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The Ocean Renewable Energy Group

# First Commercial Installation Challenges

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## First Commercial Installation Challenges

- Building Blocks to Commercialization
  - Technology Development
  - Renewable Ocean Energy Resource
  - Site Development
  - Implementation



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## First Commercial Installation Challenges

- Technology Challenges
  - Canada is in the Embryo Stage
  - Europe is in the Emerging Stage
  - Commercial Production is the Maturing Stage
  - We have the resources to grow but lack suitable habitat to mature



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## First Commercial Installation Challenges

- Renewable Energy Resource
  - Enormous Potential – But how much is developable
  - Understand the Resource – research and site data collection
  - Match the Technology to the Resource – site characteristics
  - Develop a Plan (building blocks to commercial production)



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## First Commercial Installation Challenges

- Building Blocks to Commercial Production
  - Develop a Plan: a step-by-step approach
  - Demonstration or Pilot Phase: a key step in the process
  - What Happens Next: Follow-up to Demonstration
  - Implementation: One-off



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## First Commercial Installation Challenges

- Site Development Challenges
  - Site Design and Layout - “Best Fit”
  - Regulatory Approvals
  - Community Expectations



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## First Commercial Installation Challenges

- Implementation Challenges
  - Partnerships
  - Energy Purchase Agreements
  - Operating Commitments



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## First Commercial Installation Challenges

- First Commercial Challenges
  - Challenges are Endless
  - Sophisticated Developers taking the lead



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