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Developing Renewable Energy Projects

Development Manager

Grainne Blount

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- Experienced Development Team to manage all phases of development
  - Solar
  - Wind
  - Battery
  - Hydro
- Focus on Developing projects in partnership with Communities
  - 4 Community Partnerships in Development (5MW)

  - 3 mid range projects <20 MW
  - 1 Large Scale Project ~100MW

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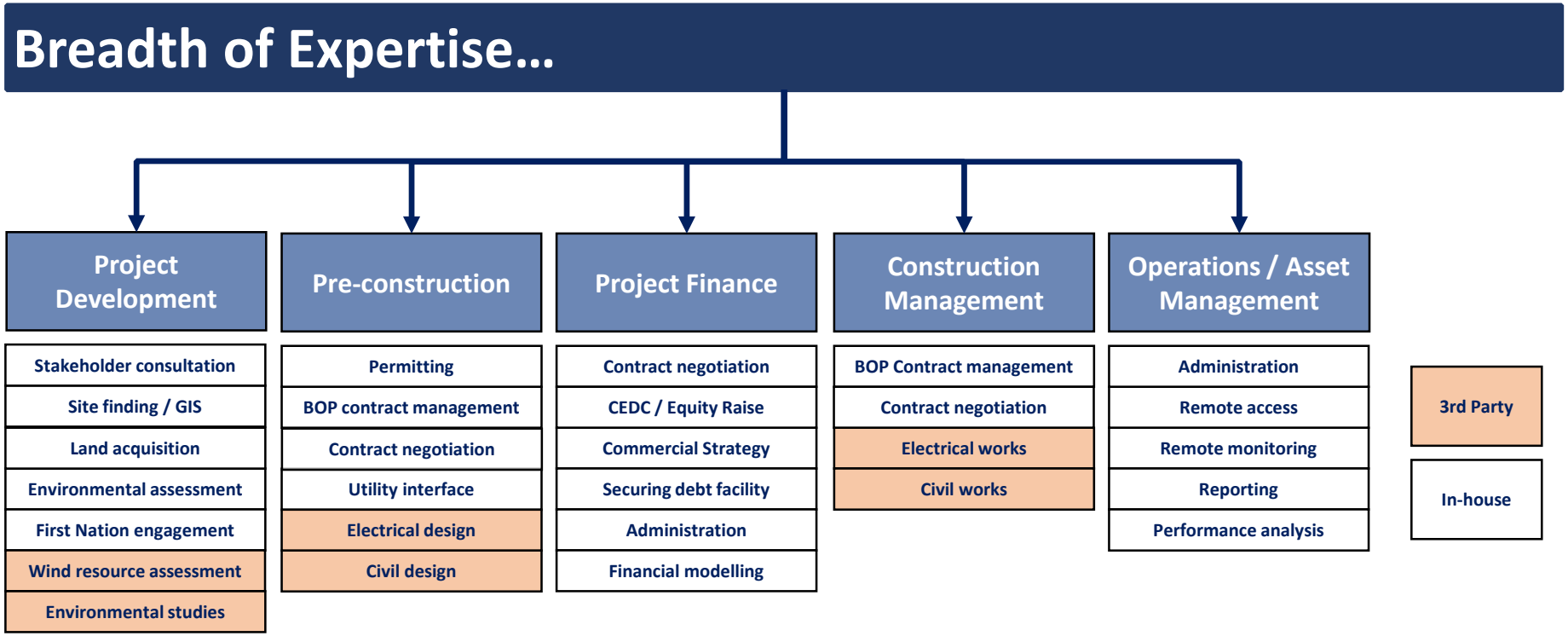
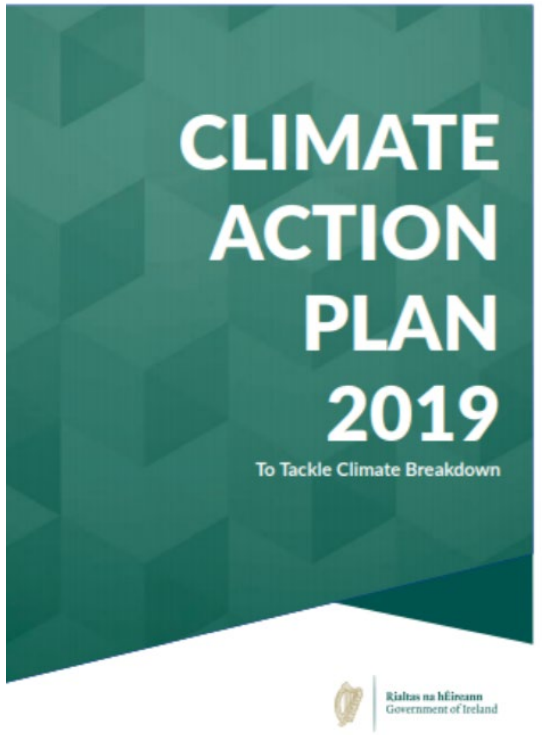
Developing, constructing, owning, and operating wind, solar, and hydro projects – the full cycle



