Facilitating the Island's Changing Fuel Mix

The Connection Offer Process

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Presentation

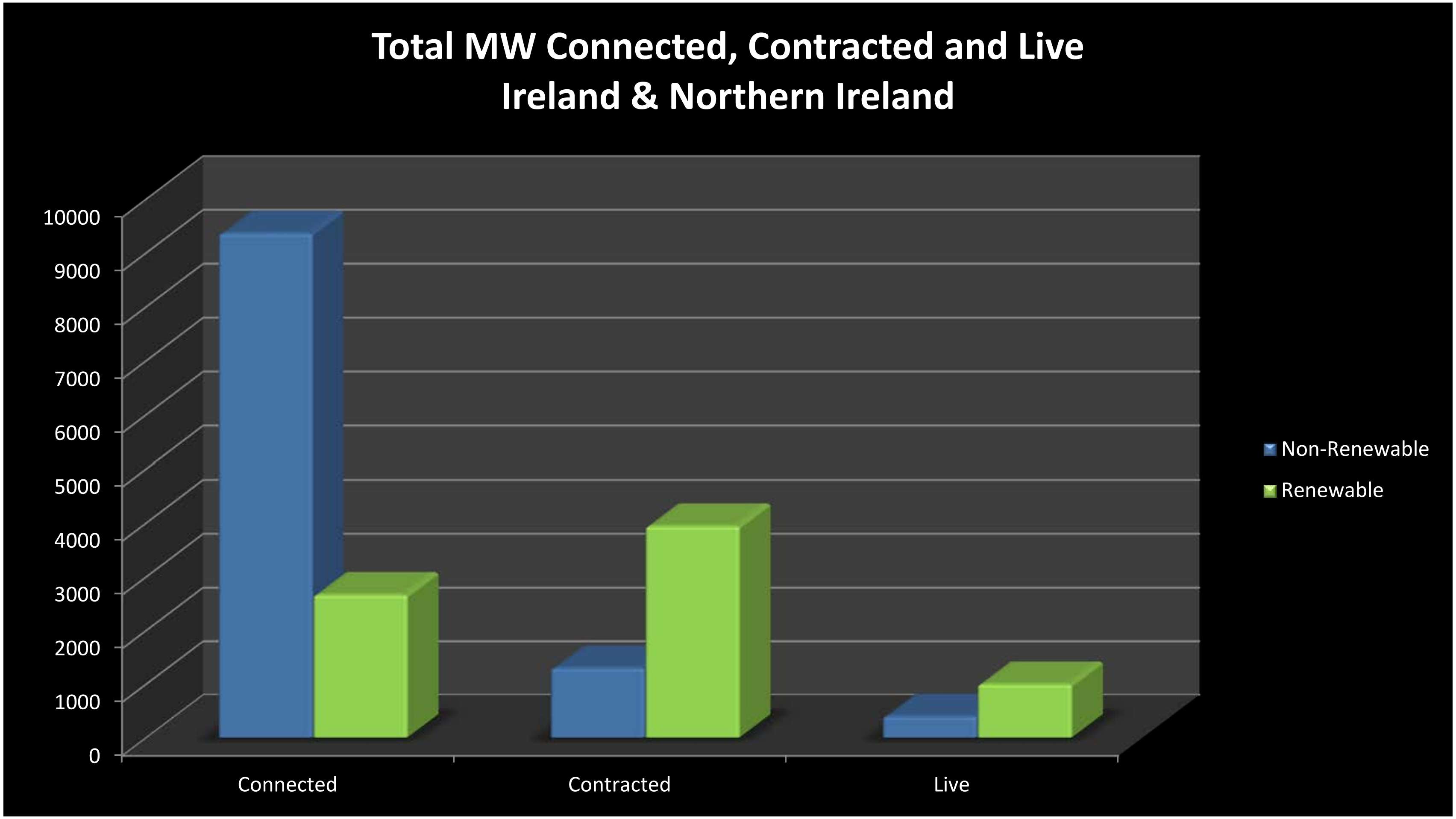
- Connection Offers in Ireland & Northern Ireland
- All Island & Gate 3 Statistics
- Connection Challenges
- The Future of the Connection Offer Processes

