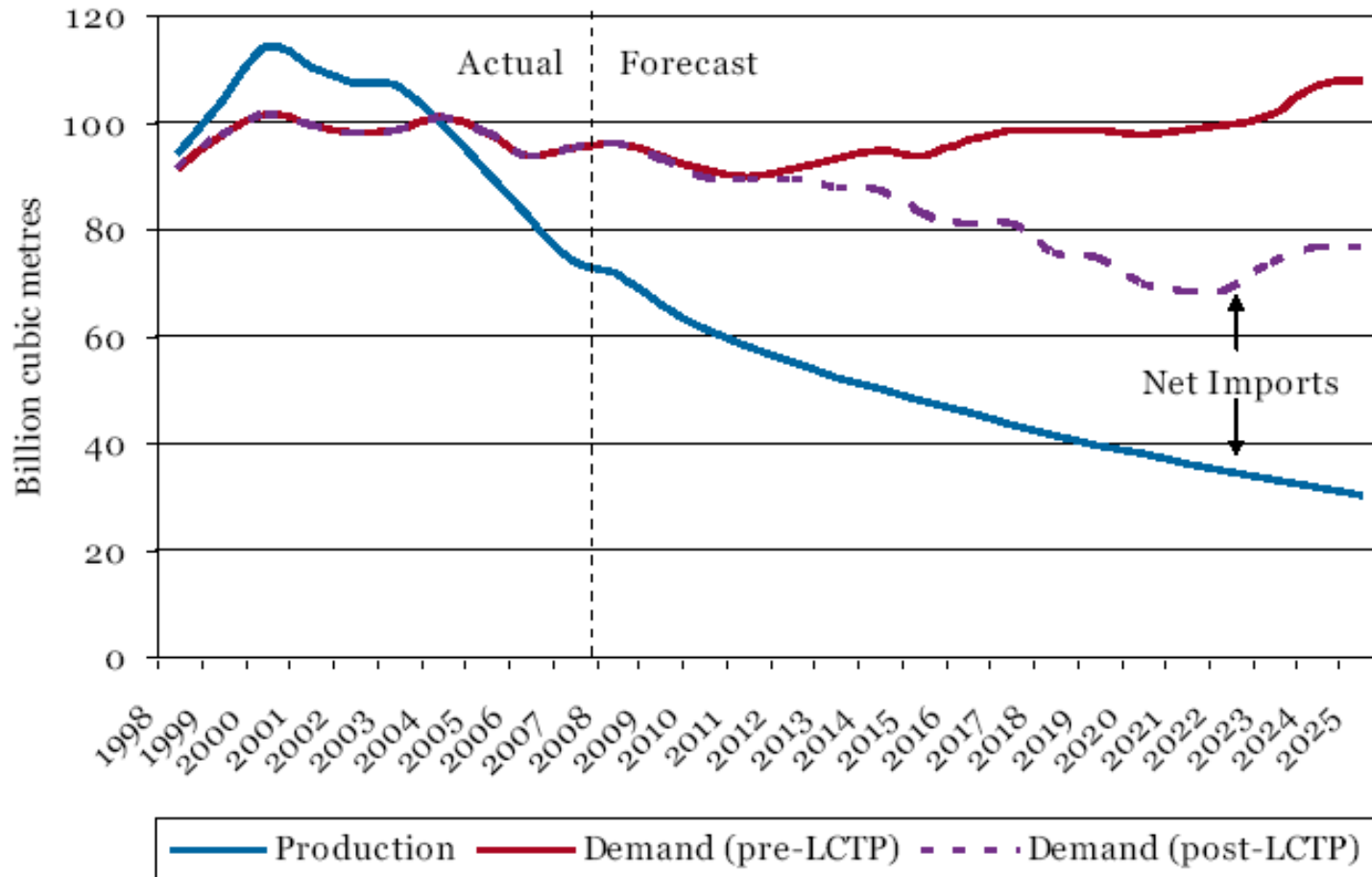
Source: Energy in Brief, BERR, July 2008

North Sea oil and gas production is declining



Source: UK Energy in Brief 2009, DECC

UK Production and Consumption of gas



Source: energy security: a national challenge in a changing world, Malcolm Wicks MP

Policy framework

2007

- Energy White Paper
- Planning White Paper

2008

- White Paper on Nuclear Power
- Managing Radioactive Waste Safely
- Planning Act
- Energy Act
- Climate Change Act

