UK Content in Offshore Wind:
Making the Case for Political Support

Alun Roberts

BVG Associates

Market analysis & business development

- Supply chain development
- Economic impact assessment
- Support to industrialisation

Technical innovation & engineering analysis

- Support to investment in technology
- R&D programme management
- Design and engineering services

Project implementation

- SCADA & condition monitoring
- O&M technical support
- Small project development

BVGassociates

1st east, 3M, Aberdeen, Able, abundance, ADS, AEA, ANGLE, archean, ARTEMIS, ATKINS, BAE SYSTEMS

Banks Developments, BGB, FAB, BLADE DYNAMICS, bp, BRADKEN, Butterley, CAMMELL LAIRD, CARBON TRUST, ChapDrive, Clipper, CLYDE BLOWERS, mpa The Concrete Centre

CONVERTEAM, Creativesheffield., THE CROWN ESTATE, DAVID BROWN Engineered around you, Department of Energy & Climate Change, DERRICK OFFSHORE, Designcraft, DOOSAN Doosan Power Systems, Douglas – Westwood, DTZ

e.on Climate & Renewables, EastPort, Enviro Business, Envirolink, EPSRC, energy technologies institute, FC Business Intelligence, FINMECCANICA, FORTH PORTS PLC, Gamesa

GE Energy, Gifford, GKN PLC, Global Wind Alliance, Golder Associates, GOLDWIND, Good Energies, Gurit, GVA Grimley, harland and wolff heavy industries limited

HEEREMA, HIE Highlands and Islands Enterprise, idinvest PARTNERS, Imperial College London, IMPSA wind, Invest Northern Ireland, IPTec, JDR, jpkenny, KBR, Kent County Council, Keystone, KHANWIND

Lloyd's Register, LM WIND POWER, Lofrix, MABEY Bridge, MACOM, MAINSTREAM RENEWABLE POWER, Marine Current Turbines, MOOG, narec, new ENGINEERING, NPP, NGenTec

nof energy, NORDEX, NOVA, Northwest, nwip, one NORTH EAST, otm, OXFORD rf, PEEL PORTS, PERA, PLATINA PARTNERS LLP, PORT OF BLYTH, PORT of MOSTYN, PPG

QinetiQ, regensw, Renewable Advice, renewableUK, RENEWABLES EAST, REpower Systems, RICARDO, Rolls-Royce, Romax Technology, ROYAL HASKONING, RWE npower renewables, scanwind, Scottish Enterprise

serco, SCS Solent Composite Systems, SCOTTISH DEVELOPMENT INTERNATIONAL, SEEDA, 上海电气, SHEFFIELD FORGEMASTERS INTERNATIONAL, Shell, SIEMENS, Skykon, SLP, SMART FIBRES

SMD, South Boats, SPT Offshore, SSB Wind Systems, SUBMARINE TECHNOLOGY, SUPERGEN, TAG, TATA, Tidal Stream, tnei, TRIDENT ENERGY, Technology Strategy Board Driving Innovation, TTP

TWI, UKERC, UK TRADE & INVESTMENT, University of Strathclyde Glasgow, VertAx Wind Ltd, Vestas, wind technologies, WINDEY, windpower renewable solutions, WindSupply, XEMC DARWIND