Connection Offer Process

- Ireland – Group Processing Approach
- 3 Gates processed to date
    1. 370 MW – Mostly wind (2005)
    2. 1300 MW – Mostly wind (2006/8)
    3. 5400 MW – 3900 MW wind / 1500 MW non-wind (2009/11)

- Northern Ireland Individual Processing
    – Once a party has Planning Permission they can apply and receive a connection offer

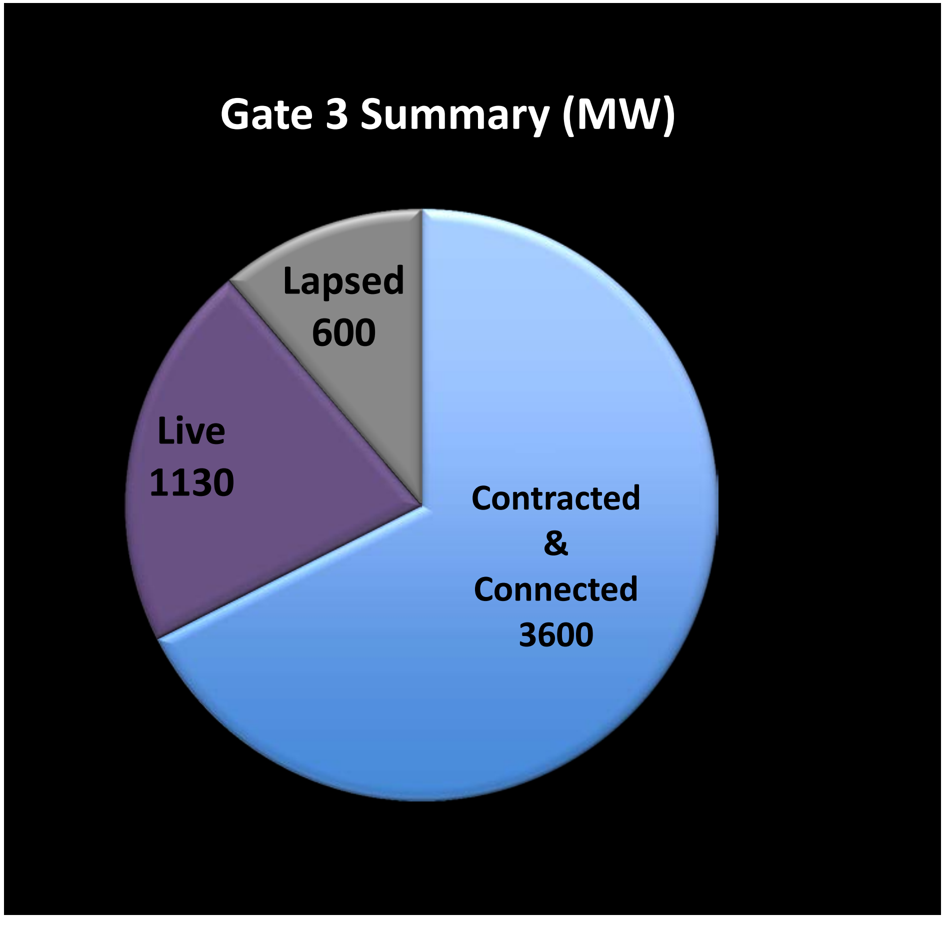
All Island Statistics

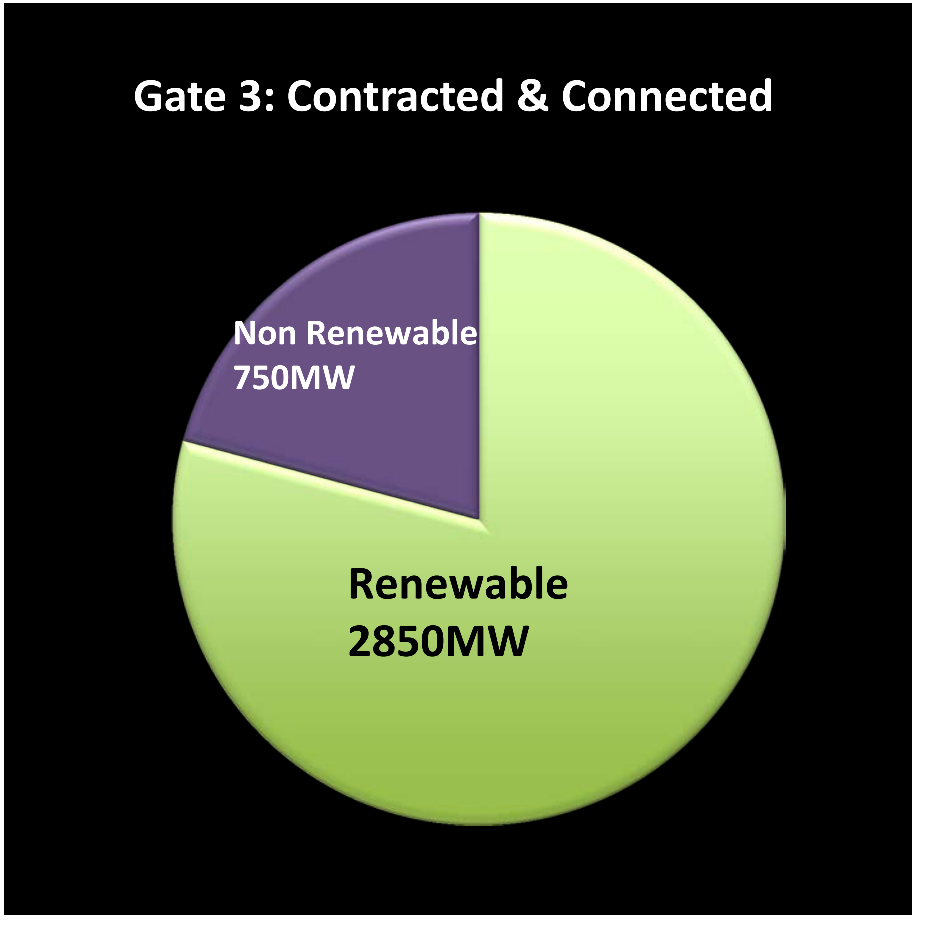


Gate 3 was big..very BIG

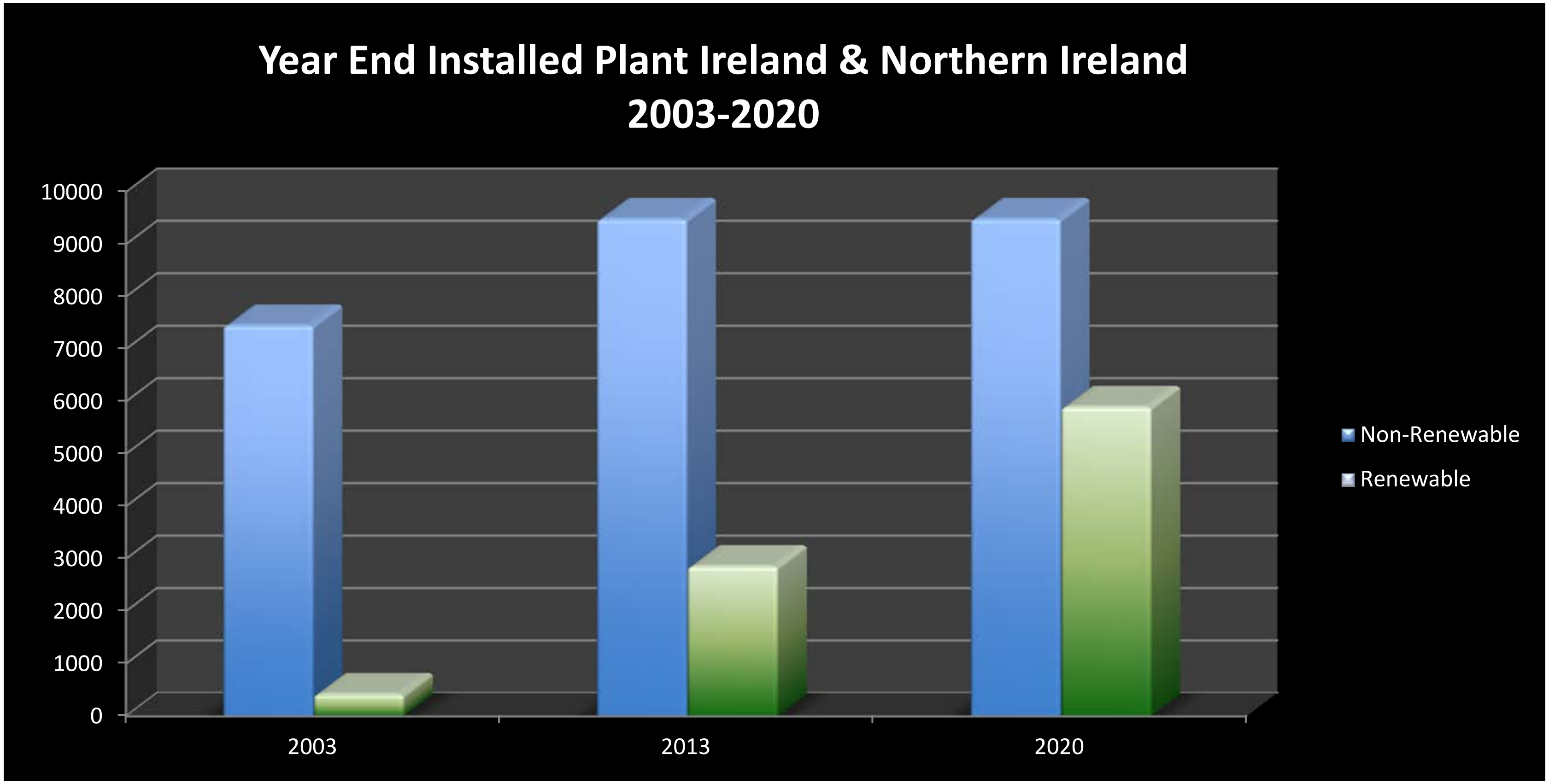
- Offers Processed for 5,330MW
  - Shallow Connections & Charges Determined
  - Deep Reinforcements and Associated Firm Access Allocated
  - Short Circuit Reinforcements
  - Constraint Reports Issued
- >3,000 MW accepted offers already existing
- Fundamental change to power flows on transmission and distribution network

Gate 3 Statistics





The fuel mix in Ireland is changing



2013 & 2020 Figures from All Island Generation Capacity Statement 2013-2022

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Challenges To Connecting A New Portfolio

Challenges	Actions
Delivering Grid • Acceptability of Infrastructure • Outage Constraints • Resource Constraints • Evolving Environmental Legislation	•5 stage consultation Process •Multi Year Outage Planning •Streamline Programme Management •Review of Short Circuit Associations
System Stability • Emerging Issue with Harmonics • Voltage and Inertial Stability	• Harmonics Action Plan • DS3
Financing • Shallow Connections for REFIT • Constraint Levels • Curtailment Levels	•Advancement of Major Projects • Grid 25 •DS3

