



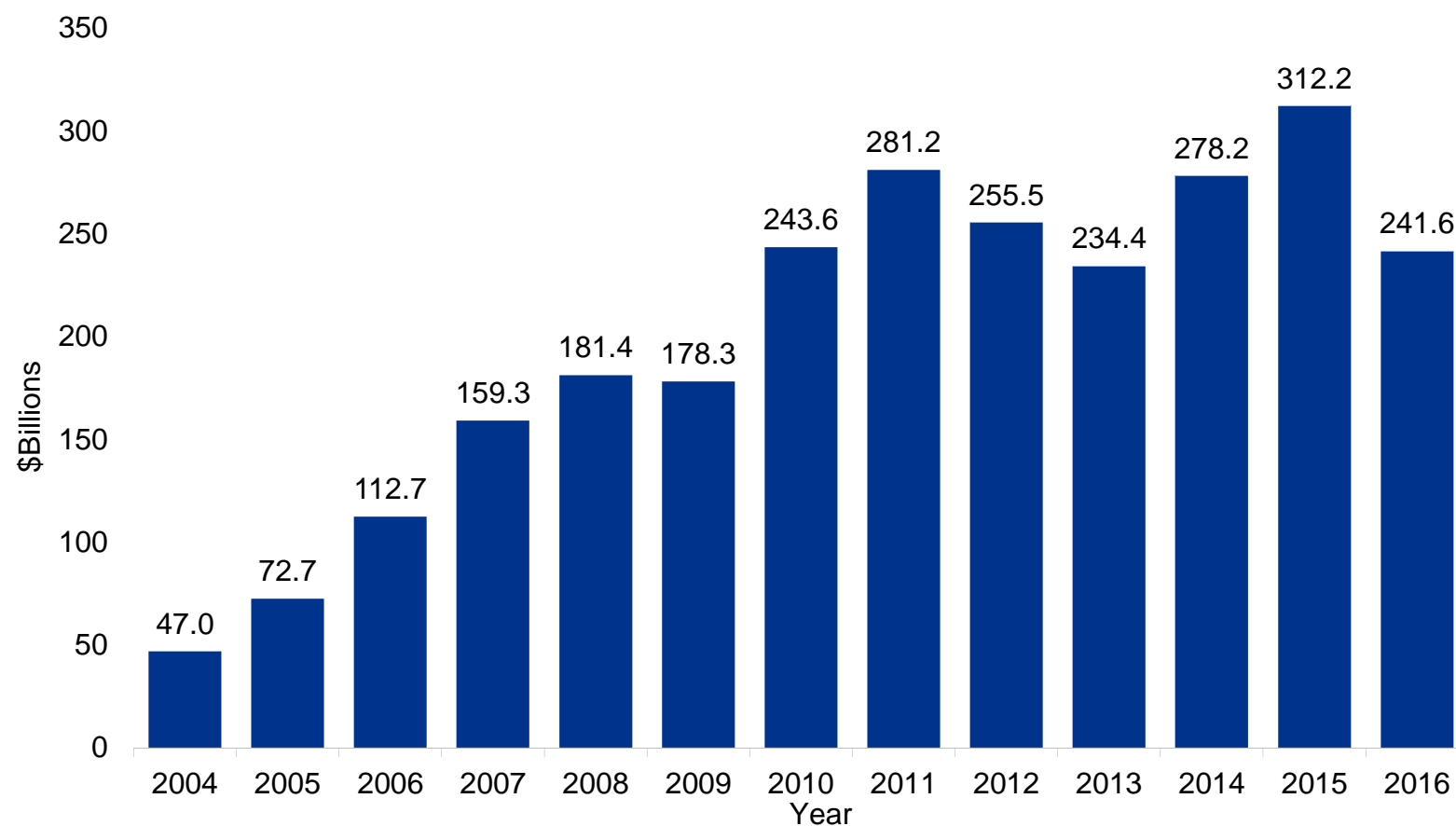
# Sourcing and Structuring Finance for AD

