Peter Barham Environment Ltd.

Delivering change across coastal and marine interface:- an industry perspective

Peter Barham

12th June 2019

peterjbarham@googlemail.com

Seabed User & DEVELOPER GROUP

Seabed User & Developer Group

- Loose affiliation of common interests
- Participants all pursuing sustainable development
- All marine but with coastal and terrestrial links

Oil & Gas	**Renewable energy**
Ports	**Aggregates**
Recreational boating	**Submarine cables**
Carbon capture	

Seabed User & DEVELOPER GROUP

Current situation

- SUDG industries make a significant contribution to the UK economy
- Environment needs protecting and improving – an essential aspect of planning marine activity and development
- Extensive experience of working with legislation, and regulators

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

i. Direct + indirect + induced

Total number of jobs = 1,154,000

Future goals for economy and environment

Seabed User & DEVELOPER GROUP

- Need for economic growth to meet UK targets for energy, climate change etc, but also…
- Need to adapt to climate change
- Changes in environmental regulation
  - 25 year Environment Plan, net gain and natural capital
- Better alignment of socio-economic targets to parallel environmental targets?

Current approaches from SUDG: environmental:

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

Current approaches from SUDG: socio-economic:

Seabed User & DEVELOPER GROUP

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

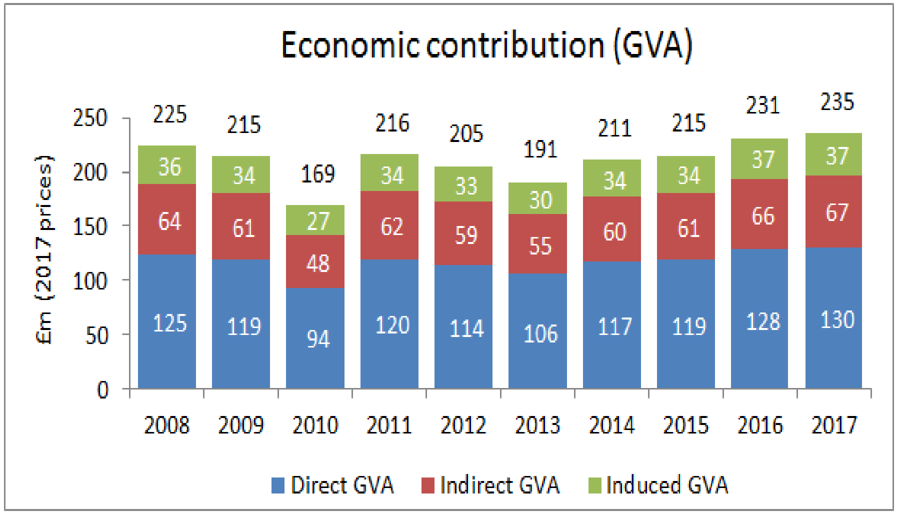
Future trends in sector activity

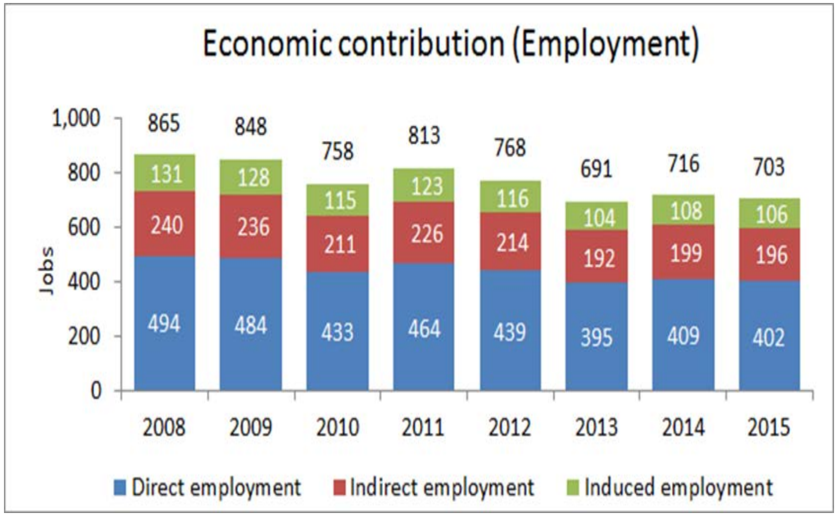
- Three scenarios
  - Business as Usual
  - Nature at Work
  - Local Stewardship