1. Energy Policy



Electricity

70% **Electricity generated from renewable** sources by 2030

Phase-out Coal and Peat electricity generation

Homeowners to generate their own electricity and sell back to the grid under scheme for **micro-generation**

Transport

Increase the number of EVs by 2030 to circa **1 million**

Build EV charging network to stay ahead of demand

Expand our network of cycle paths and 'Park and Ride' facilities, helping ease congestion

No diesel-only purchases for public buses in our cities from 1 July 2019

Citizens and Communities

Engage Communities across the country through:

- Establishing a **Community Outreach Programme**
- Driving action through the **National Dialogue on Climate Action**
- Increase the number of **Sustainable Energy Communities** to **1,500**
- Develop **flagship low-carbon projects** in all Local Authorities

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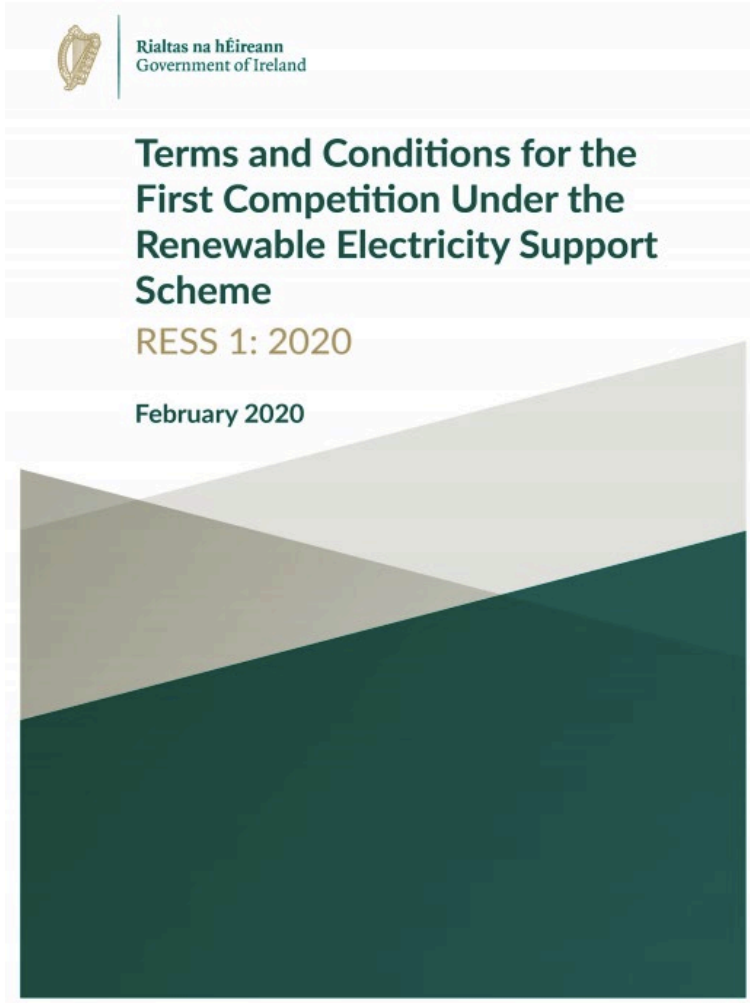
2. Renewable Energy Support Scheme (RESS)



