



**BILFINGER**

## DEEPWIND - POWER2X SUBGROUP WEBINAR

17<sup>th</sup> December 2020

Sandy Bonner, MD, Bilfinger Salamis UK Ltd

### Positioning

Proven leading service provider established globally across the energy sector

### Range of services

Design, Engineer, Inspect, Repair, Maintain

### Employees

Over 34,000

### Revenue 2019

€4,327 million



Engineering, Maintenance and Technology solutions provider.

**2** SERVICE LINES  
Engineering & Maintenance  
Technologies

**4** BUSINESS UNITS

**6** INDUSTRIES



Chemical  
& Petro-  
chemical



Oil & Gas



Energy &  
Utilities



Pharma-  
ceuticals &  
Biopharma



Metallurgy



Cement



# Invested in the Energy Transition - Local Content, Global Expertise

## Local Content

- Focused on local content and expertise – major employer in the local economy
- Together we deliver engineering and industrial services to the Energy Sector – onshore and offshore locally for over 4 decades
- Significant employer – offer multi-disciplined and skilled teams - > 2,000 in Scotland
- Invest in training – commitment to leave a skills legacy
- HSEQ leader – in the UK we deliver around 7 million manhours p.a. safely in highly regulated environments

## Wide Range of Services across Multiple Sectors

- Scottish HQ and local logistics base- we cover the full asset lifecycle - Design, Construction and Installation, and Operations & Maintenance of Energy Assets
- We are expanding capabilities rapidly in Wind, Hydrogen, Carbon Capture and Nuclear

## Major Employer

- > 4,000 personnel in UK
- Largest Rope Access Employer in the UK

## Revenues

- 2019 - c. £400m + in UK



# Playing our part in a Low Carbon Future



## FULLY INTEGRATED SOLUTION FROM A SINGLE SOURCE

### DESIGN AND ENGINEERING

- FEED Studies
- System integration
- Surveys
- HAZOP/HAZAN/ HAZCOM
- Civil, Structural, Process and MEC&I Design
- Automation and Software
- LV/MV Switchgear Design
- Data and Networks
- SCADA and Reliability Monitoring
- CDM

### CONSTRUCTION AND INSTALLATION

- NDT/ANDT
- Scaffold/Access
- Coatings
- Lifting and Rigging
- LV/MV switchgear
- Control Systems
- Instrumentation
- E, C and I installation
- Data and Networks

### AUTOMATION AND SYSTEM INTEGRATION

- PLC/SCADA Systems
- DCS
- ESD Systems
- F&G Systems
- MES
- Plant Historians
- Batch & Recipe Solutions
- Industrial IT
- IT/OT Convergence
- Digital Twin
- Condition monitoring
- Digitalisation

### ASSET SERVICES AND SUPPORT

- NDT/ANDT Inspection Services
- Technical manpower
- Maintenance, Modifications and Operations
- Managed services
- Plant shutdowns
- Turnarounds
- Core Contracts

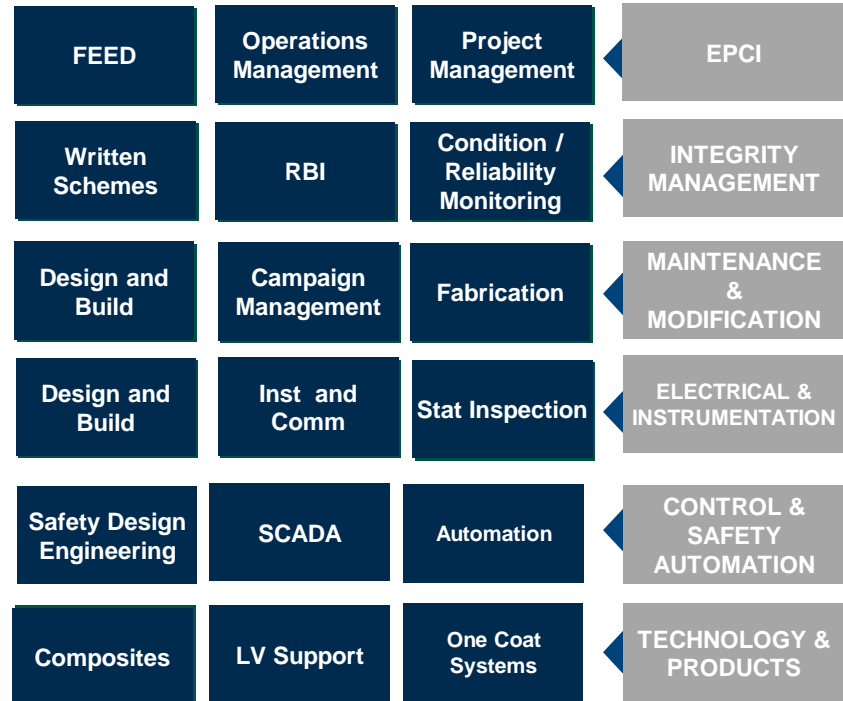
### PROJECT AND PROGRAMME MANAGEMENT

### CONCEPT

### DELIVERY AND EXECUTION

### LIFE CYCLE

**Proven Resourcing Model**  
**Multi-Disciplined Teams**  
integrating the below skills,  
Drone, Blade, Endoscope, Ultrasonic Testing, IRATA Level 3, Marine Growth Removal and Cleaning, Blasting, Coating, Repair and Composite Wraps, Lifting and Rigging, Mechanical, Electrical and Instrumentation scopes




