



ECRN 8 th Congress
Brussels October

Humber Renewable Energy Network

Dr Glyn R Hughes

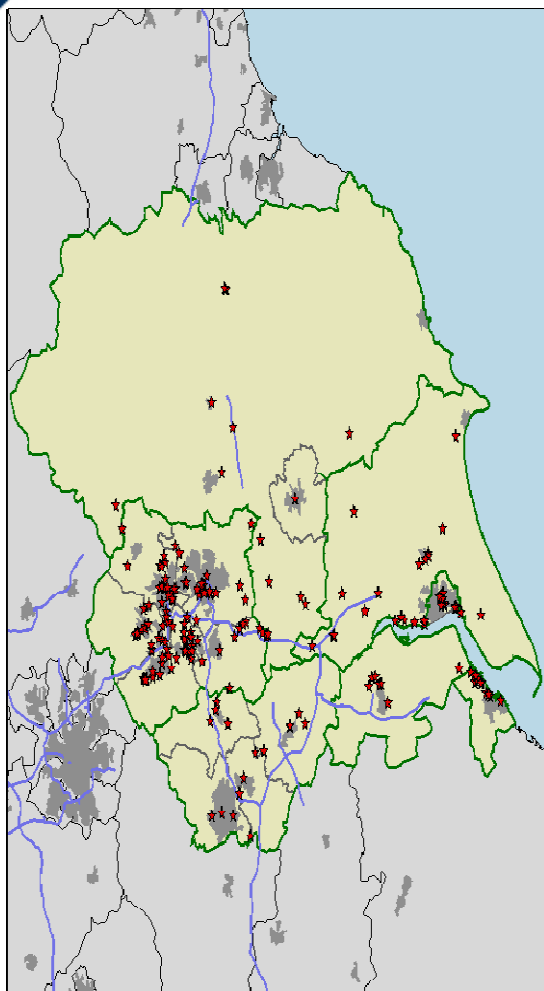
CEO
Humber Chemical Focus Ltd
&
Chair Humber Renewable Network Group



What I'd like to cover today

- ∇ Introduction
- ∇ Brief Overview of Humber Scale Industrial Development
- ∇ Transition to Renewable Process & Power Sector
- ∇ HCF Work and Partnering Model
- ∇ Questions

Our Region



As a region
£80 billion GVA

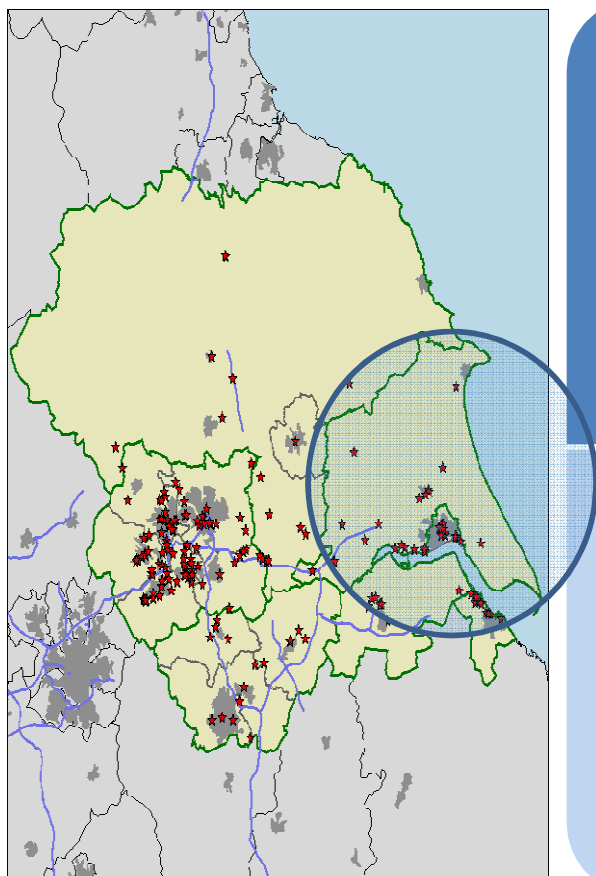
Population
5 million

Yorkshire & Humber

Chemicals
10% UK Output

Energy
15%+ UK
Generation &
Distribution

Focus Today: The Humber Estuary Area



Maritime & Estuary
Location

UK's Largest Ports
Infrastructure

The Humber

Chemicals
€8 billion Output

Energy
15%+ of UK's
Generation & Fuels



Developing A Humber Renewables Network



00's

Polymers
Pipelines
Ports Development
New CHP's
Off-shore Gas

2010's.....