October 2017

Russell Smyth, KPMG Director

*“Sourcing and Structuring Finance for AD”*

# Global Renewable Investment

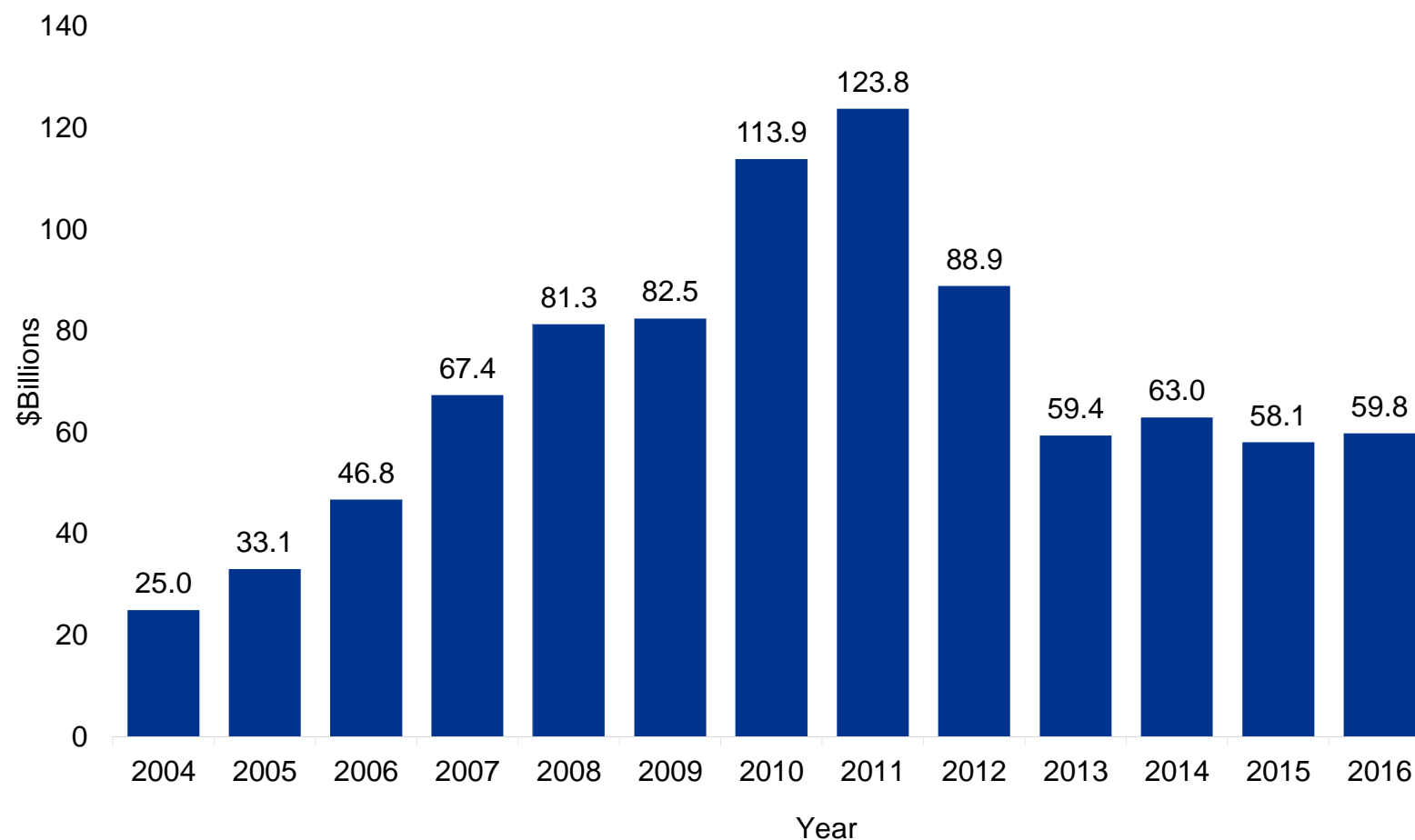


Source: *Global Trends in Renewable Energy Investment 2017*



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# European Renewable Investment