- Auction Programme
- Competing against other projects for contracts
  - Most competitive projects will secure contracts
- 15 year fixed price contract for supply of electricity to the grid
- Secure government backed contract to build, reducing risk
- Technology agnostic

- New Community Category Introduced

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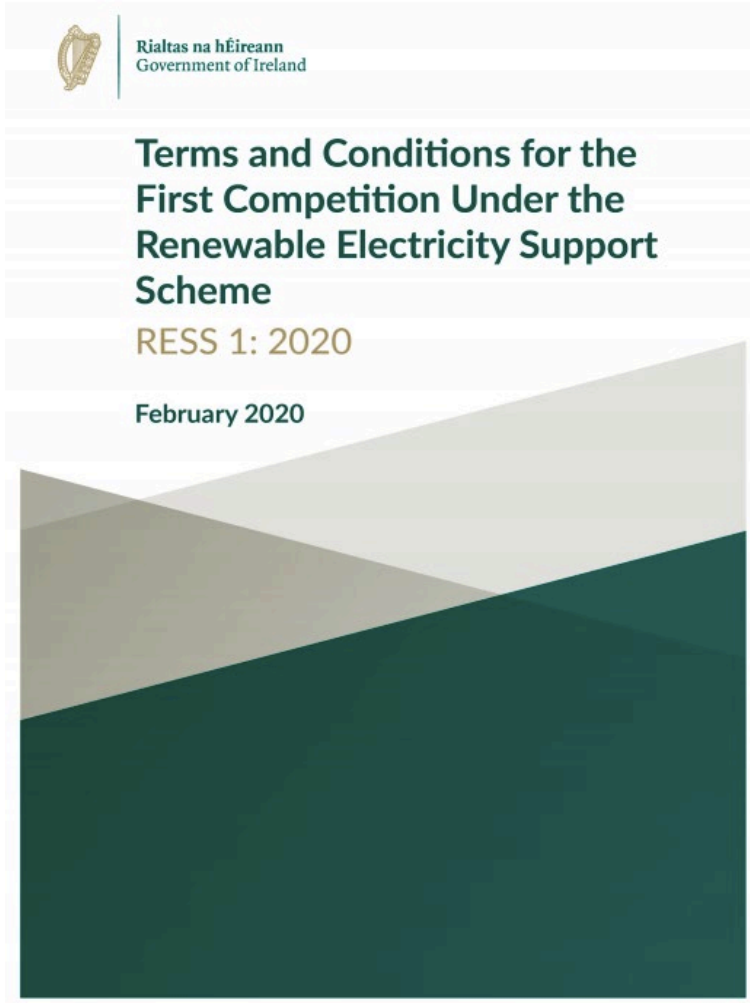
2.1 RESS 1 Results



114 Projects applied to RESS 1 Auction to the most recent Auction (July 2020)

The winners include:

- 63 solar farms (comprising 796MW of capacity)
- 19 onshore wind farms (comprising 479MW of capacity)

- 7 Community Projects

	Community	Solar	All Projects
Average Price	104.15 €/MWh	72.92 €/MWh	74.08 €/MWh

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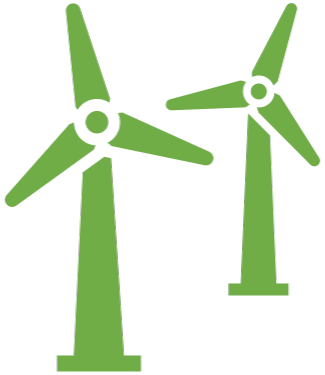
Community Category

49%
Shareholder

Minimum 51%
Shareholding

Can be up to 100%



≤ 5MW
Renewable Energy Project

Community Benefit Fund
€2/MWh annually

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Renewable Energy Technologies