Bio-Fuels
Bio-mass to Energy
Food waste to Energy
South Bank
Gas Pipelines
CHP Expansion
Oleochemicals
Energy Integration
Wind
Carbon Capturing & Storage

90's

Port Infrastructure
CHP's
Corridor

80's

Gas Power
Stations
Refinery
Expansions
Polymers
Specialty Gases
Specialty Chems

Industrial Development in the Humber's Process and Energy Industries

70's

Off-On Shore Gas
Energy
Specialty Chemicals
Drax

60's

Commodity Chemicals
N Sea Gas
Refineries
Coal Fired Power

50's

Pigments
Fertilizers
Metal Refining

40's

Marine, Timber,
Natural Oils, Iron-
Steel

Sector Traditional Drivers-Feed-stocks

Fossil
+
Renewables

Coal/Town Gas

Oil/Gas/Coal

Gas, Gas & Coal

Specialty Chemicals
Drax

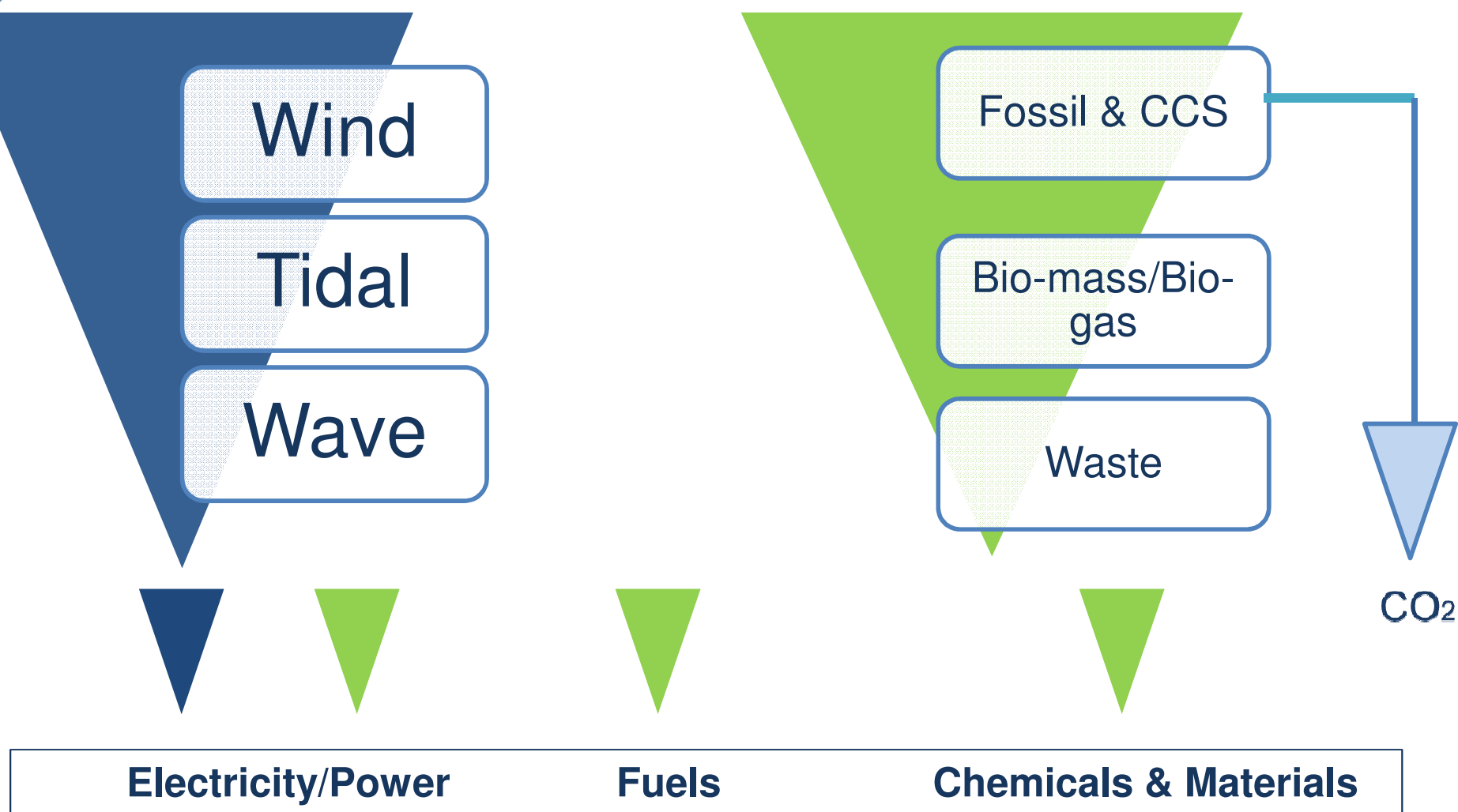
Refineries
Coal Fired Power

Pigments
Fertilizers
Metal Refining

Post
War
Marine, Timber,
Natural Oils, Iron-
Steel



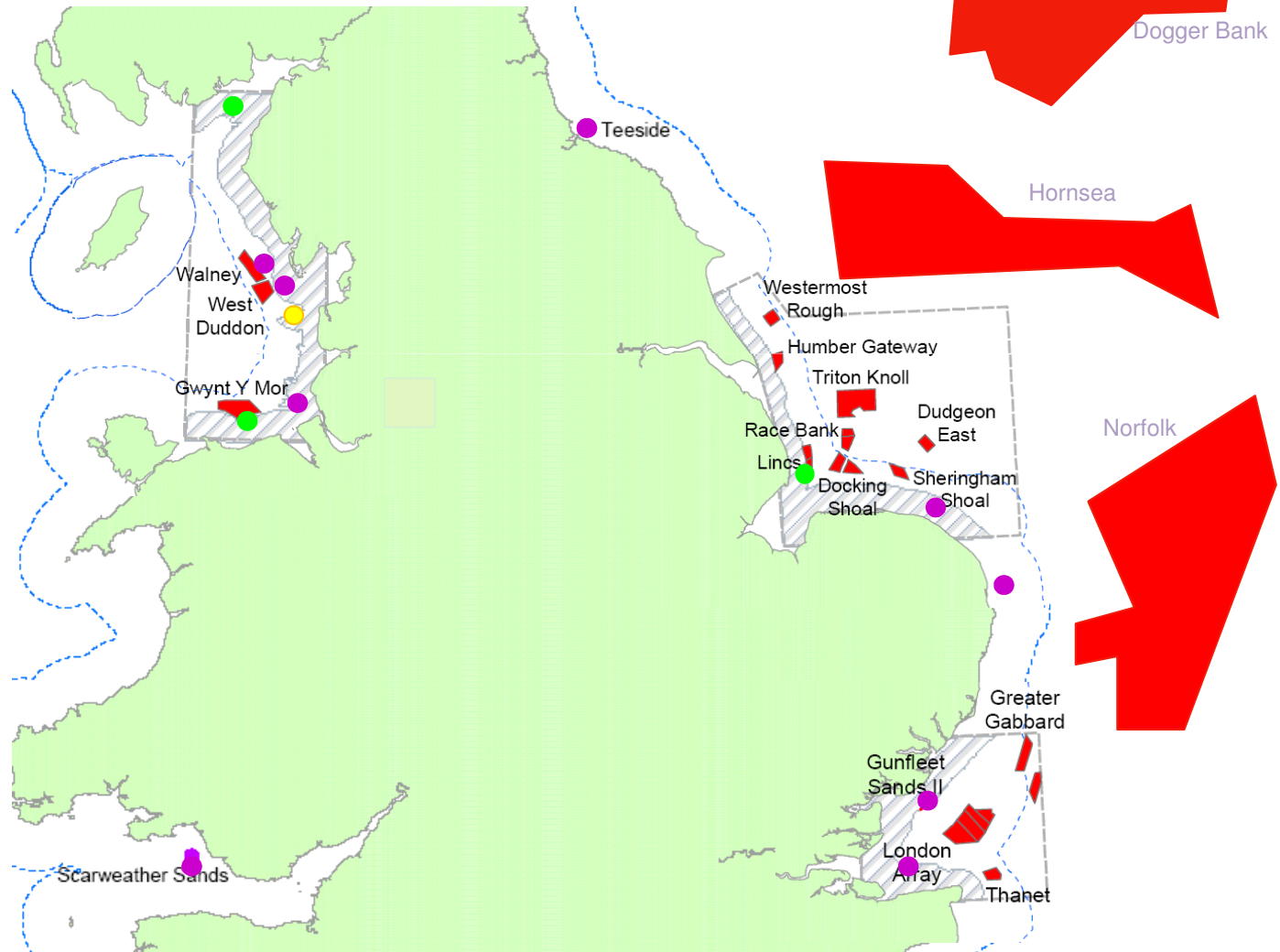
Humber: A Natural Location for Renewable and Low Carbon Scale Generation



