

Coastal Futures - 2019



SUDG – a socio-economic update

Peter Barham – Seabed User and Developer Group

www.sudg.org.uk



Current situation

- SUDG industries make a significant contribution to the UK economy
- Environment needs protecting and improving
- Extensive experience of working with legislation and regulators

Future goals for environment and economy



- Need for economic growth to meet UK targets for energy, climate change etc
- Better alignment of socio-economic targets to parallel environmental targets?
- 25 year Environment Plan, ecosystem services, net gain and natural capital



Current approaches from SUDG: environmental:



- Working with conservation NGOs
 - Shared objectives
 - Development of agreed good practices
 - Joint statement
- Better ways to comply with legislation
 - Better regulation
 - Link compensation to site management
 - Ecosystem and natural capital



Current approaches from SUDG: socio-economic:



Updating information on:

- Economic value to UK economy
- Value to societal well-being
- Benefits of sustainable development
- Positive and negative impacts on natural capital assets



Socio-economic study ABPmer and ICF



What

- Social and economic data
- Future trends
- Preliminary look at Natural Capital

How

- Differing sources of information for different sectors
- As accurate as possible
- Not necessarily the same methods as used in 2008, but still consistent between sectors



Definitions for both social and economic data



Direct impact: the value generated and jobs supported directly by the economic activities of businesses in the sector.

Indirect impact: the value generated and jobs supported in industries as a result of the sector's purchase of goods and services inputs from its UK supply chain.

Induced impact: the value generated and jobs supported in the wider economy when the direct and indirect employees of the sector spend their wages and salaries.

Future trends in sector activity

- Three scenarios
 - Business as Usual
 - Nature at Work
 - Local Stewardship
- Approach
 - Identify key drivers of sector activity
 - Relative influence of drivers under scenarios
 - Indicative projections about future sector growth



Value of key sectors



Sector	GVA (£m) ⁱ	Change (%) ⁱⁱ
Minerals	247	5
Oil and gas	23516	-18
Offshore wind	3411	10.7
Wave and tidal	267	6.9
Ports	23810	1
Recreational boating	4720	- 2.4

**3.2% of
total GVA
UK**

i. Direct + indirect + induced

ii. Average growth per annum over last 5 or 7 years (depending on sector)

Number of jobs in key sectors

Sector	Number of jobs ⁱ
Minerals	1791
Oil and gas	280000
Offshore wind	30500
Wave and tidal	3242
Ports	690000
Recreational boating	142824



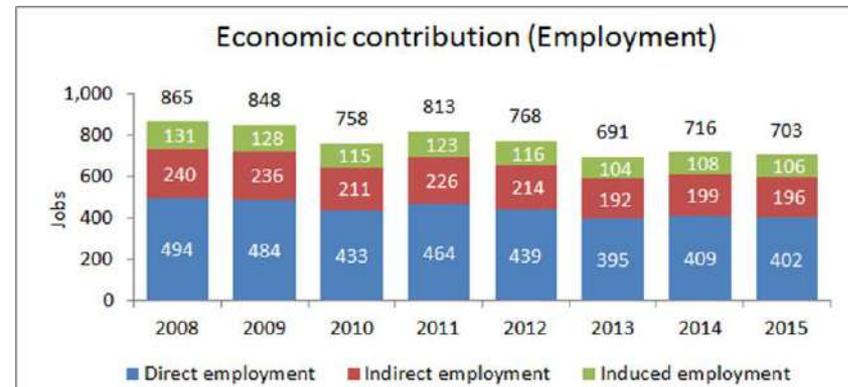
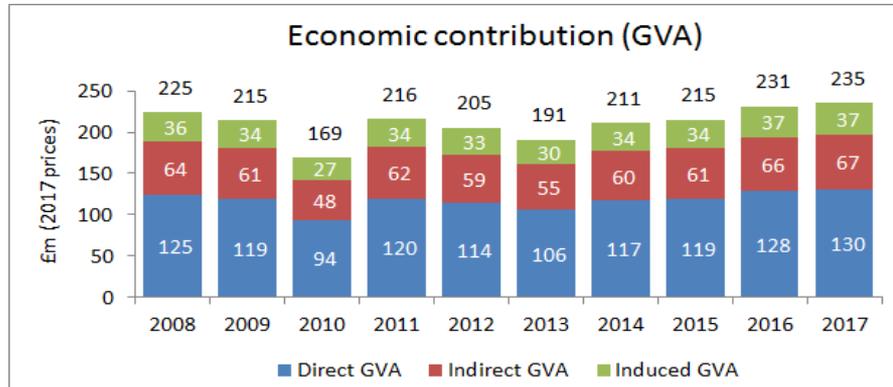
Total number of jobs = 1,154,000

i. Direct + indirect + induced

Mineral extraction: economic value



- Recovery since economic downturn
- £34m of capital investment over ten years to 2015