Solar PV

- High competition in Solar

Small Scale Hydro

- Long development cycle & difficult to finance & planning

Biogas

- No Support Scheme in place for Bio-Gas

Offshore Wind Energy

- High Capital Requirements at development stage

Onshore Wind Energy

- Difficult planning but competitive in RESS

Market Analysis

Completive Analysis

Technical Feasibility

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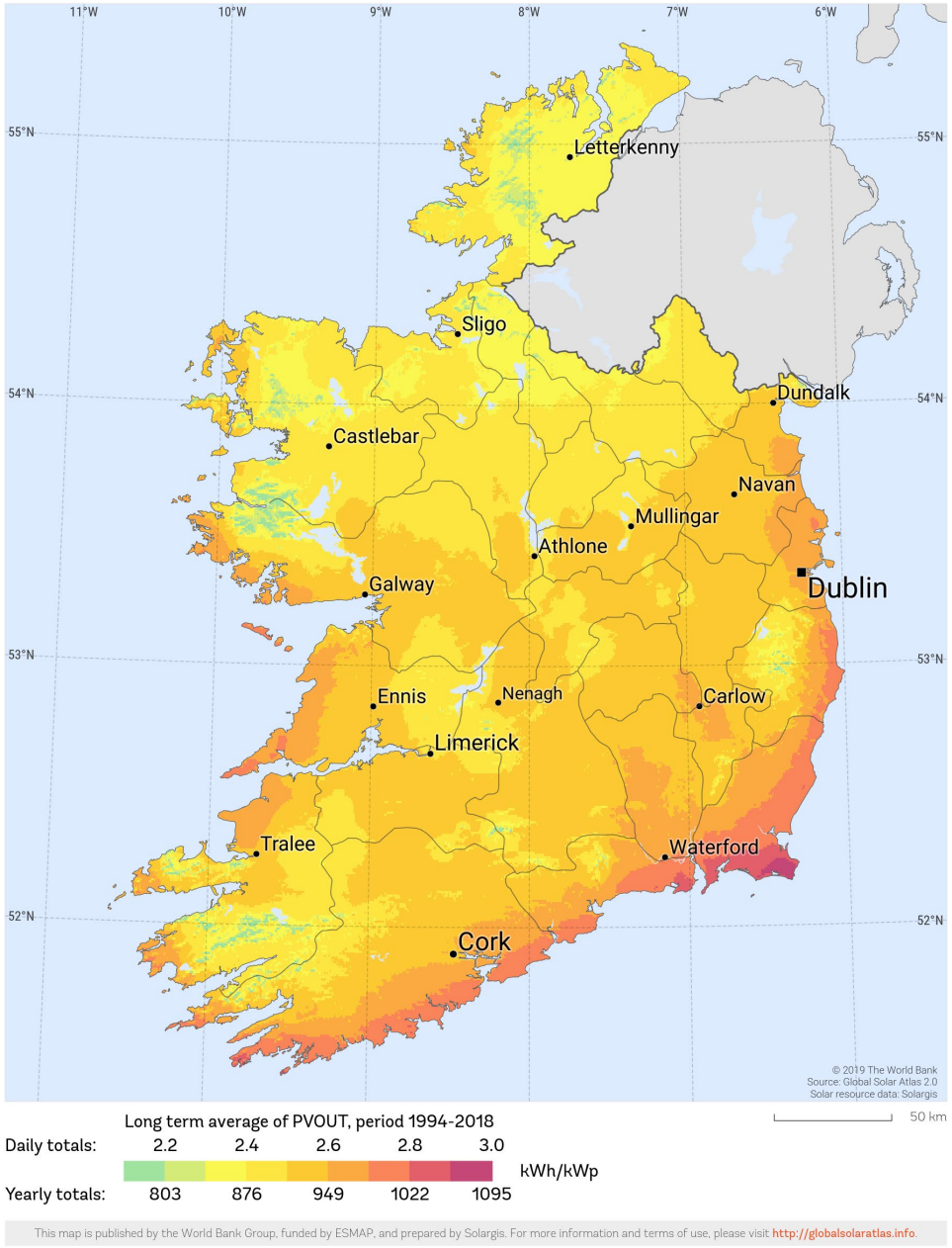
Solar Energy