Politics and offshore wind

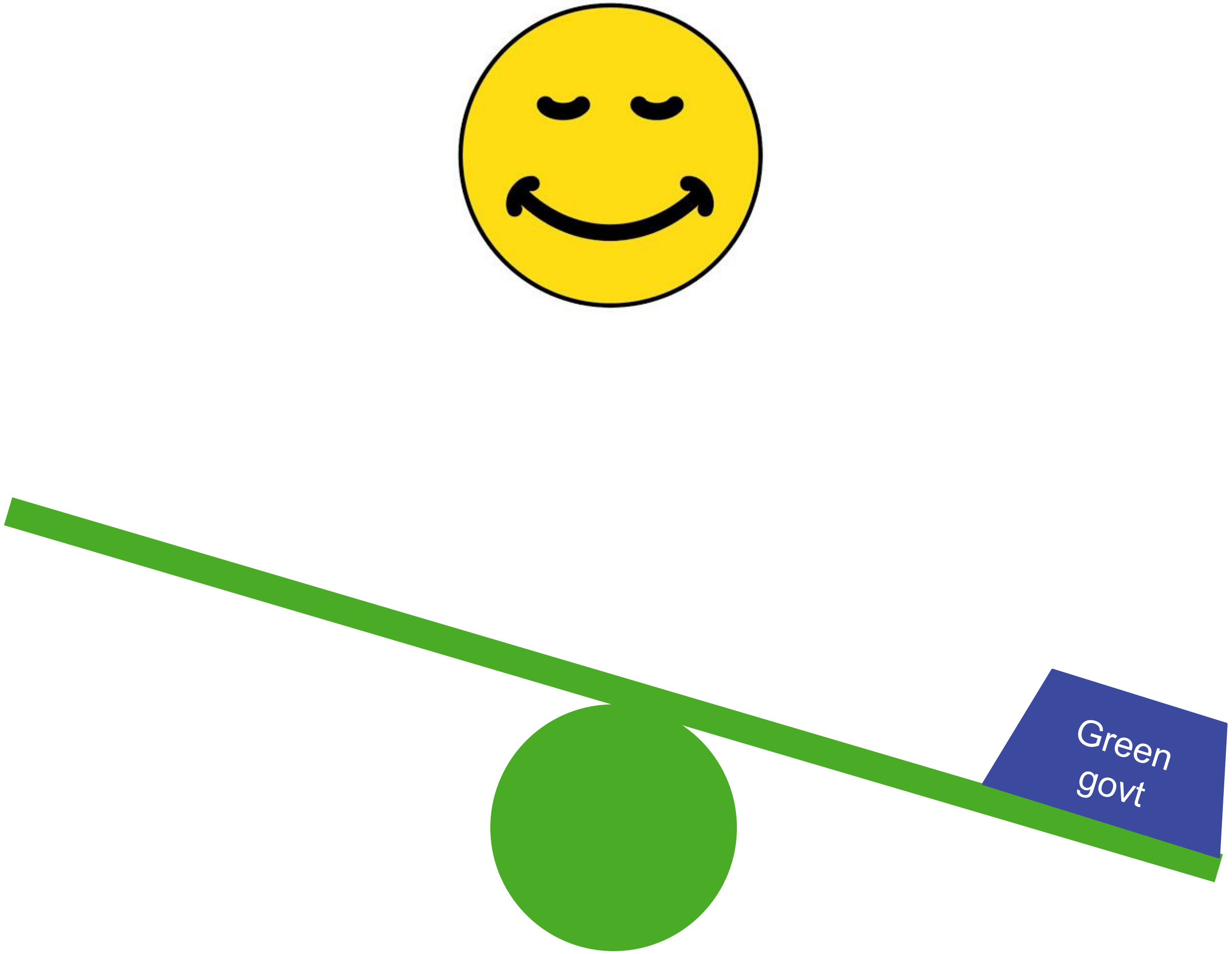
- **In supporting the development of a new energy technology, politicians will consider three factors:**