2009/10

- National Policy Statements



The policy case for nuclear

Low Carbon Emissions



Helps combat climate change

Stability of Costs



Benefits customers and UK competitiveness

Security of Supply



Reduces reliance on imported gas



Nuclear New Build and the UK EPR

- The EPR is an Areva/EDF evolutionary design and is a pressurised water reactor (like Sizewell B)
- 2 reactors, 1630 MW (electrical) each
- 4 reactors over two sites (Hinkley and Sizewell) would meet roughly 12% of UK's electricity demand
- Approximately 700 staff during operation
- Operating life of 60 years

Cutaway of a single EPR

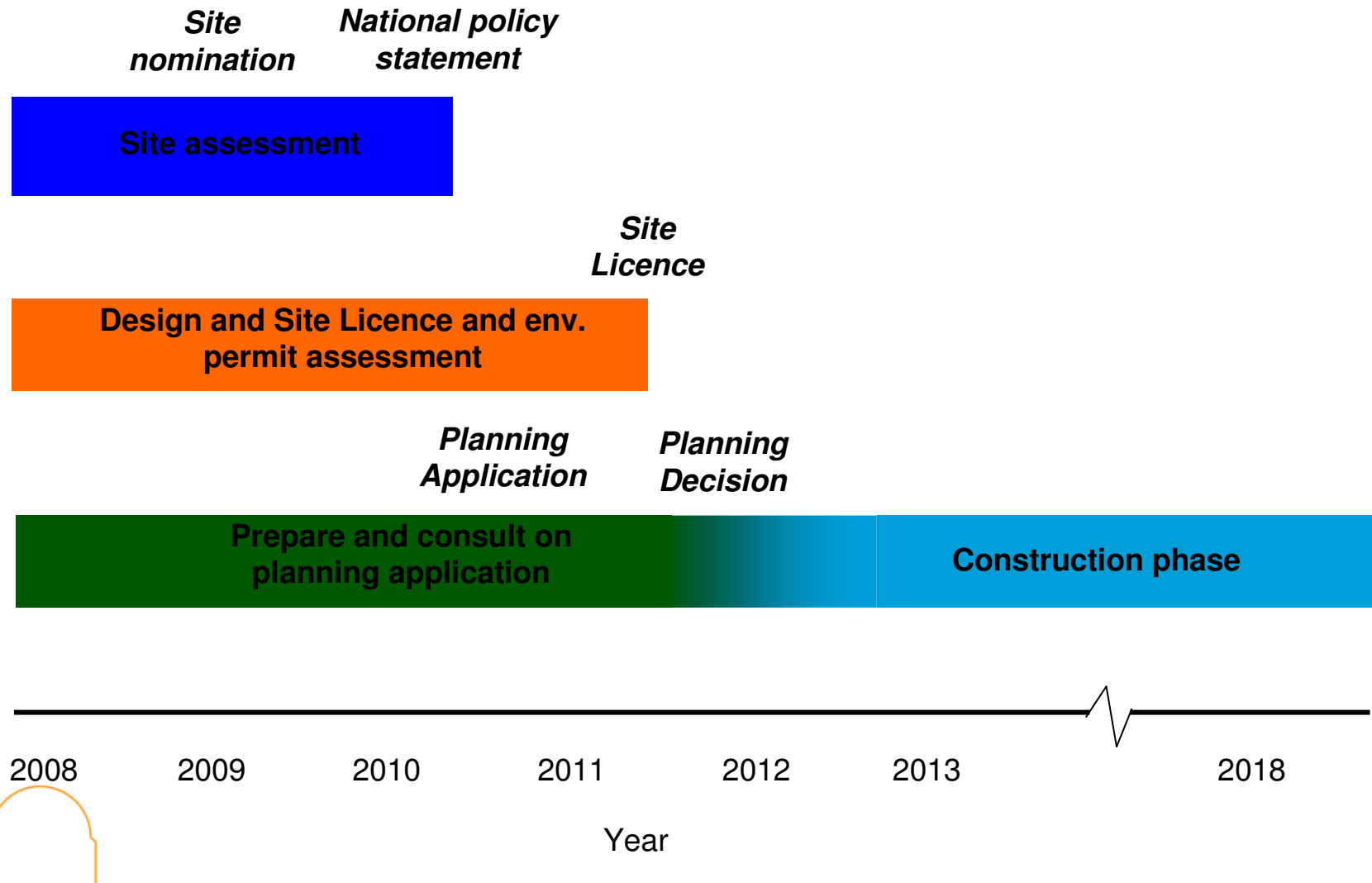


Artist's impression of Hinkley Point C, Somerset

Flamanville 3, Normandy, August 10



Nuclear New Build – Indicative Timetable for First UK Unit



thank you