UK New Wind Energy Developments: Crown Estate Offshore Wind Licensing Rounds

1. ~1500 MW
2. ~7100 MW
3. ~ 32,000MW

*Just the 3 East
Coast English
Zones shown
~ 20,000MW*





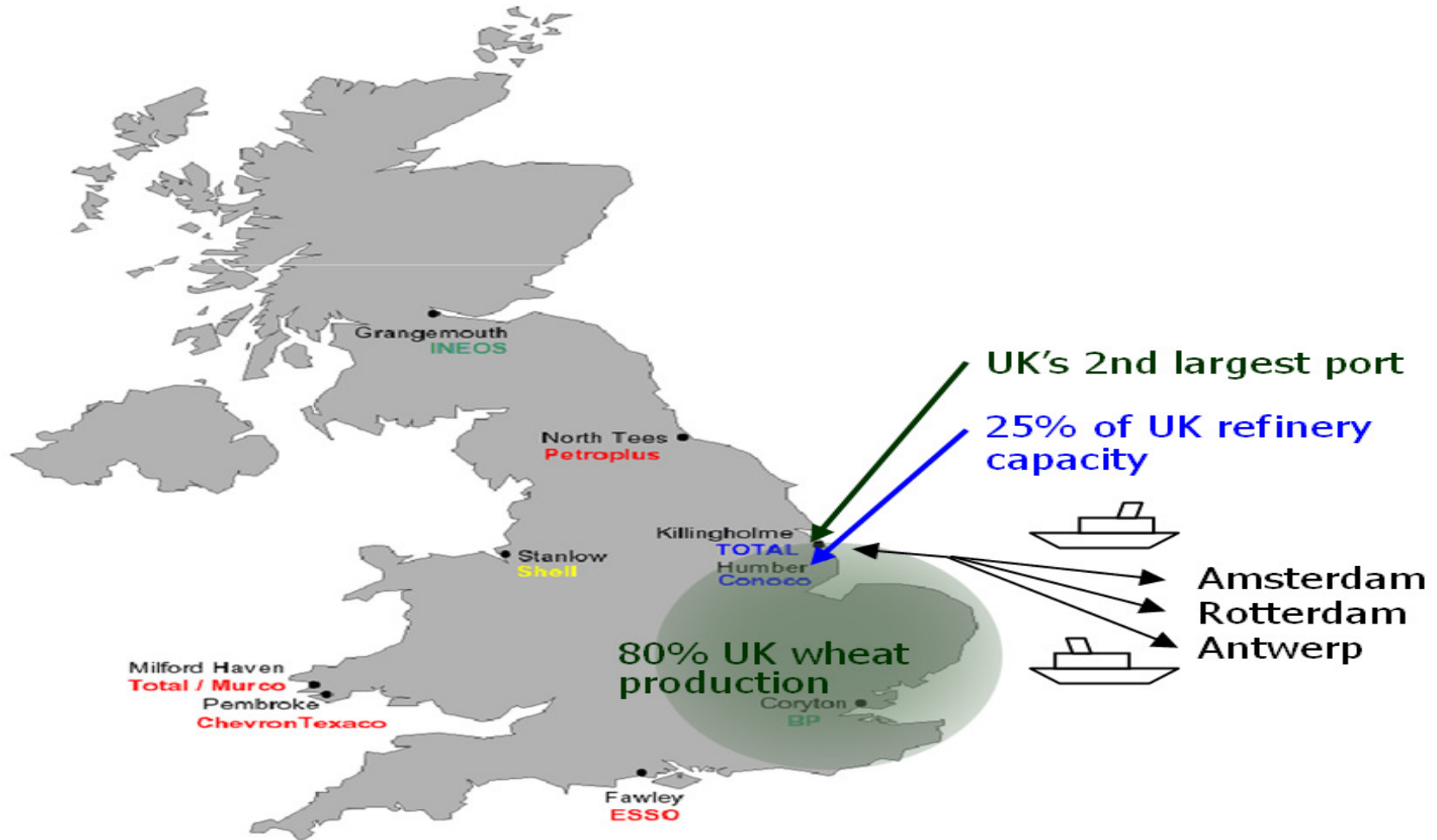
Wind Power Investment



E.ON