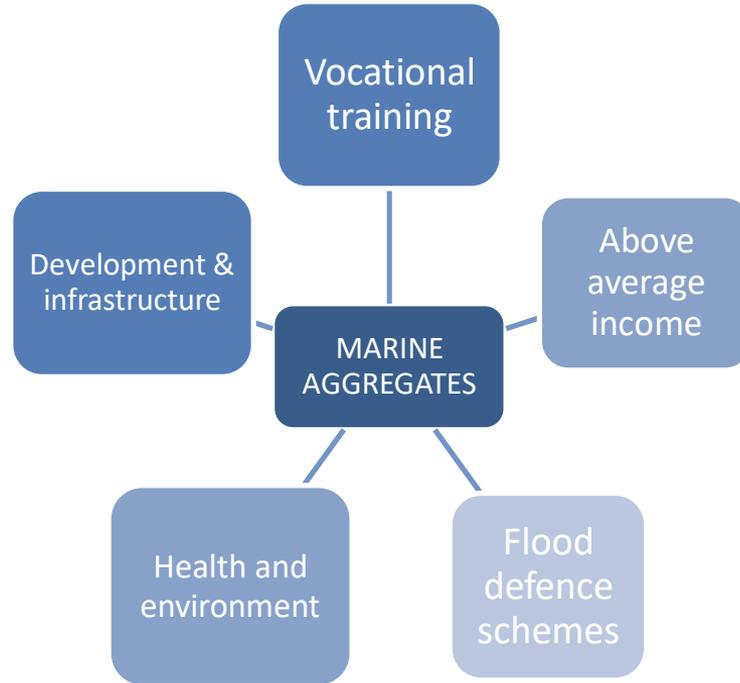


Socio-economics – Mineral extraction social value

Examples:

- 2012 London Olympic site,
- Heathrow Terminal 5,
- Crossrail,
- Cardiff Bay Barrage,

Barges carry 18,000 tonnes of marine-dredged aggregate to London every day replacing 900 lorry movements.



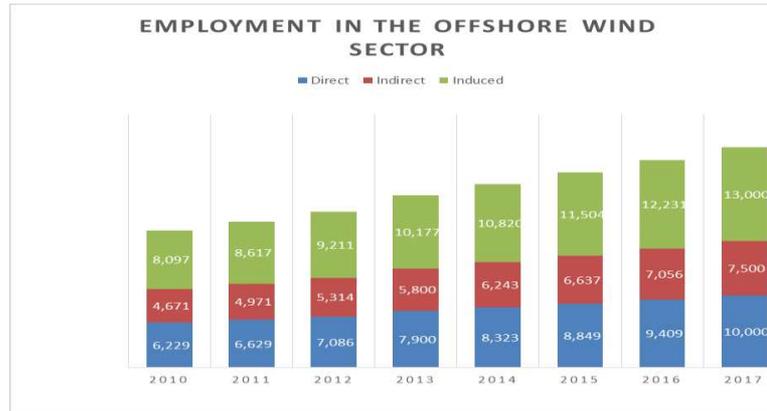
Lincshire is the largest beach nourishment scheme in the country protecting beaches and property from Mablethorpe to Skegness. value of £3bn

Marine aggregates: future scenarios



	Business as Usual	Nature at Work	Local Stewardship
Key drivers	<ul style="list-style-type: none"> Construction demand Climate change 	<ul style="list-style-type: none"> Construction demand Climate change 	<ul style="list-style-type: none"> Construction demand Climate change
Growth	<p>In line with OBR growth projections</p> <p>80% land sand and gravel / 20% marine sand and gravel</p>	<p>> BAU</p> <p>National infrastructure projects (e.g. nuclear)</p> <p>Increased beach recharge</p> <p>Increased contribution of marine sourced aggregates</p>	<p>> BAU</p> <p>Local infrastructure/energy projects (e.g. tidal lagoon)</p> <p>Increased beach recharge</p> <p>Increased marine sourced aggregates</p>