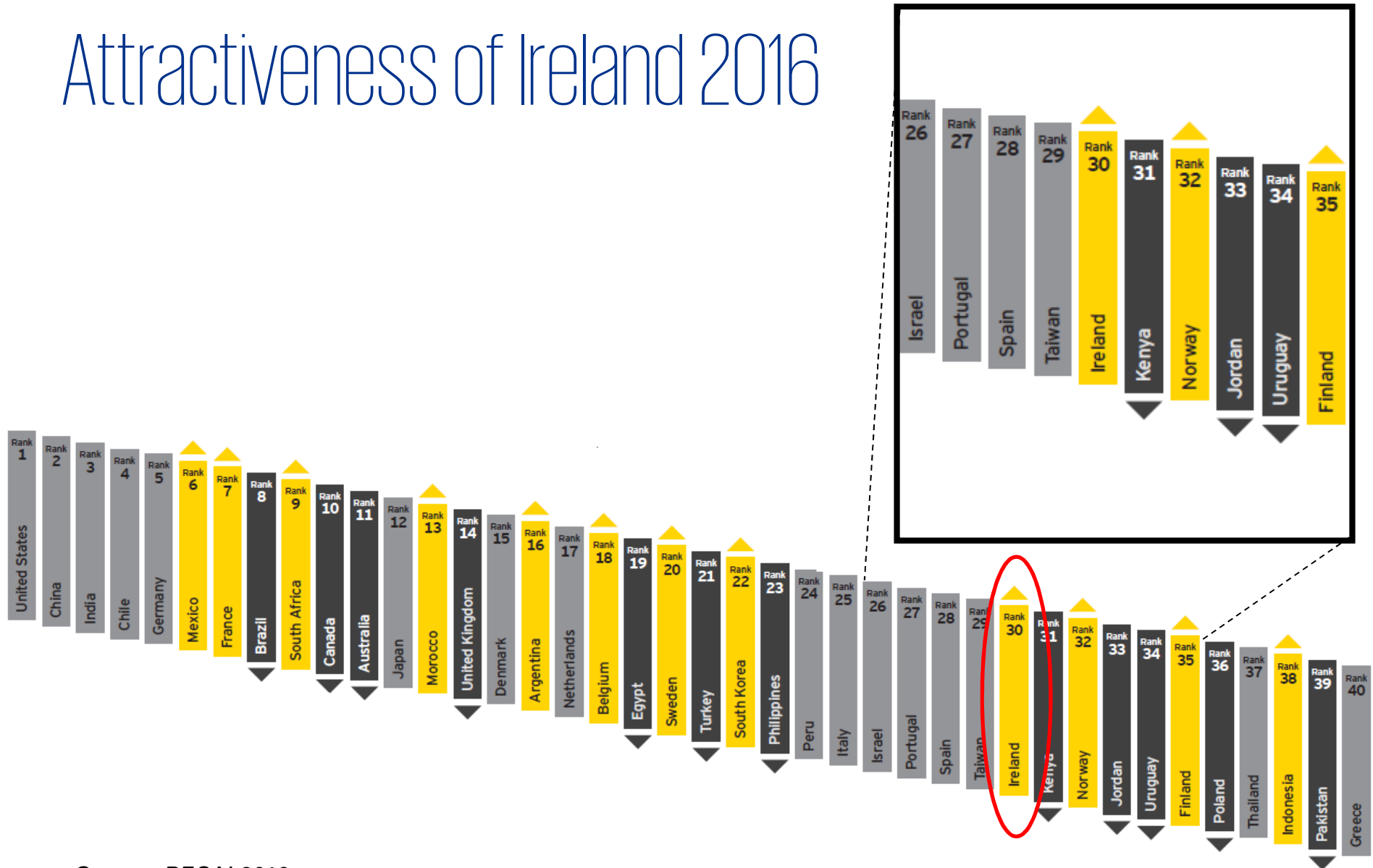


Source: *Global Trends in Renewable Energy Investment 2017*