Environment

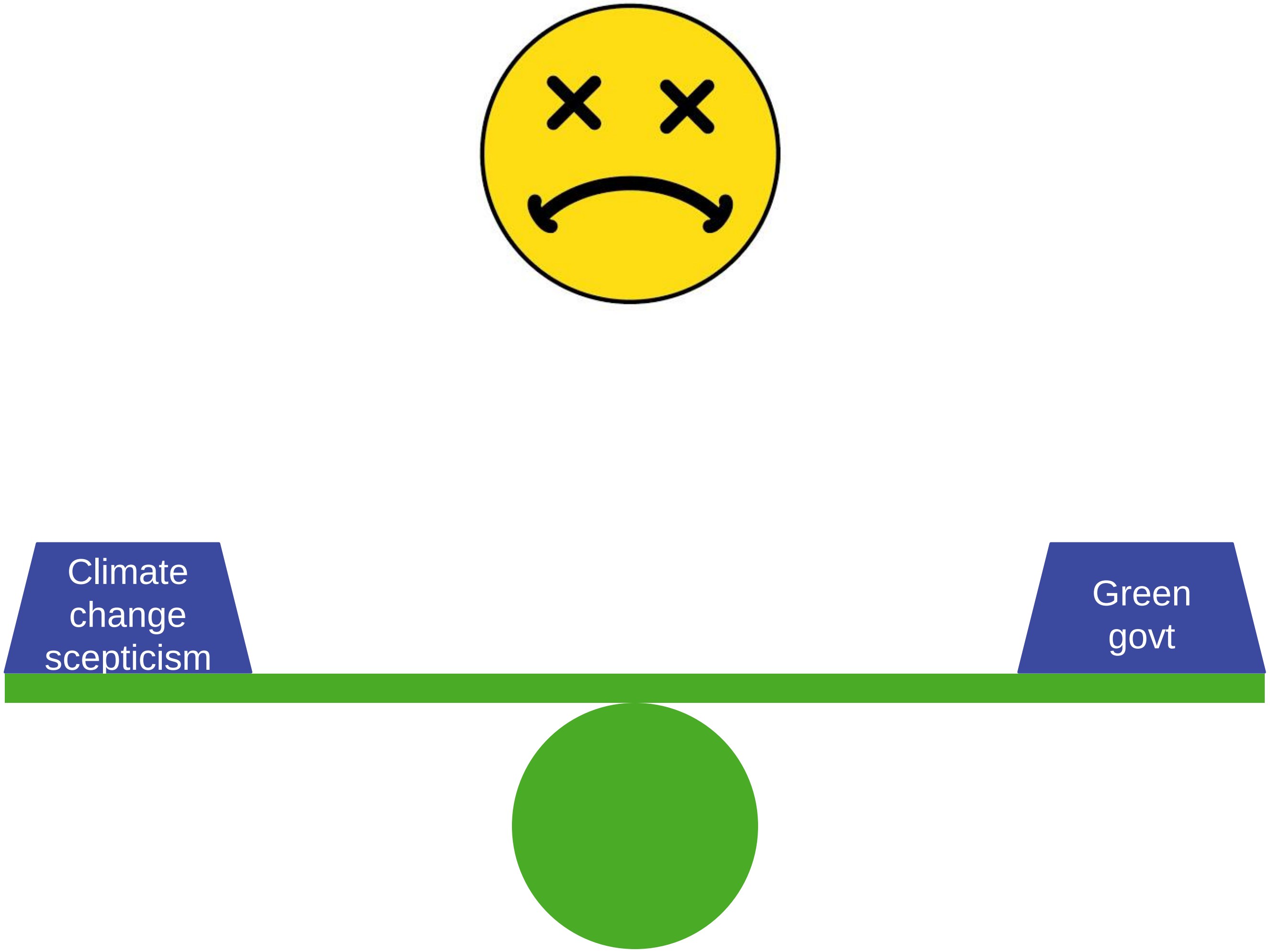
Security of supply

Economics

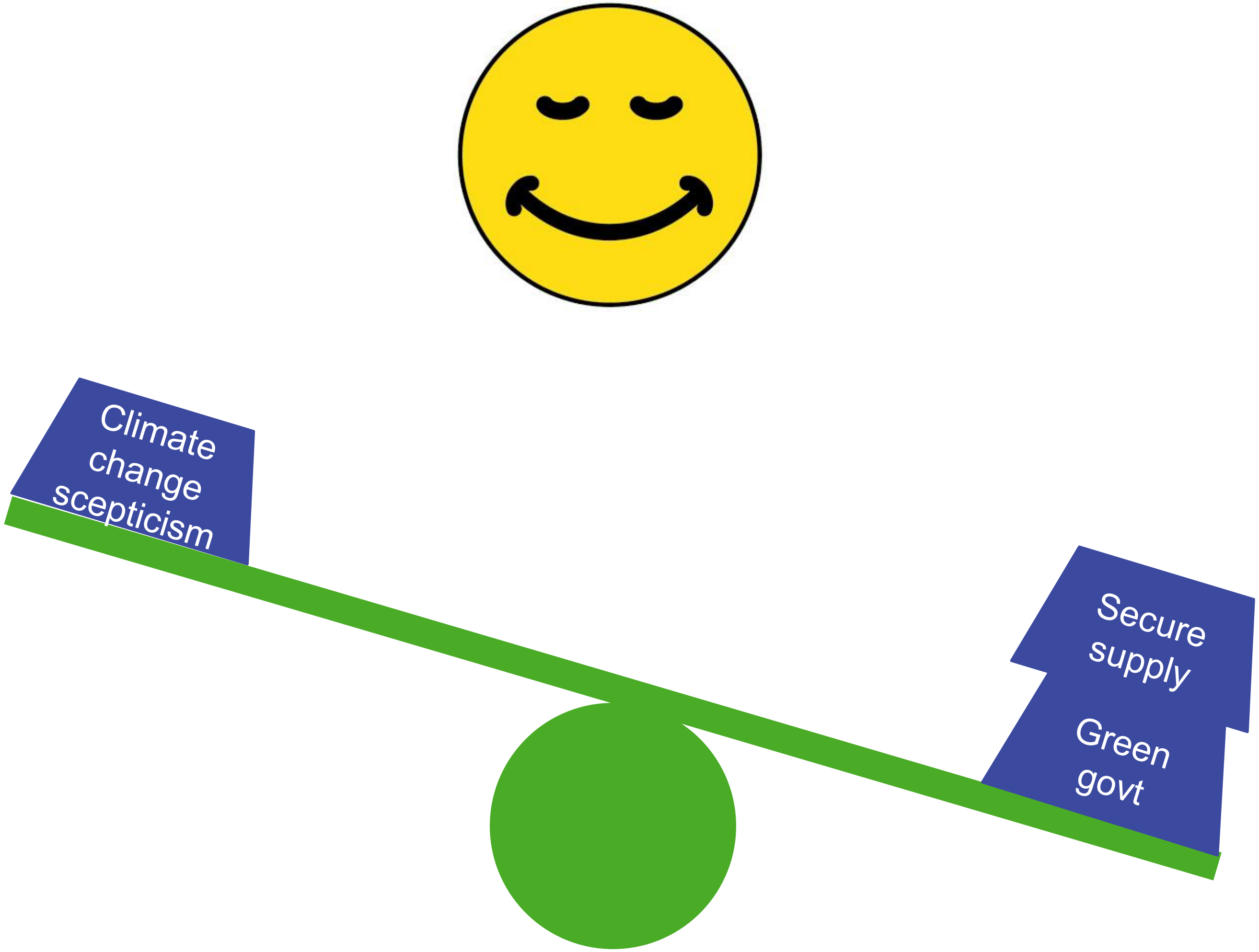
Offshore wind in the balance



