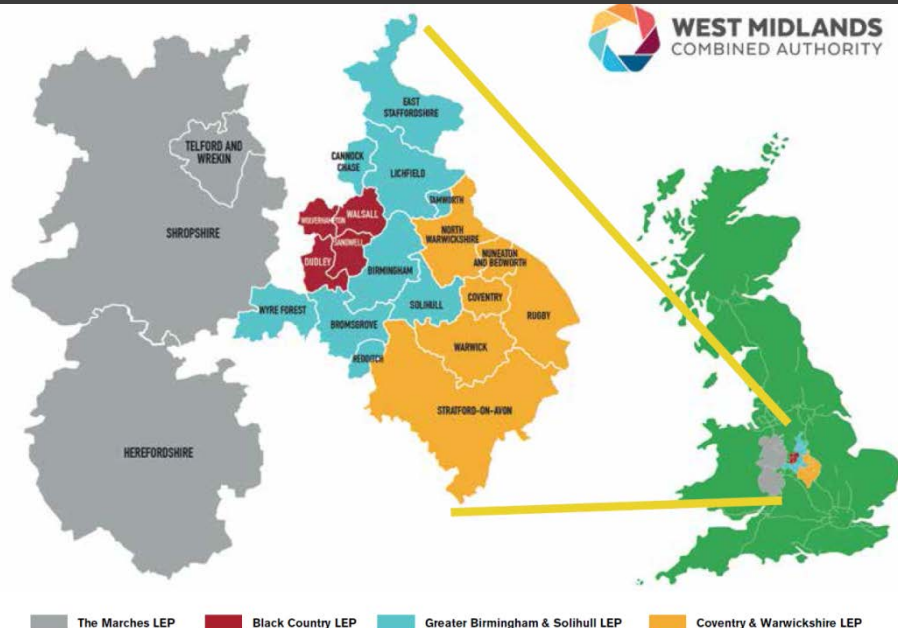


ENERGYCAPITAL

Professor Martin Freer
Director of the Birmingham Energy Institute



**OUR AMBITION IS TO ESTABLISH A POSITION
OF GLOBAL MARKET LEADERSHIP IN THE**

\$2.7 TRILLION MARKET

FOR ENERGY TECHNOLOGIES, FOCUSING SPECIFICALLY ON
THE SMART AND DISTRIBUTED ENERGY SOLUTIONS THAT WILL
SUPPORT THE CONNECTED SMART CITIES OF THE FUTURE.

The Birmingham Energy Institute:

BIRMINGHAM
ENERGY
INSTITUTE

Energy storage

Nuclear energy

Economics

Hydrogen and fuel cells

Transport

Electricity and smart grids

Materials for energy applications

Sustainability

Strategic elements & critical materials

Energy Law and regulation

UNIVERSITY OF
BIRMINGHAM



BIRMINGHAM
ENERGY
INSTITUTE

 **BHAMENERGY**
 WWW.BIRMINGHAM.AC.UK/ENERGY

**WE
HAVE
OVER...**

140
ACADEMICS

4
FROM
COLLEGES

**ENGAGED IN ENERGY AND ENERGY
RELATED RESEARCH AND DEVELOPMENT**

£75 MILLION

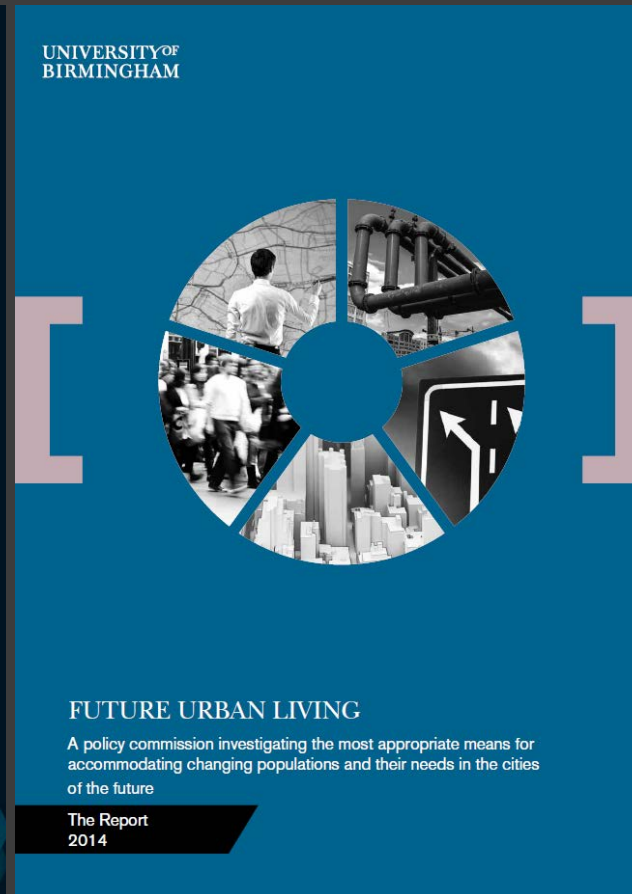
**AWARDED FROM EXTERNAL PROJECT
FUNDING RELATED TO ENERGY**

Policy Commissions

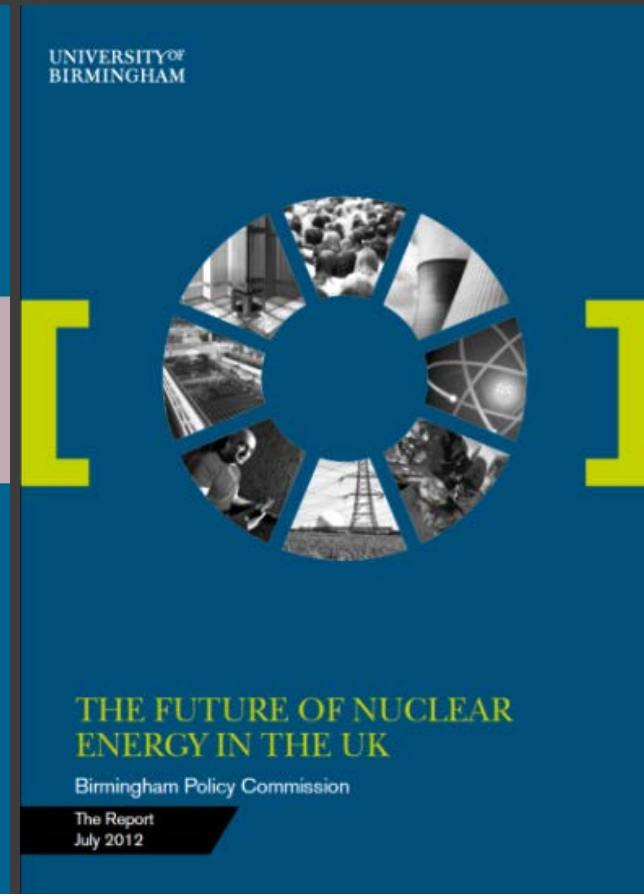
2015



2014



2012





AN INNOVATIVE PARTNERSHIP
BETWEEN SIX LEADING UK
UNIVERSITIES – ASTON,
BIRMINGHAM, LEICESTER,
LOUGHBOROUGH, NOTTINGHAM
AND WARWICK – AND THE BRITISH
GEOLOGICAL SURVEY, SET TO
DELIVER A STEP CHANGE IN THE
NATURE AND IMPACT OF ENERGY
RESEARCH IN THE UK.

The Energy Research Accelerator

brings together the
Universities of Aston,
Birmingham, Leicester,
Loughborough,
Nottingham and
Warwick and the British
Geological Survey to
form a **£180M**
research hub which will
deliver on UK expertise
and leadership to give
the UK competitive
advantage in energy
research and
development.