generating good chemistry

Renewable Clean Fuels Humber Bio-fuel Manufacturing, Storage & Distribution



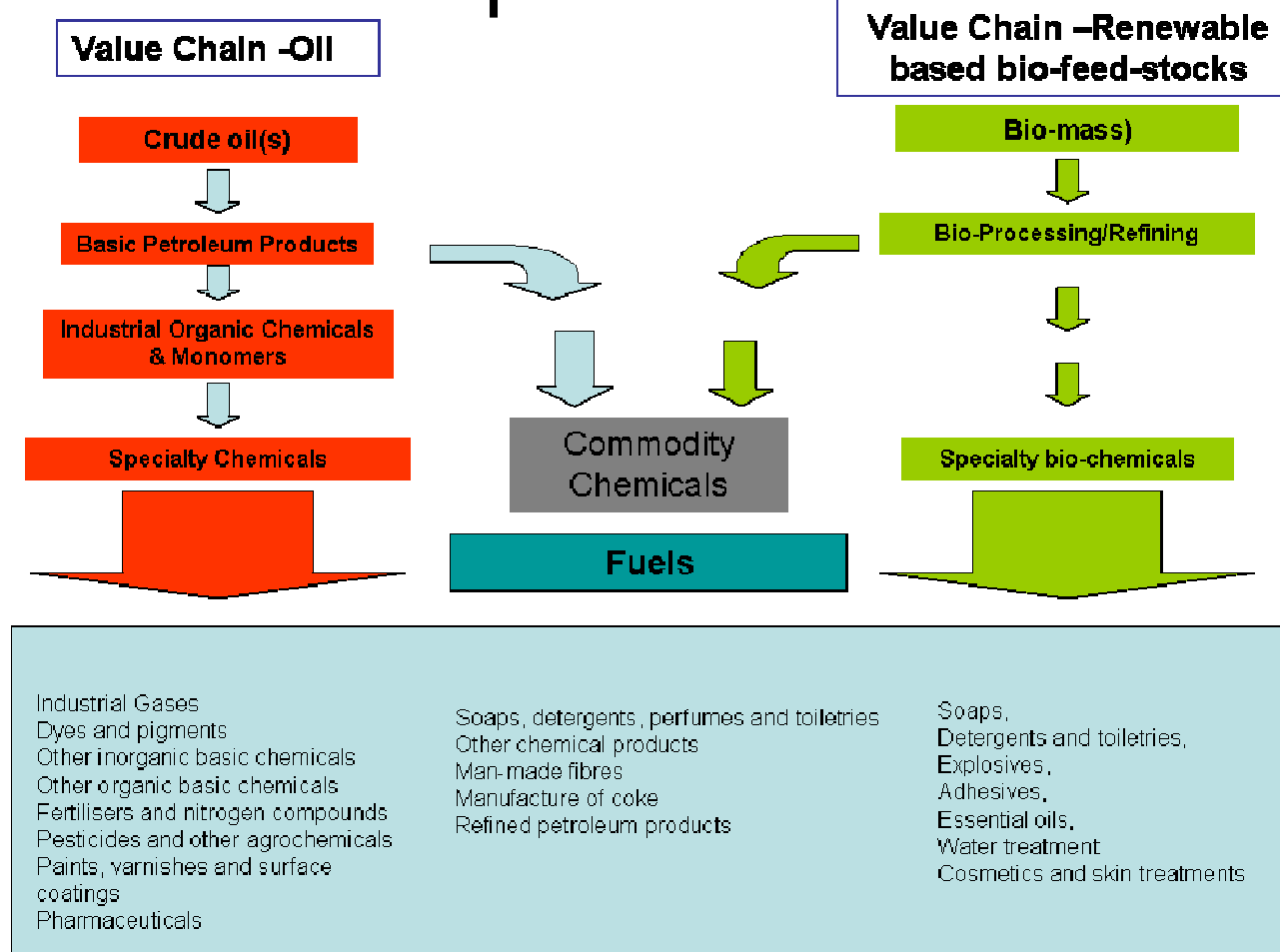
Bio-mass to Energy



Drax

generating good chemistry

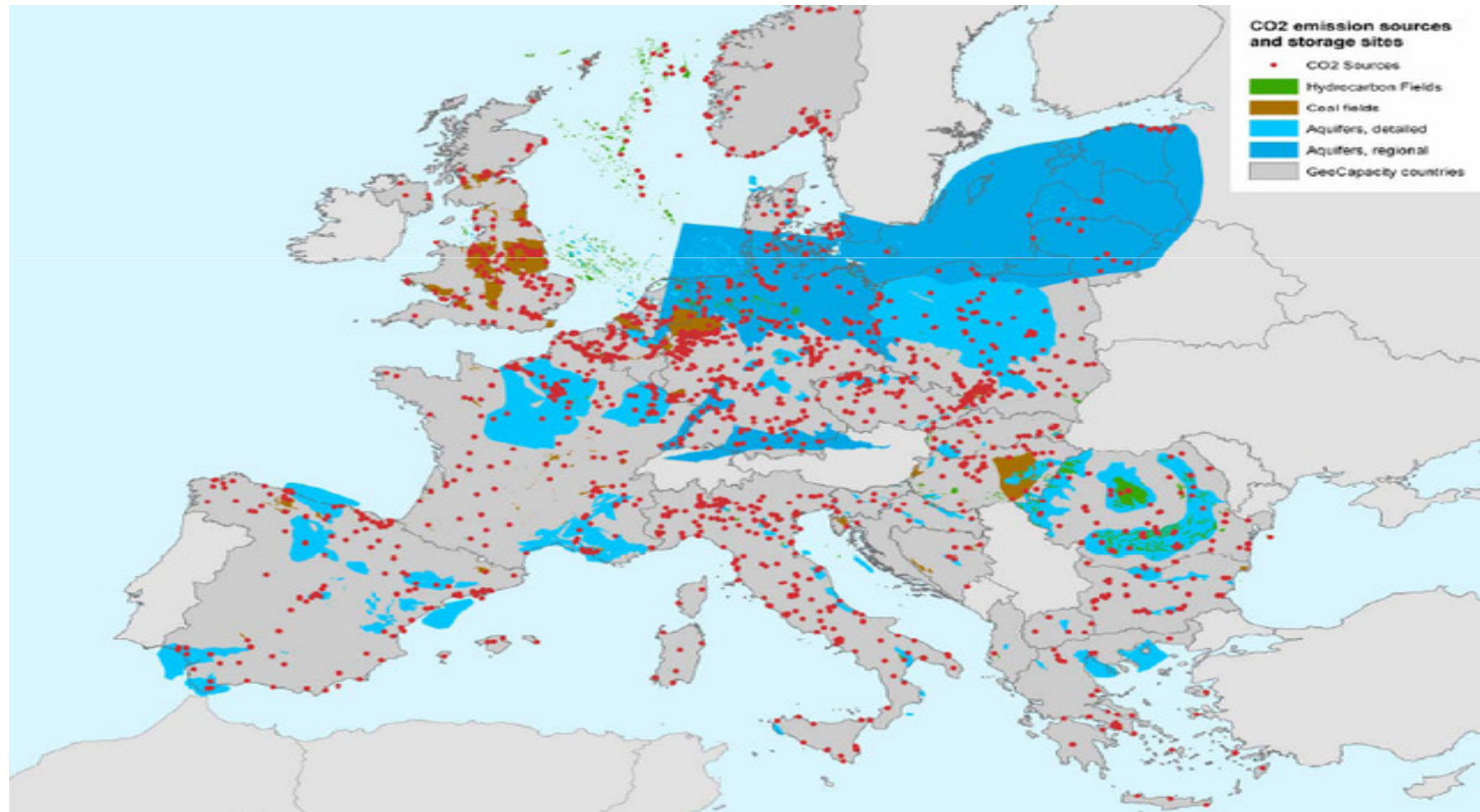