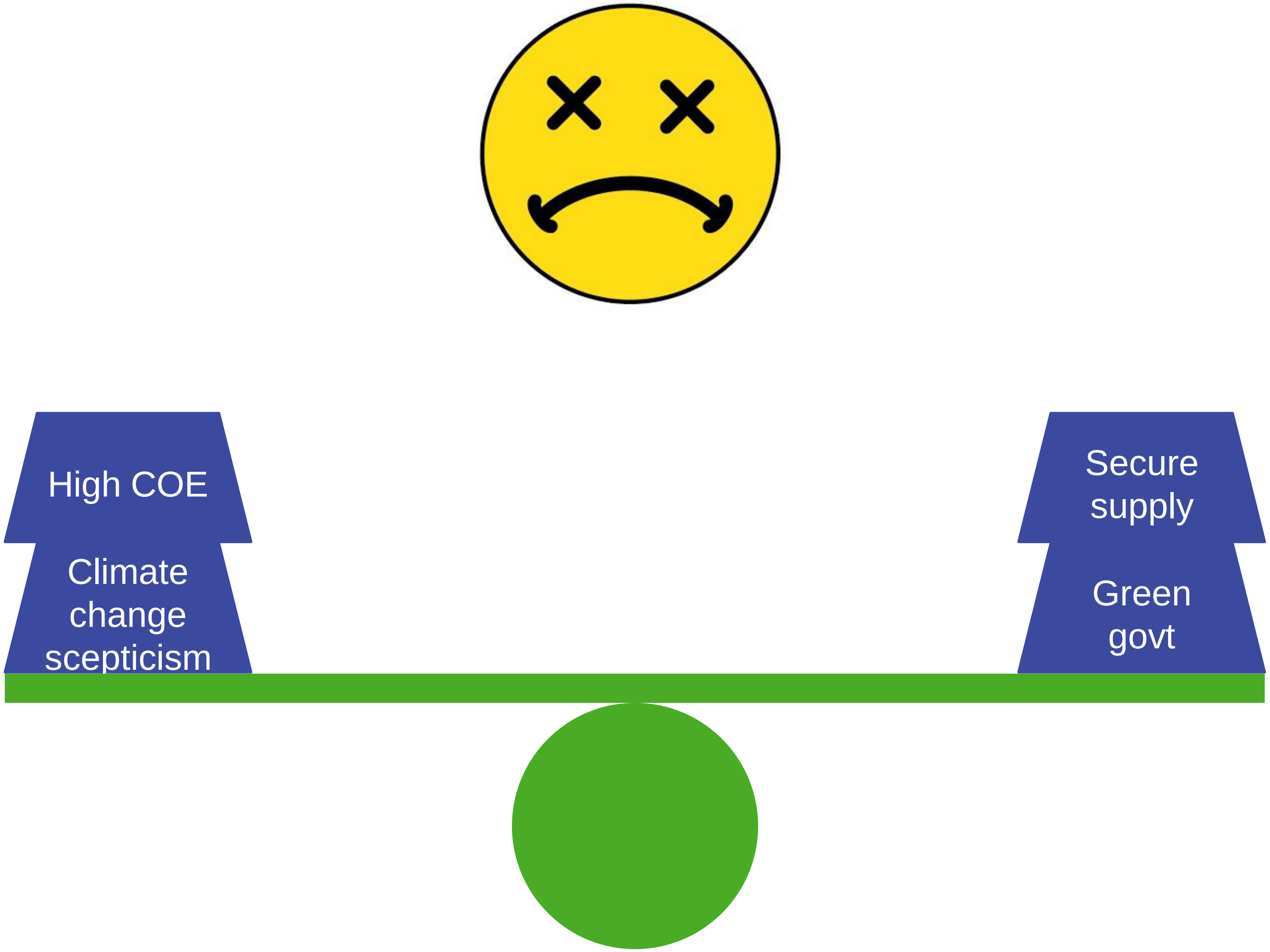
Offshore wind in the balance



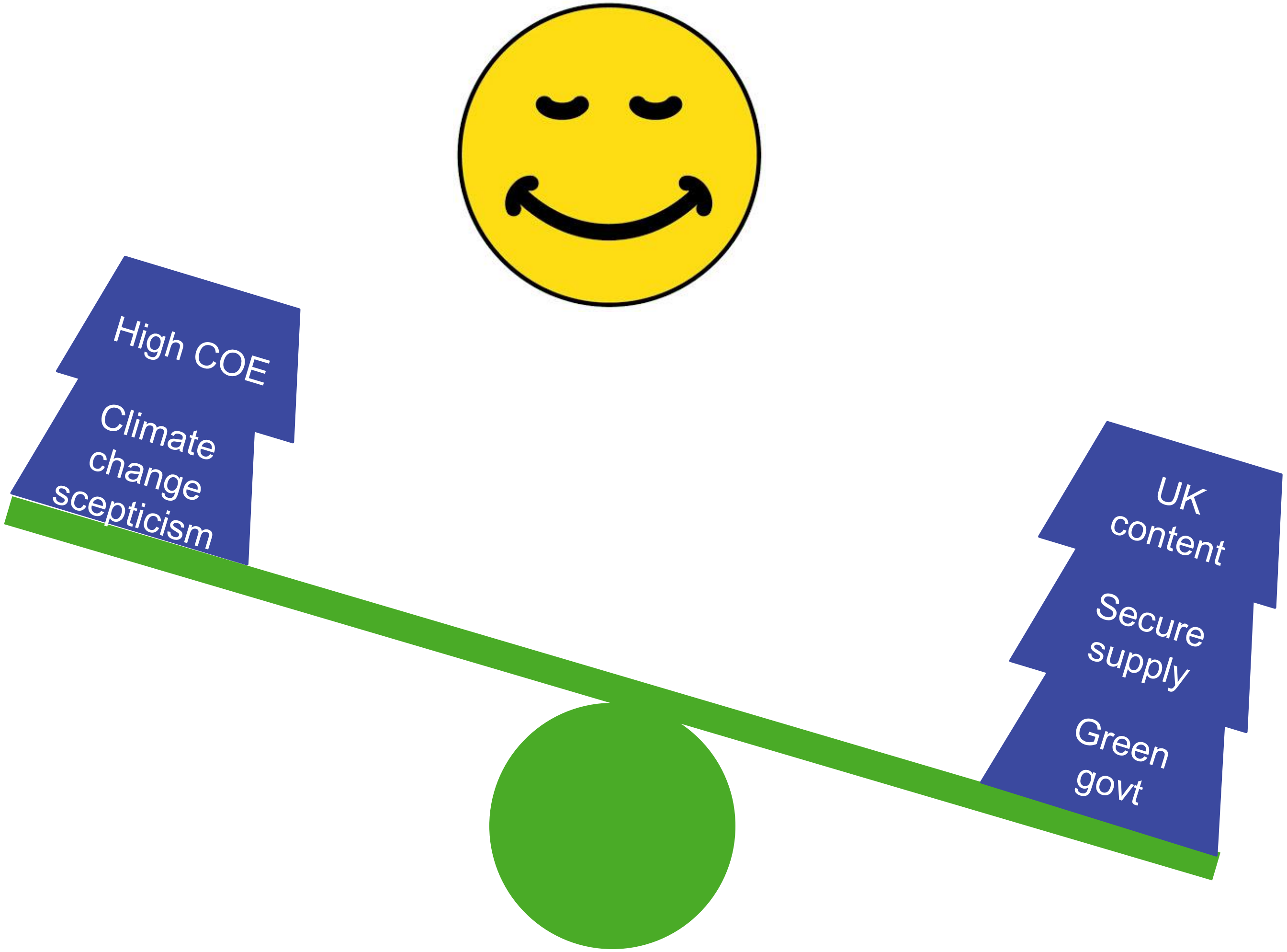
Offshore wind in the balance