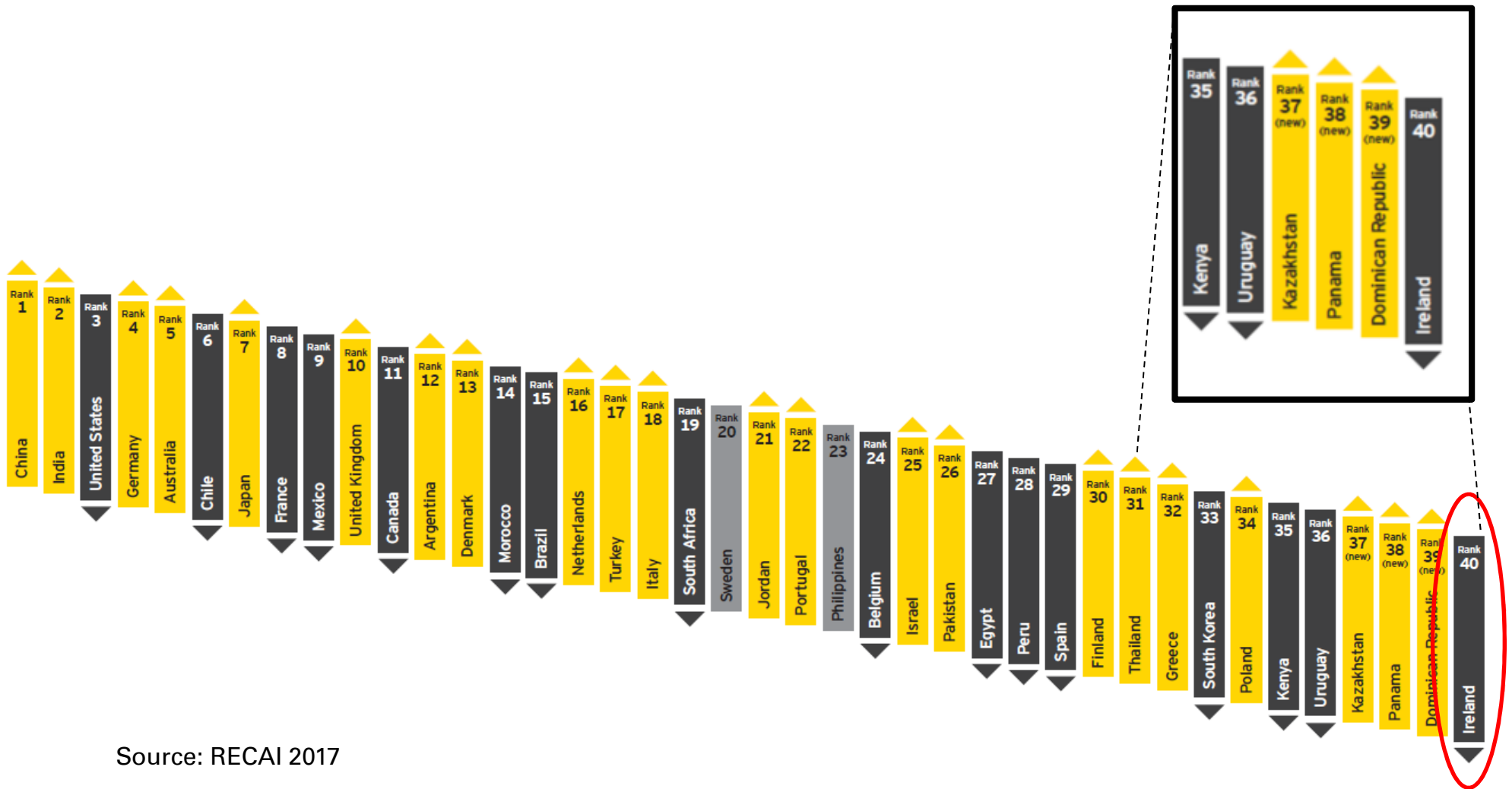
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# Attractiveness of Ireland 2016