Raw materials, processes and products



Market Applications

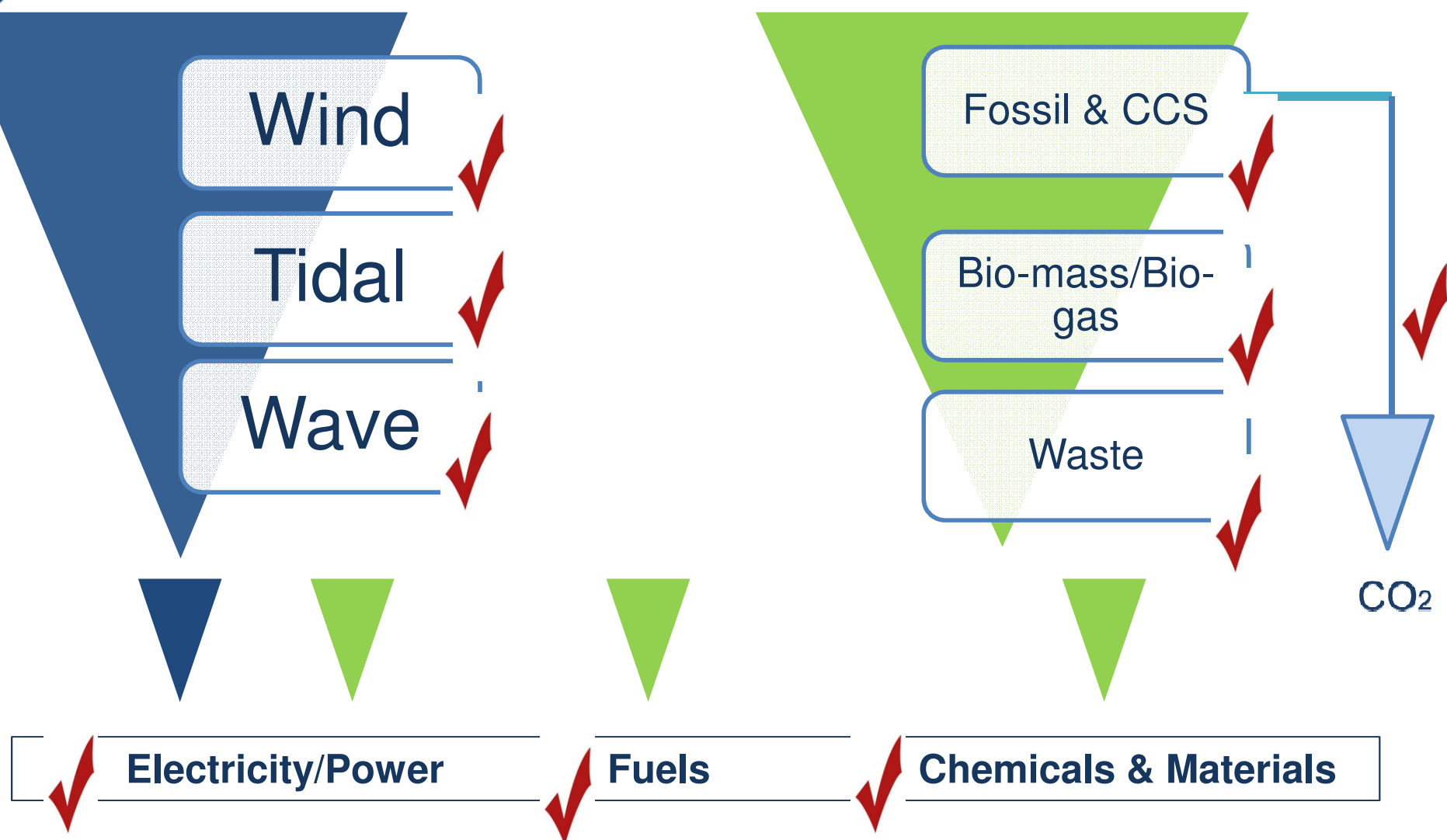
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Yorkshire & Humber and Low Carbon Agenda CO₂ Emissions and Strategic Storage Potential