Offshore wind in the balance

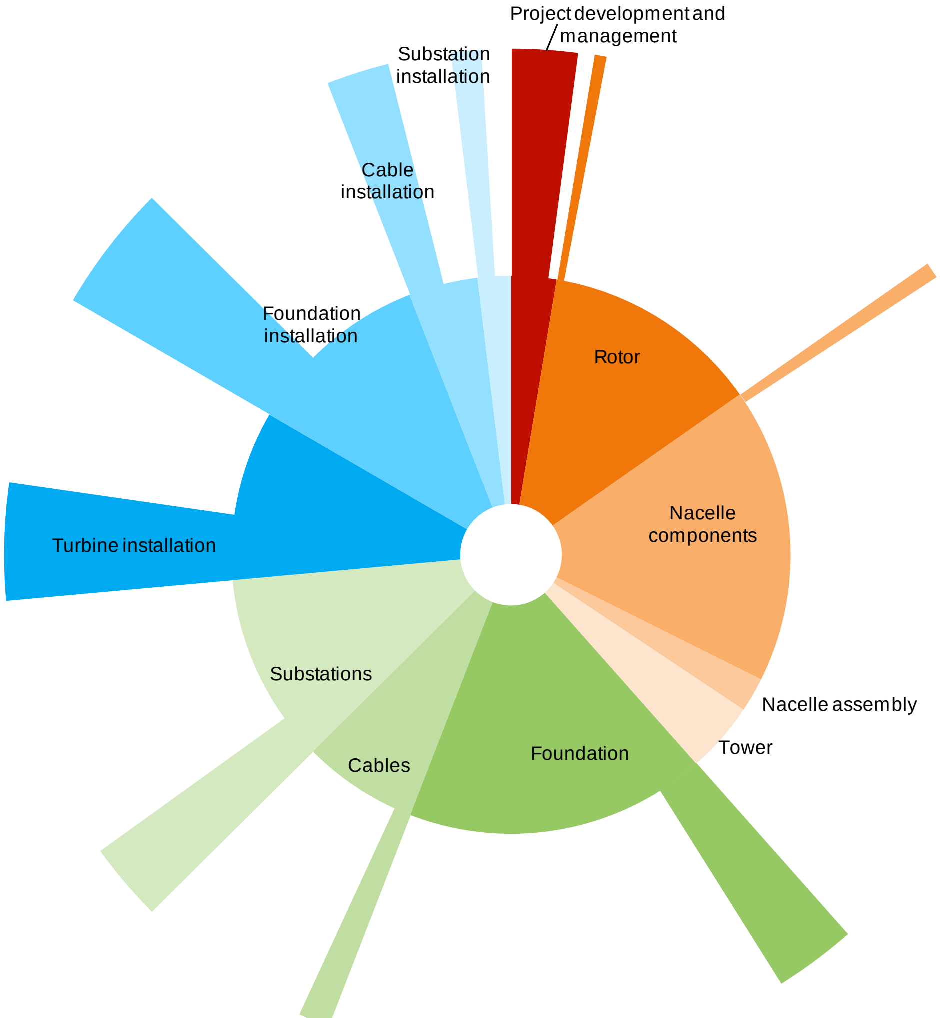


Offshore wind in the balance



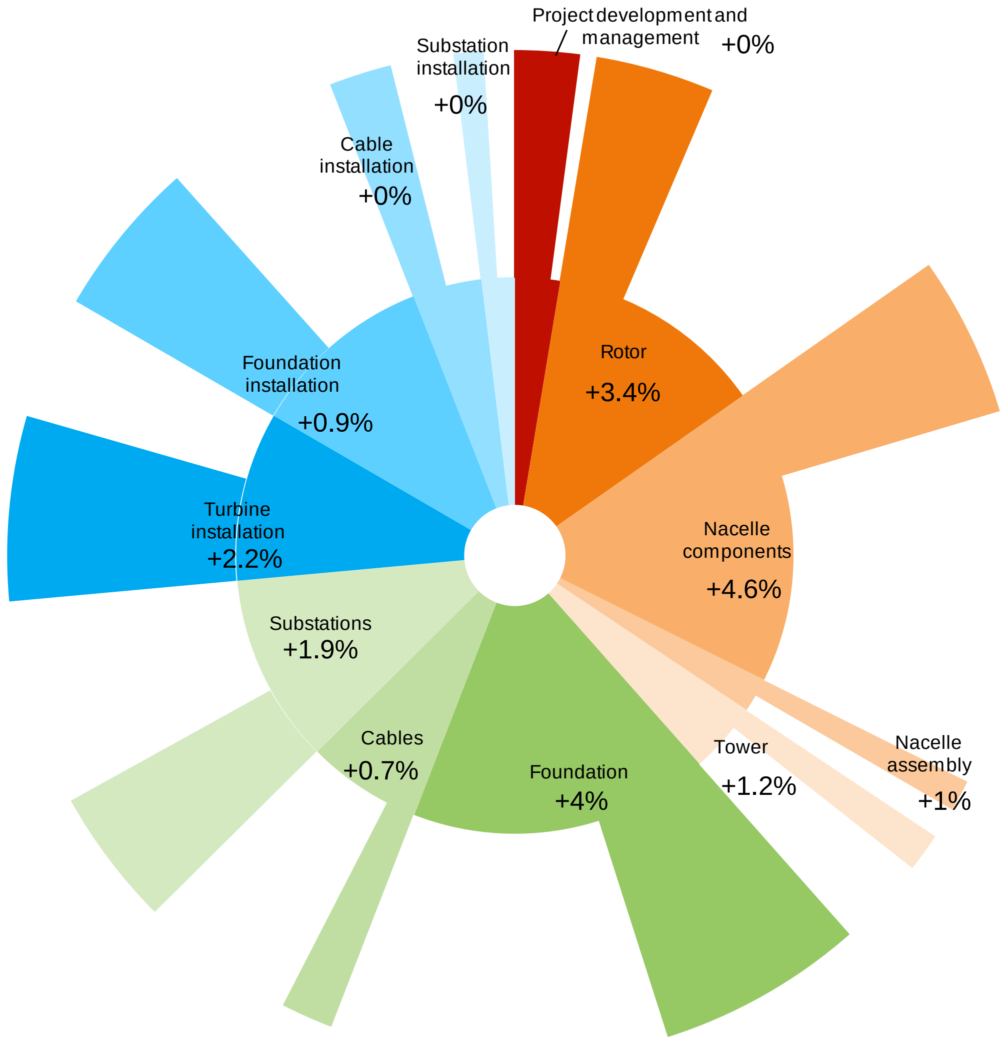
UK content in CAPEX in 2012

- **<u>Representative</u> UK content in CAPEX = c.20% (some projects – Robin Rigg, Ormonde higher)**
- **Negligible turbine component supply**
- **Modest foundation supply**
- **Competitive vessel operators and installation contractors - but vessels built overseas**