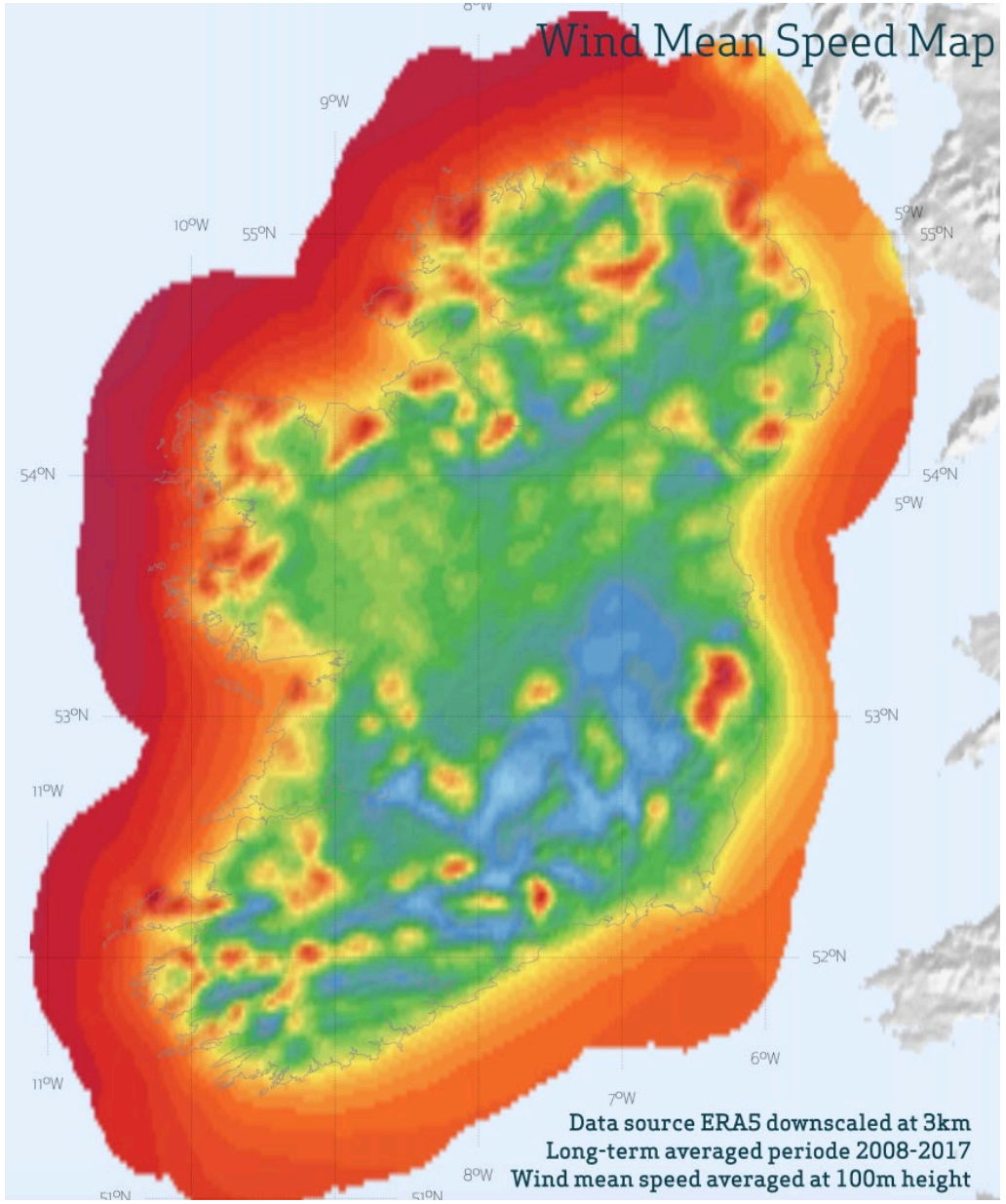
Key Points

- Solar Irradiance matters
- Circa 4.5Acres per MW
- Proximity to Substation
- Grid Connection Route
- Planning: Glint and Glare, Visual impact
- 11-15% Capacity Factor