Fundamental R&D

Demonstration and
validation

Manufacturing and
productionisation



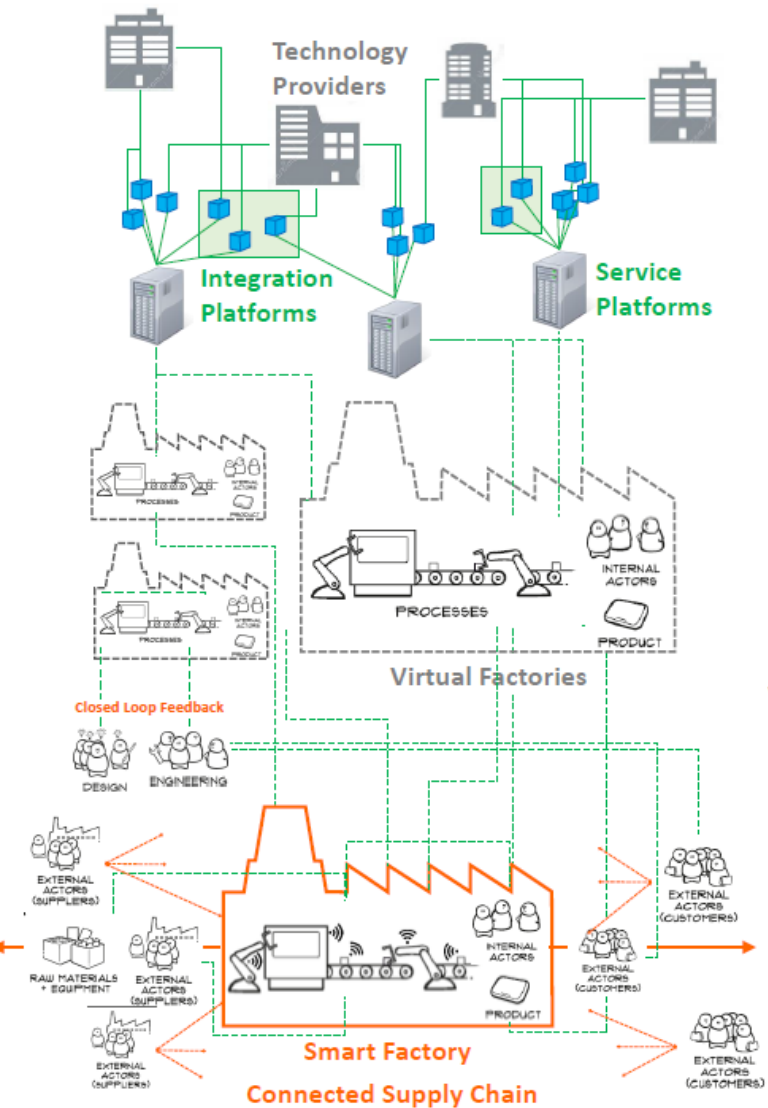
CATAPULT

CATAPULT
Manufacturing



Fraunhofer
UMSICHT

FUTURE SUPPLY NETWORKS



TECHNOLOGY AREAS

Enablers

Information Solutions,
Advanced Analytics and
Intelligence as a Service

Service Platforms for Service
Provision and Connectivity

Horizontal Communications
as Enablers of Networks and
Connectivity

Virtual Factories as Test Beds and
Enablers of Informatics Services

Autonomous Robotics
and Control

Cyber-Physical
Production Systems

ITEMA
International
Thermal
Energy
Manufacturing
Accelerator



Energy Capital

Transform West Midlands into a UK centre of excellence for energy innovation