Socio-economics – Offshore wind economic value



Offshore wind in the UK – Estimated Direct, Indirect and Induced GVA (£m)

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Direct	672	790	862	937	1,019	1,118
Indirect	504	580	646	703	764	839
Induced	874	1,018	1,120	1,218	1,325	1,454
Total	2,050	2,388	2,628	2,859	3,109	3,411

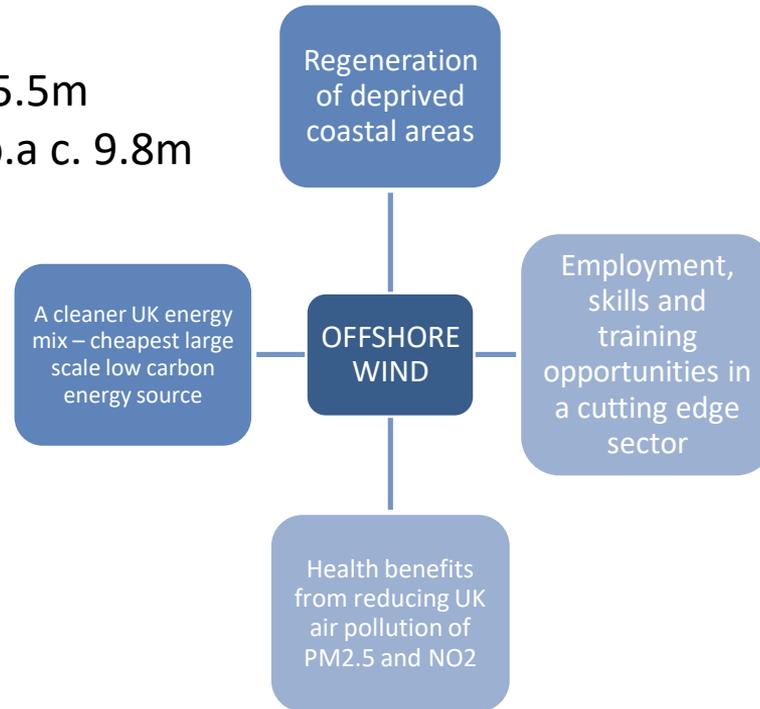
Offshore wind economic value



- UK leads the world in offshore wind development
 - 43% of Europe's capacity
 - world's largest offshore wind farm (Walney Extension)
 - world's first 8 MW turbines (Burbo Bank Extension);
 - world's first floating offshore wind farm (Hywind)
 - pioneering new designs
- Rapid turnover and GVA growth ~10%pa since 2008
- Investment and growth continuing
- Over 1,000 UK supply chain firms

Socio-economics – Offshore wind social value

Homes powered p.a. – c.5.5m
CO2 reduction – tonnes p.a c. 9.8m



Examples:
employment and regeneration on the Humber
£310m investment in Green Port Hull facility, resulting in the creation of ~1000 jobs in the UK

Offshore wind energy

	Business as Usual	Nature at Work	Local Stewardship
Key drivers	<ul style="list-style-type: none"> ▪ Climate change ▪ Policy ▪ Energy security ▪ Restrictions on other sectors ▪ Availability future lease areas ▪ Technology 	As per BAU	As per BAU
Growth	<p>All planned projects progressed</p> <p>Additional capacity via deep water areas and new lease areas</p> <p>35 GW operating capacity by 2038</p>	<p>Technology enables development in previously unsuitable areas</p> <p>45 GW by 2038</p>	<p>Onshore community renewables reduce demand for OWFs</p> <p>30 GW by 2038</p>

Early look at Natural Capital

- 25 Year Environment Plan highlights increases importance of natural capital thinking and opportunities for net gain
- Marine industries use natural capital assets (both biotic and abiotic assets) to deliver important socio-economic benefits
- Some uses are consumptive (oil and gas, marine aggregates); others are non-consumptive (wind energy, water transport)
- SUDG Report starts to explore positive and negative impacts associated with use of natural capital



Summary



- SUDG industries are critical to marine and UK economy
- The environment needs protecting and enhancing
- We need better ways of examining socio-economic benefits and how they are used in decision making
- We need to find good working practices that everyone agrees deliver development and conservation

Delivering sustainable development in the marine environment