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**Translating Best Practices from Aerospace
to Renewable Ocean Energy**

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Translating Best Practices from Aerospace to Renewable Ocean Energy

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Aerospace - to Renewable Ocean Energy

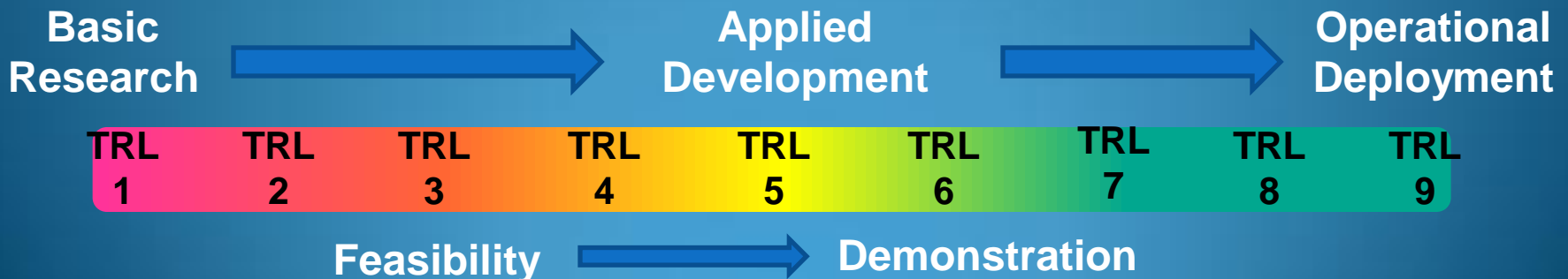
- Maturing Research and Technology
- Integrating Environmental Testing
- Mitigation Issues
- Risk Management

Maturing Research – Advancing Technology

- Materials (strength & corrosion protection, in particular)
- Biofouling prevention/control
- Energy transmission & grid integration
- System health monitoring and prognostics for continuous assessment and failure avoidance
- Integrated modeling & simulation
- Integrated demonstration & validation test plans
- Alternative uses for energy (electrical or other) generated when transmission to shore is impractical

Build upon a framework from NASA and DOD:

Technology Readiness Levels



Potential Impacts

- Wake effects (alteration of currents and waves)
- Alteration of bottom substrates, sediment transport and deposition
- Alteration of benthic habitats
- Noise
- Electromagnetic fields
- Chemical toxicity
- Strikes and entanglement
- Inadvertent FADs issues
- Interference with animal movements and migrations
- User conflicts (shipping; fisheries)



Aerospace - to Renewable Ocean Energy

- Maturing Research and Technology
- Integrating Environmental Testing
- Mitigation Issues
- Risk Management
- Permitting and Regulatory

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