Wind Energy

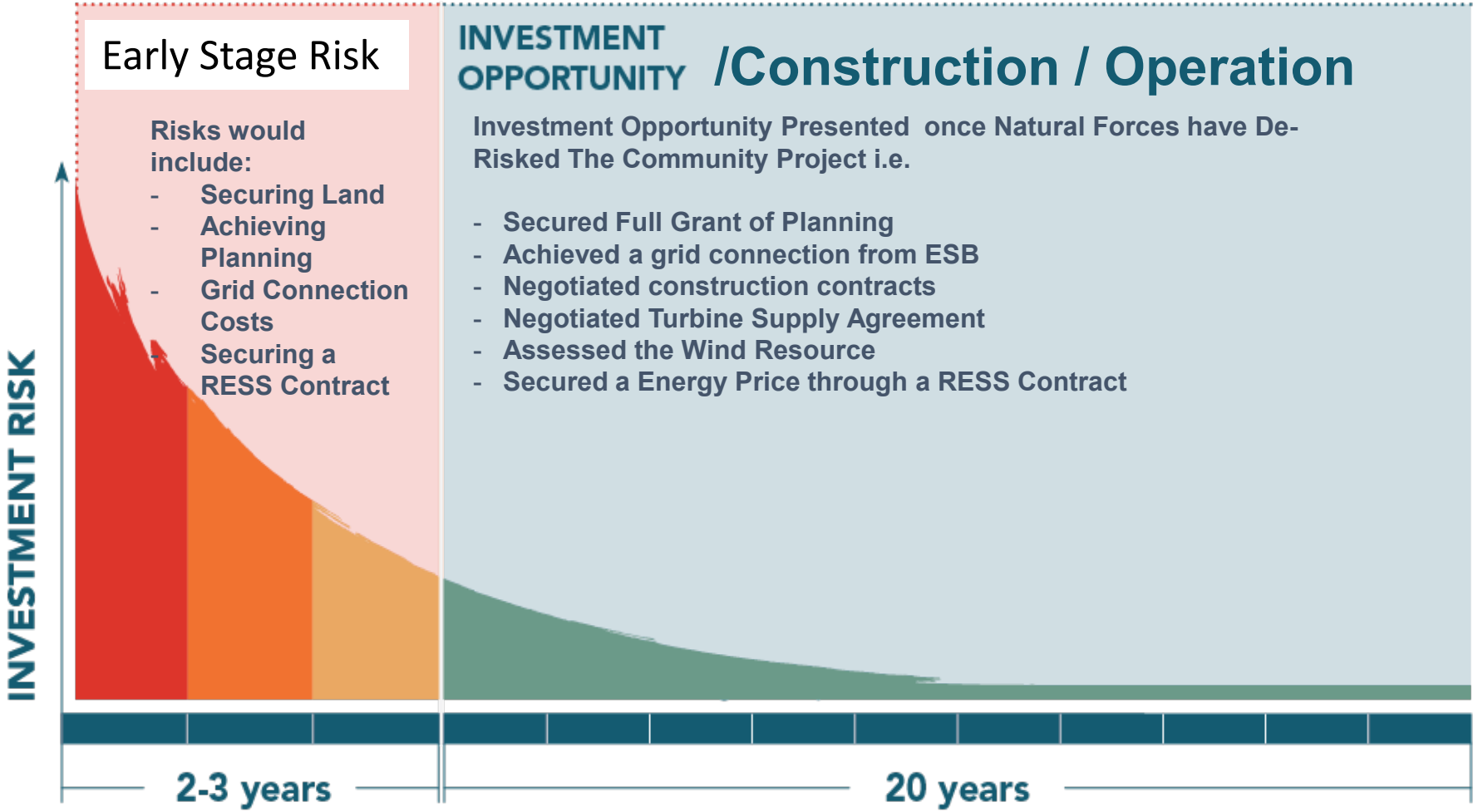
- Higher capacity factor then Solar
- Wind Atlas Ireland
- Wind Planning Guidelines
  - 500m from houses
  - Shadow flicker
  - Visual Impact
  - Environmental and Ecological Considerations
- More competitive