Humber: A Renewable & Low Carbon Future!





About HCF

Private-Public Sector Business Partnership

100
members
5 Staff

£300 k
turn-over

Serving :

£6 billion
process
sector

The
Humber
Region

USP's

Public-
private
sector
interface

CATCH
Training
Facility

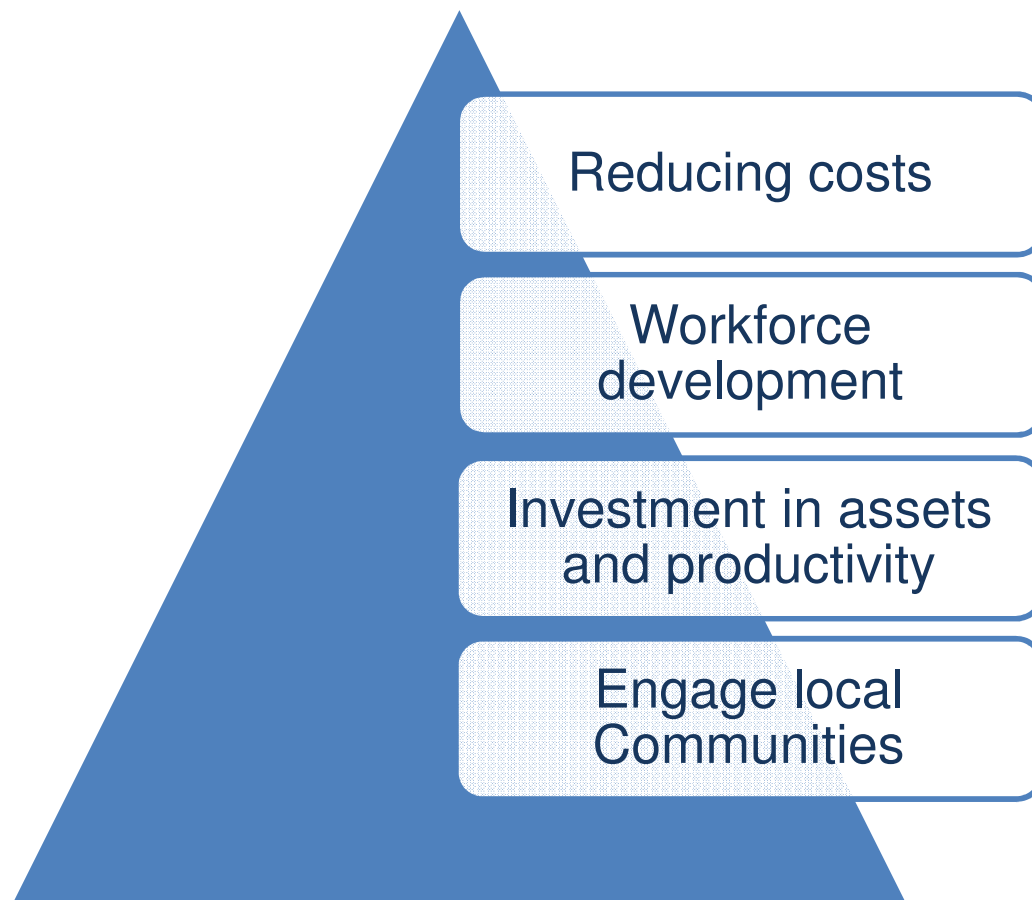
USP's

Local Economic
Sector Knowledge

**Network
Development**



The Networks Business Focus





Our Humber Membership & Network Focus



Our Humber Network(s) Focus

Growth and Economic
Development

Chemicals

Bio-fuels

Renewable
Energy

Regulatory Change

Major Hazards

Environmental

REACH

Operational
Excellence

Human
Resources

Skills

Community
Panels

Local Community

Humber Renewable Network

- 2006 IBM Research
- 2007/9 Hull Forward Development & Leadership
 - Pan-Humber
 - 40+ Members/Attendees
 - Marketing
- 2009 - HCF Acquired Network Responsibility
 - Survey
 - Expanding membership
 - New Marketing Materials
 - Briefings
 - Research
 - Supporting a new energy cluster approach
 - Strategic Influence to UK Government