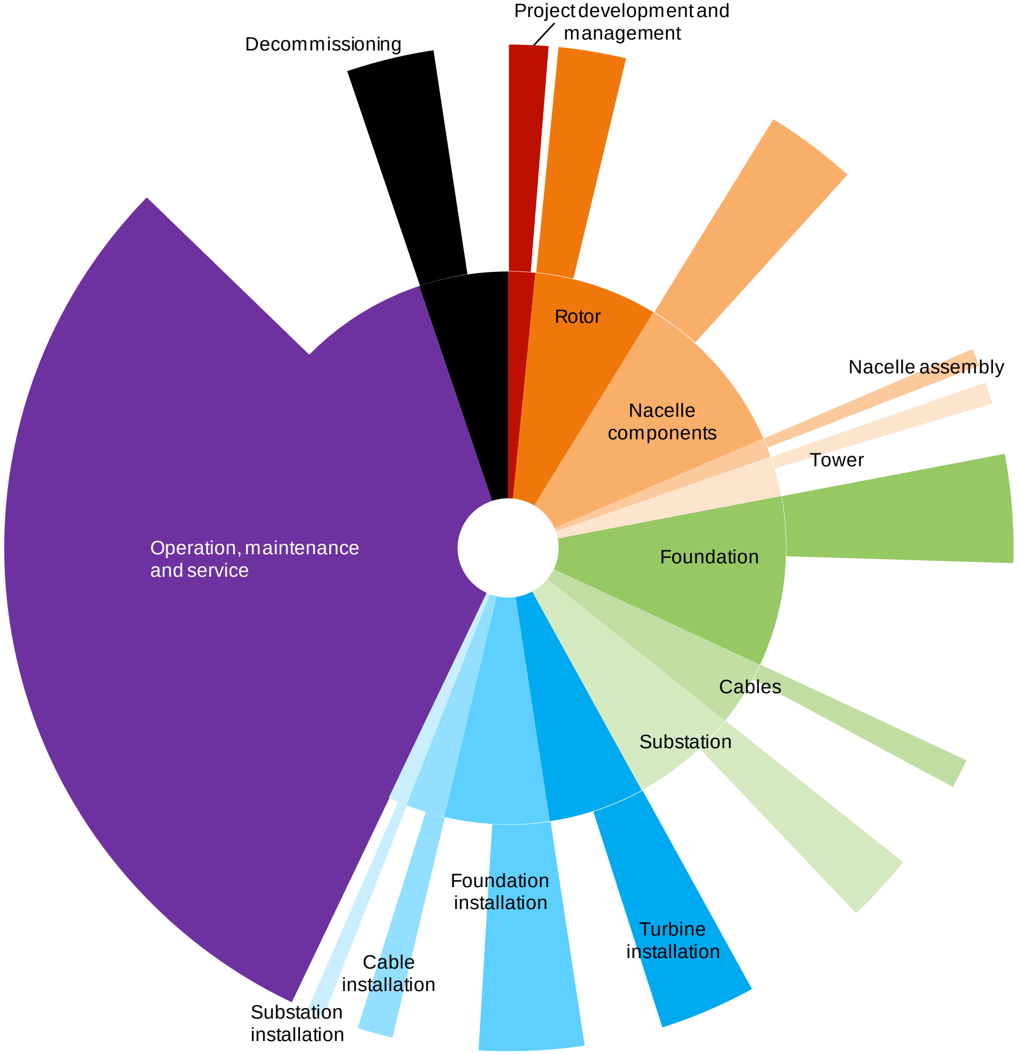
What’s possible in 2020?

- **Average UK content in CAPEX = c.40% (some projects will be higher)**
- **Half the turbines installed in the UK assembled here (along with some blade and tower manufacture, and some drive train)**
- **More UK foundation supply (concrete has high UK content but most steel imported)**
- **A little more installation content (from UK manufacturing facilities)**



Let's look at lifetime UK content

- Lifetime average UK content of a project completed in 2020 = 57%
- Some projects already close to this



For discussion

- Lots of scope to increase UK content in CAPEX – there is untapped UK capability and opportunities for inward investment
- At the moment, UK investments are matched by those of its competitors
- Are limits to UK content in CAPEX – an average 40% doesn't sound high but is good from where we are now
- Need both confidence in market and clear incentive to buy British (but it still needs to match quality and price)
- Need to move the argument on – to lifetime UK content – reaching 60% is attainable