- Approach
  - Identify key drivers of sector activity
  - Relative influence of drivers under scenarios
  - Indicative projections about future sector growth

Mineral extraction: economic value

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



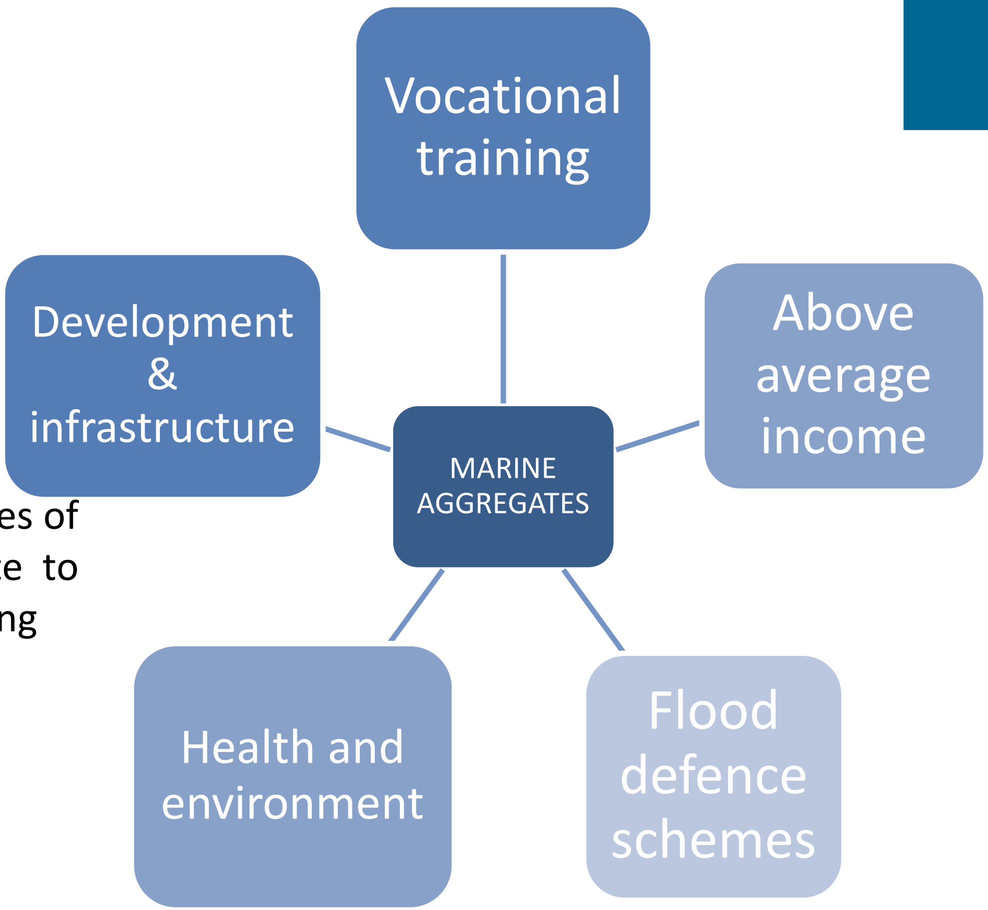


1.

Socio-economics –
Mineral extraction social value

Seabed User & DEVELOPER GROUP

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



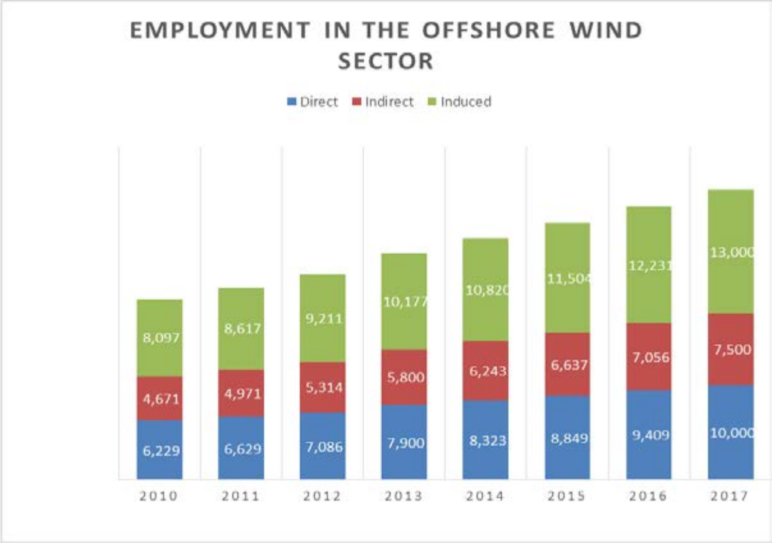
Barges carry 18,000 tonnes of marine-dredged aggregate to London every day replacing 900 lorry movements.