Energy Innovation zones

New business models

New regulatory models

A Birmingham Energy Company

ENERGYCAPITAL

ENERGYCAPITAL

CREATING THE ENERGY
MARKETS AND SYSTEMS
OF THE FUTURE

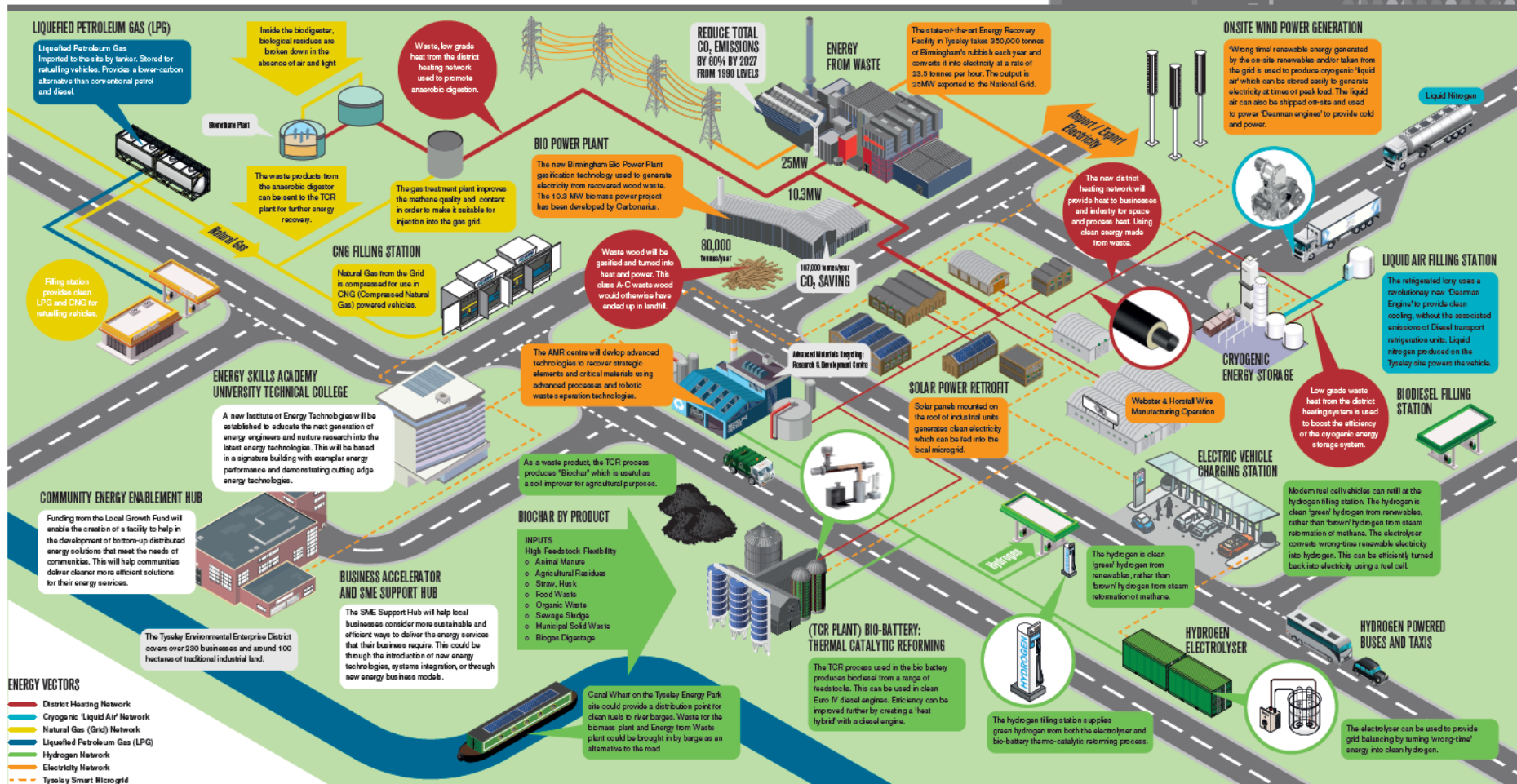
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BIRMINGHAM: ENERGY CAPITAL

TYSELEY ENVIRONMENTAL ENTERPRISE DISTRICT

The City of Birmingham has ambitious plans to deliver carbon reductions, create a low carbon infrastructure and to modernise how it deals with waste. These priorities are captured in the Carbon Roadmap produced by the City's Green Commission which articulates the ambition via CO₂ Emissions Target and Carbon Budgets.



Video