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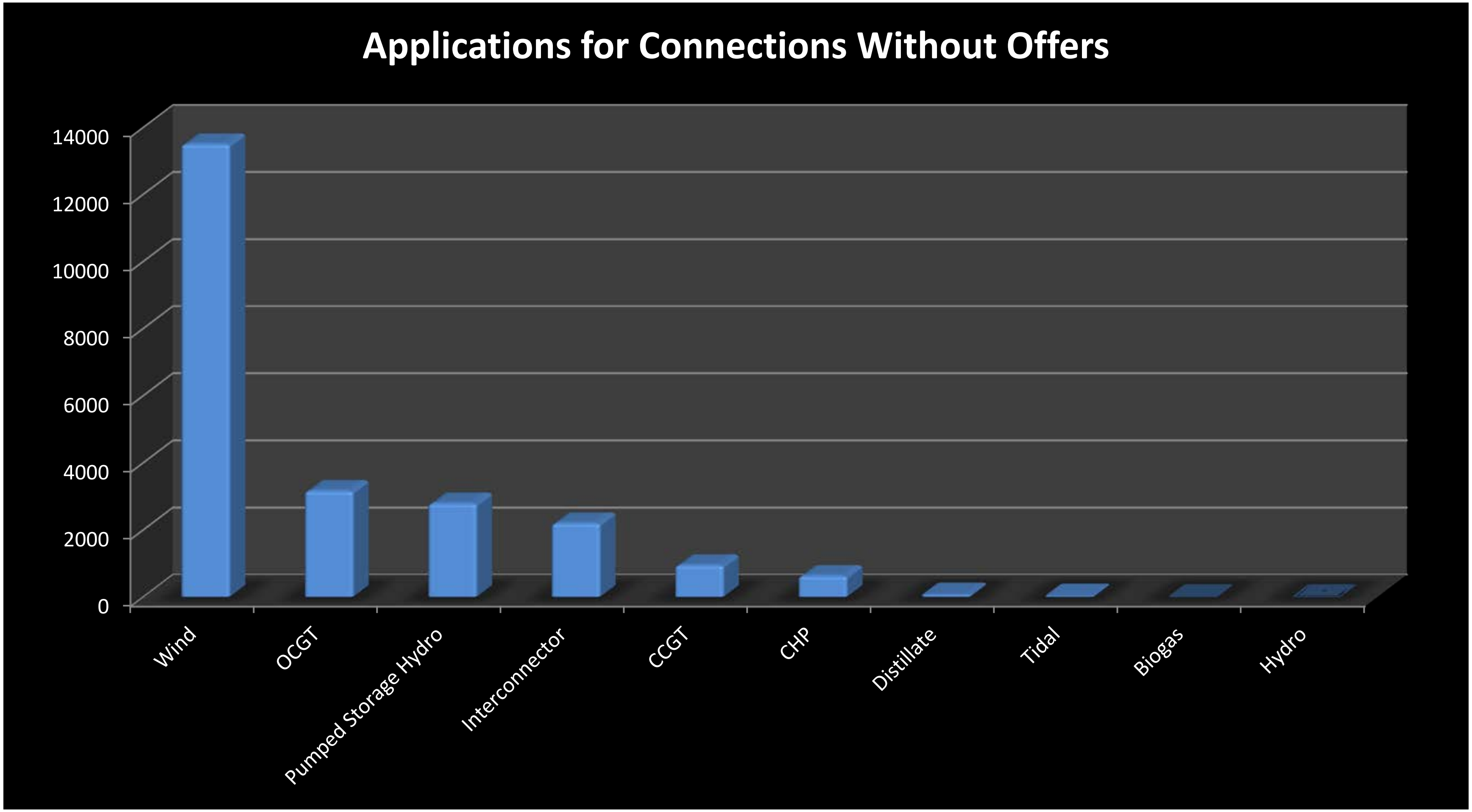
What Happens Next?



What will Future Offer Processes Look Like?

- Options:
  - All-island Offer Processing
  - Extend or abandon Group Processing
  - Provide offers to any party who wants one but parties must have Planning Permission first
  - Make offers to a specific portfolio only to meet energy policy goals & security of supply
  - No More Offers
- Considerations
  - Grid delivery often takes longer than generation project delivery
  - Balance between Market Led Process and Pragmatic System Development
  - Need to minimise risk of stranding grid infrastructure
  - Offer Processing time must be proportionate

Summary

- Statistics for new connections on the Island are staggering

  ~ 12,000 MW of Plant Connected today

  ~ 5,200 MW generation contracted, yet to be built

  ~ 1,400 MW Live offers which may still sign contracts

  ~ 25,000 MW of Generation waiting for Offers

  Peak Demand on the Island is only 6,500MW

- We need an appropriate process for managing system access beyond 2020

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