Lincshore 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	▪ Construction demand ▪ Climate change	▪ Construction demand ▪ Climate change	▪ Construction demand ▪ Climate change
Growth	In line with OBR growth projections 80% land sand and gravel / 20% marine sand and gravel	> BAU National infrastructure projects (e.g. nuclear) Increased beach recharge Increased contribution of marine sourced aggregates	> BAU Local infrastructure/energy projects (e.g. tidal lagoon) Increased beach recharge Increased marine sourced aggregates

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**

Socio-economics – Offshore wind social value

Seabed User & DEVELOPER GROUP

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

Regeneration of deprived coastal areas

A cleaner UK energy mix – cheapest large scale low carbon energy source

OFFSHORE WIND

Employment, skills and training opportunities in a cutting edge sector

Health benefits from reducing UK air pollution of PM2.5 and NO2

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	▪ Climate change ▪ Policy ▪ Energy security ▪ Restrictions on other sectors ▪ Availability future lease areas ▪ Technology	As per BAU	As per BAU
Growth	All planned projects progressed Additional capacity via deep water areas and new lease areas 35 GW operating capacity by 2038	Technology enables development in previously unsuitable areas 45 GW by 2038	Onshore community renewables reduce demand for OWFs 30 GW by 2038

Seabed User & DEVELOPER GROUP

Marine industries and planning:-
marine planning

Terrestrial plans:-

– Create context for development
– Nationally regionally and locally
– Planning policies provide guidance for planning work
  - Critical for (Imperative Reasons for Overriding Public Interest) IROPI

Marine plans:-

Still evolving

No single view from industry – so:-

Marine plans can be seen as

- providing planning guidance
- seen as restriction

However…..

- Sustainable development and Blue Growth is critical to UK economy
- Environment needs protecting and improving
- Coastal areas and communities highlighted as requiring investment

So – can Marine Plans help?

Marine planning process

- Plan development has been highly inclusive
  - A voice for all interests
  - Recognition that we have all been learning as we go
- Evolved through consultation
  - The objectives of marine planning
  - The language of planning
- Planning and licensing
  - Plan led decision making –'work in progress'

Marine plan benefits

- Plans set out the importance of industry sectors – nationally and regionally/locally

- Plans can create links with UK policies
  - Energy, transport, environment, growth

- Plans should create a planning context for development
  - Parallels with terrestrial plans

Marine plan benefits

- Plans may assist in planning locations for future development and the likelihood of success
- Plans help identify alternative uses and pressures
- Plans can help in examining co-location issues and opportunities as well as possible conflicts.

But....

- Different sectors need to respond to change:
  - Markets
  - Opportunities
  - Competition
  - Policy
  - Regulation

So marine plans need to ensure flexibility as well as provide guidance

Marine planning and the future

Seabed User & DEVELOPER GROUP

- Growth scenarios – future proofing
- New sectors
- Need for flexibility not constraint
- Better marine management – linking licensing to planning
- The language of planning
- Plans as living/evolving documents growing in importance as time goes on.

Marine planning and the future: coastal concordat

regulators working together

– are there historic issues of compliance?

– should concordat create better linkage between licensing and terrestrial and marine planning

– working group looking at this

Links to planning?

Marine planning and the future: net gain

2. Intertidal Environmental Net Gain

- Town and Country Planning Act
- Will link to the Environment Bill
- Within NPPF it is completely legitimate for Local Authorities to mandate for net gain

Links to planning?

Conclusions

Seabed User & DEVELOPER GROUP

- Marine industries are critical to UK economy
- Working with environment and environmental organisations is essential
- There are clear links to planning – marine and terrestrial
- Planning can assist in developing new opportunities
- Planning should assist in delivering licences
- Planning can be a key part of protecting future growth