Humber Renewables Network

Focus:

Scale & Strategic Industrial Developments

Participants:

Companies, Government Agencies, NGO's, Community

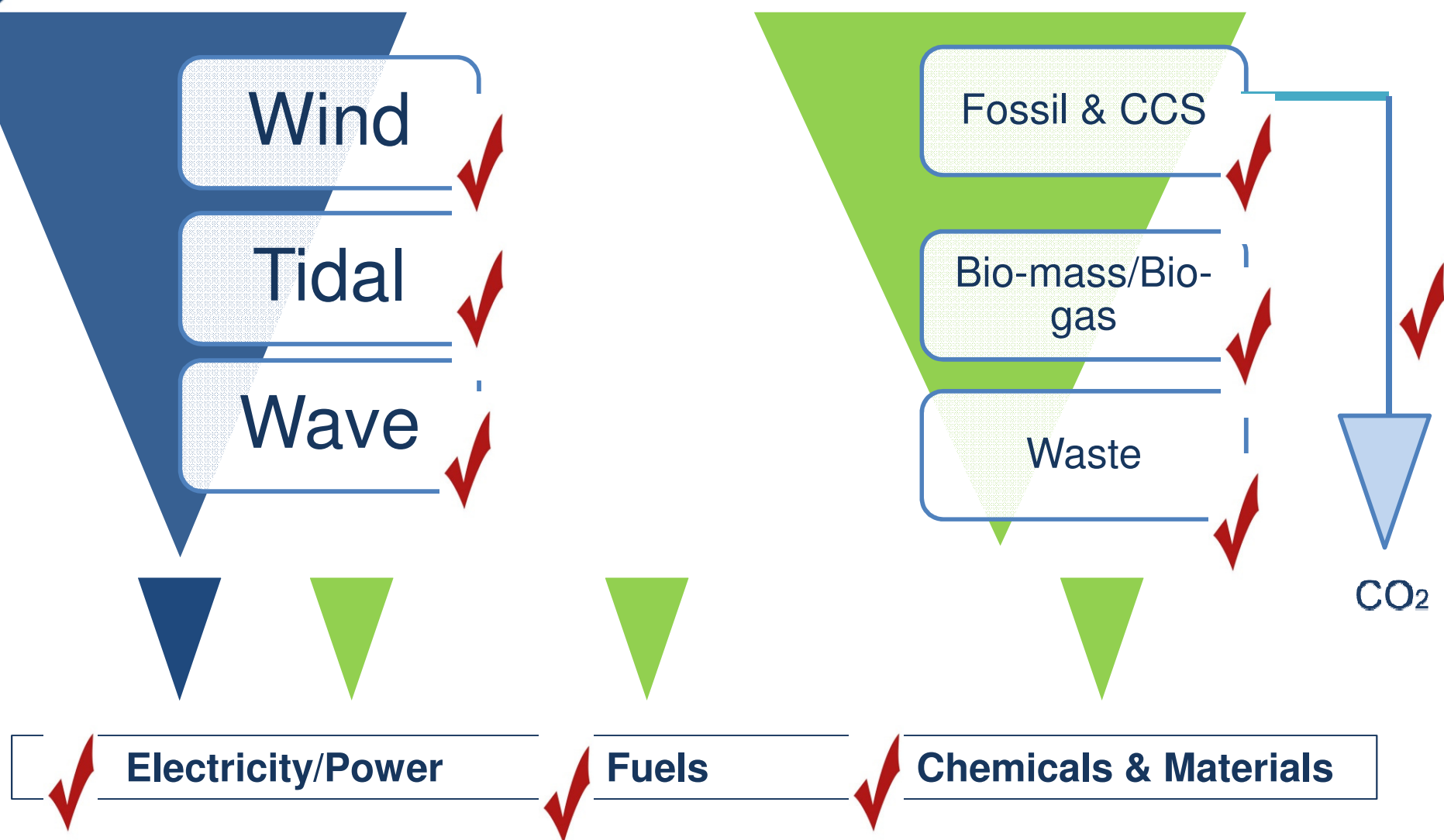
Activity:

Information & Knowledge Exchange

Strategic Influencing

Building local 'scale' to make a difference e.g interventions

We will have all this!





Summary

Renewables

A new and key economic sector for the Humber

Our Role

Leveraged as a proven cluster vehicle to build new relationship group

Focus

Strategic Outcomes
Economic Development
Performance

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Thank You

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