**INTEGRATED OPERATIONAL SUPPORT / WORKPACKING / DATA MANAGEMENT SYSTEMS**

# Project Examples in Energy Transition

				
	<b>Onshore Wind</b>	<b>Offshore Wind</b>	<b>Offshore Wind</b>	<b>Hydrogen</b>
<b>Scope</b>	<ul style="list-style-type: none"> <li>• Customer: EDF EN</li> <li>• New Onshore wind farm in Rzepin</li> <li>• Total capacity of 67MW (29 turbines)</li> </ul>	<ul style="list-style-type: none"> <li>• Customer: Equinor</li> <li>• Sheringham Shoal Offshore wind farm</li> </ul>	<ul style="list-style-type: none"> <li>• Customer: Nordsee One GMBH</li> <li>• North Sea - Germany</li> </ul>	<ul style="list-style-type: none"> <li>• Customer : ArcelorMittal</li> <li>• Hamburg H2H project phase 1</li> <li>• H2 in steel production process</li> <li>• Total Capex ~65M€.</li> </ul>
<b>Bilfinger Scope</b>	<ul style="list-style-type: none"> <li>• FIDIC's Owner's Engineer, Design Verification, Procurement, H&amp;S, Project Management, Site Supervision, Commissioning</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance services</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance Services</li> </ul>	<ul style="list-style-type: none"> <li>• Consulting services contract</li> <li>• Opportunity for Bilfinger to capture part of the execution scope in phase 2.</li> </ul>
<b>Timeline</b>	2013	2017-2020	2017-2020	2019-2020
<b>Location</b>	Poland	United-Kingdom	Germany	Germany
<b>Key aspects / USP</b>	<ul style="list-style-type: none"> <li>• 10 years of experience as EPCm contractor for onshore wind project in Eastern Europe</li> <li>• Full EPCm capabilities from concept to construction management</li> </ul>	<ul style="list-style-type: none"> <li>• Boat landing, corrosion and substation repairs – multi-skilled teams and excellent safety record. Ability to offer local, long term personnel.</li> </ul>	<ul style="list-style-type: none"> <li>• Fully integrated inspection and coatings maintenance services – multi-skilled teams and excellent safety record.</li> </ul>	<ul style="list-style-type: none"> <li>• Extensive experience in gas sector and gas processes.</li> <li>• Capacity to build multi-disciplinary teams and combine its capabilities to offer comprehensive project delivery</li> </ul>

# Project Examples in Energy Transition

	 <p><b>Hydrogen</b></p>	 <p><b>Energy Storage</b></p>	 <p><b>CCU</b></p>	 <p><b>Nuclear</b></p>
Scope	<ul style="list-style-type: none"> <li>Client: North Sea Energy 3 (NSE3)</li> </ul>	<ul style="list-style-type: none"> <li>Customer: Siemens-Gamesa</li> <li>Gamesa heat and power storage for Hamburg Offshore wind farms</li> </ul>	<ul style="list-style-type: none"> <li>Customer: AVR</li> <li>CO2 capture from Waste-to-Energy plant and reuse in nearby greenhouses</li> </ul>	<ul style="list-style-type: none"> <li>Customers: NNB Genco</li> <li>Piping Design, Fabrication and Installation</li> </ul>
Bilfinger Scope	<ul style="list-style-type: none"> <li>Conceptual Design</li> <li>Feasibility Study</li> <li>CAPEX figures</li> </ul>	<ul style="list-style-type: none"> <li>Concept, design &amp; EPC</li> </ul>	<ul style="list-style-type: none"> <li>EPCm services</li> </ul>	<ul style="list-style-type: none"> <li>Fabrication and installation of c. 300km of piping for the new Hinkley Point C plant</li> </ul>
Timeline	2020 -	2018 - 2020	2018 - 2019	2018 -
Location	Netherlands	Germany	Netherlands	United Kingdom
Key aspects / USP	<ul style="list-style-type: none"> <li>Independent system integrator</li> <li>Full lifecycle coverage</li> <li>Proven onshore and offshore expertise</li> </ul>	<ul style="list-style-type: none"> <li>Strong engineering and project execution capabilities</li> <li>Capacity to develop innovative solutions for specific needs</li> <li>Proprietary thermal storage techno.</li> </ul>	<ul style="list-style-type: none"> <li>Strong engineering design and know how on carbon capture technologies and solutions</li> <li>Established experience on EPCm services</li> </ul>	<ul style="list-style-type: none"> <li>Responsive nuclear engineering contractor with significant multi-skilled workforce.</li> </ul>



# North Sea Energy Transition – Bilfinger Statement of Intent

Bilfinger offers a unique portfolio of technical experience and local infrastructure.

- We believe in partnerships and support forward-thinking organisations and SMEs. We seek to drive technology integration and innovation in the Green economy.
- We will maximize our infrastructure and expertise spanning wind, CCUs, nuclear, and hydrogen across Scotland, the UK and Europe.
- We will continue to train, adapt and commit to leaving a skills legacy. We will invest in our highly skilled local workforce with extensive marine, logistics and offshore expertise – access to over 2000 multi-skilled North Sea technicians.
- We will continue to safely deliver large-scale infrastructure and energy projects. We understand what is needed to operate in highly regulated environments where safety performance is paramount.