3. Getting Involved- Landowners

1. Lease Land	2. Develop Project	3. Community Development
Low Risk	High Development Risk	Lease Land
Rental Income for 25+ years	Steep learning curve	Invest in local Project with ROI

Development: Timeline, Costs & Risk



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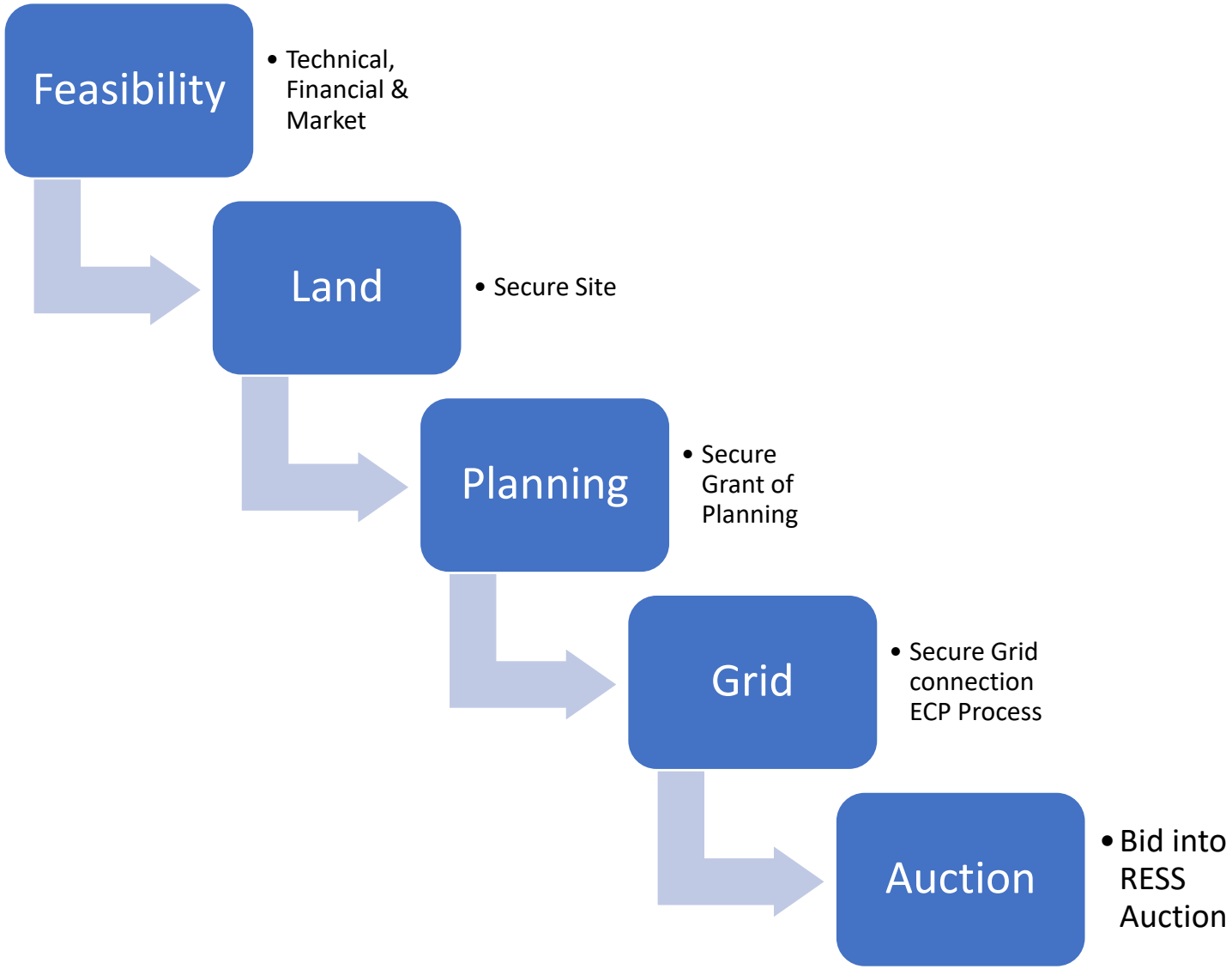
The Development Steps



Questions