



# BVS MARINE & OFFSHORE SERVICES FOR OFFSHORE FLOATING WIND

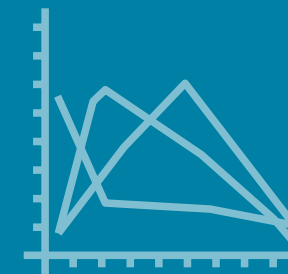
Our comprehensive range of engineering and advisory services, are designed to:



**Develop Clients'  
Engineering**



**Provide Technical  
Expertise**



**Identify and Mitigate  
Risks**



**Support  
Operations**

As independent consultants, we are well positioned to support all stakeholders in floating offshore wind projects:



**Governments and Regulators**



**Windfarm Developers and Owners**



**Equipment Manufacturers**



**Construction and Installation Contractors**

# DESIGN

Early-stage planning with developers and authorities

Resource evaluation and wind farm optimisation

Hydrodynamic and structural analysis and design

Moorings and installation simulation

Integration of new technologies

Risk assessments, HAZID and HAZOP workshops

Environmental studies

$$Power_{ext} = F_{VD} = 2a(1-a)^2 v_{\infty}^3 \rho A D$$

$$B_0 = \xi B_{crit} = \xi 2 \sqrt{(A(\omega) + M)C}$$

$$P_{D+} - P_{D-} = \frac{1}{2} \rho (v_{\infty}^2 - v_w^2)$$

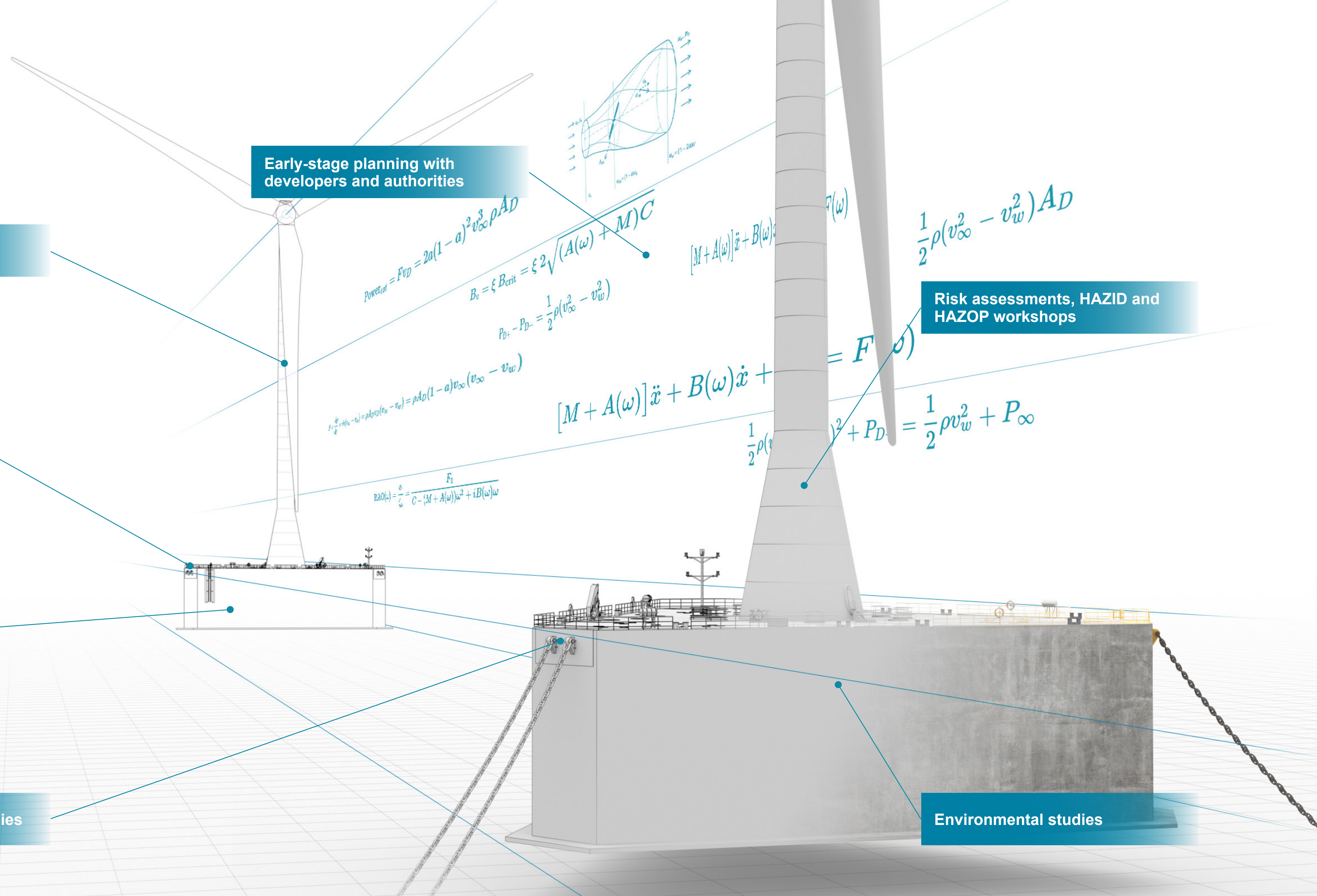
$$F = \frac{1}{2} \rho A D (v_{\infty} - v_w) = \rho A D (1-a) v_{\infty} (v_{\infty} - v_w)$$

$$RAO(\omega) = \frac{a}{\omega} = \frac{F_0}{C - (M + A(\omega))\omega^2 + iB(\omega)\omega}$$

$$[M + A(\omega)]\ddot{x} + B(\omega)\dot{x} + C = F(\omega)$$

$$\frac{1}{2} \rho (v_{\infty}^2 - v_w^2) A D + P_{D-} = \frac{1}{2} \rho v_w^2 + P_{\infty}$$

$$\frac{1}{2} \rho (v_{\infty}^2 - v_w^2) A D$$



# FABRICATION AND INSTALLATION

Construction and industrialisation consultancy

Advisory to attain classification

Weather-dependent installation planning

Marine traffic studies

Marine Warranty Surveying

Detailed planning of mooring, towing, and hook-up operations

Client representation

# OPERATING LIFE AND BEYOND

Condition Assessment and remote surveys

Risk studies and regulatory compliance

Critical equipment and spare parts analysis

Asset Integrity Management

Reliability improvement and maintenance programs

Response to changes in regulatory framework

Late life management and decommissioning

Environmental inspection preparation