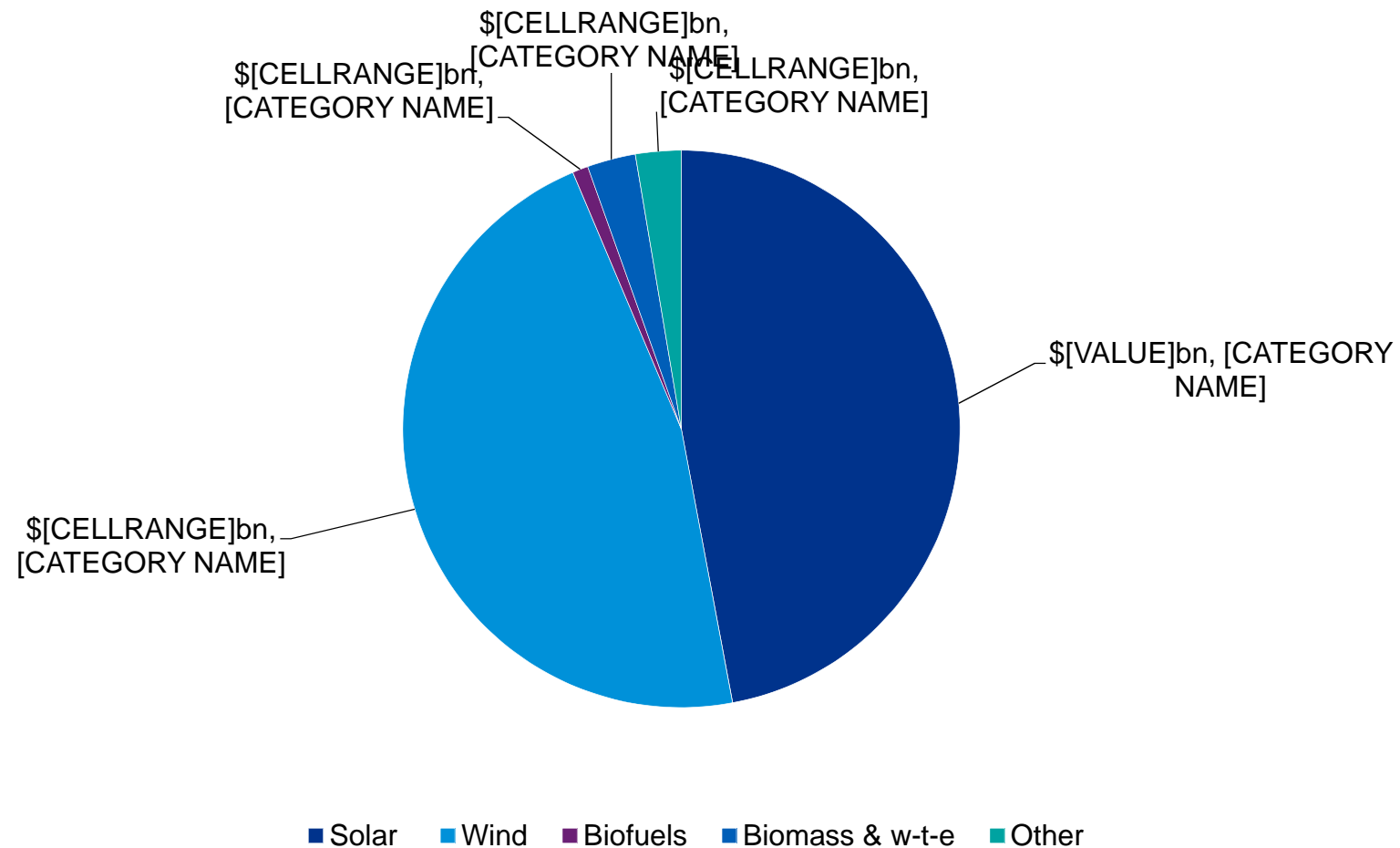
Source: RECAI 2016

# Attractiveness of Ireland 2017



Source: RECAI 2017

# Renewable Investment by Technology

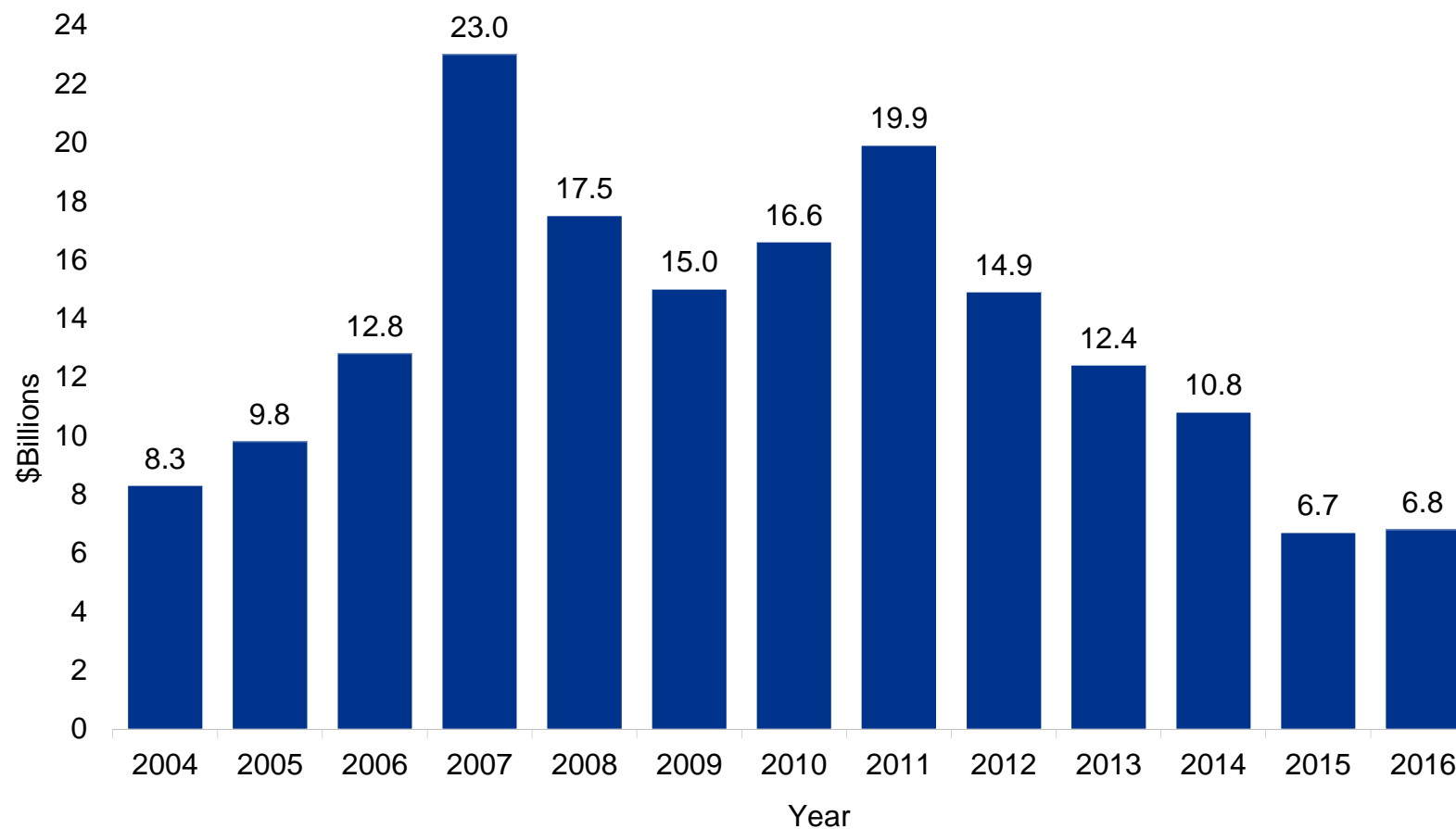


Source: Global Trends in Renewable Energy Investment 2017



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# Renewable Investment in Biomass (incl AD)



Source: *Global Trends in Renewable Energy Investment 2017*

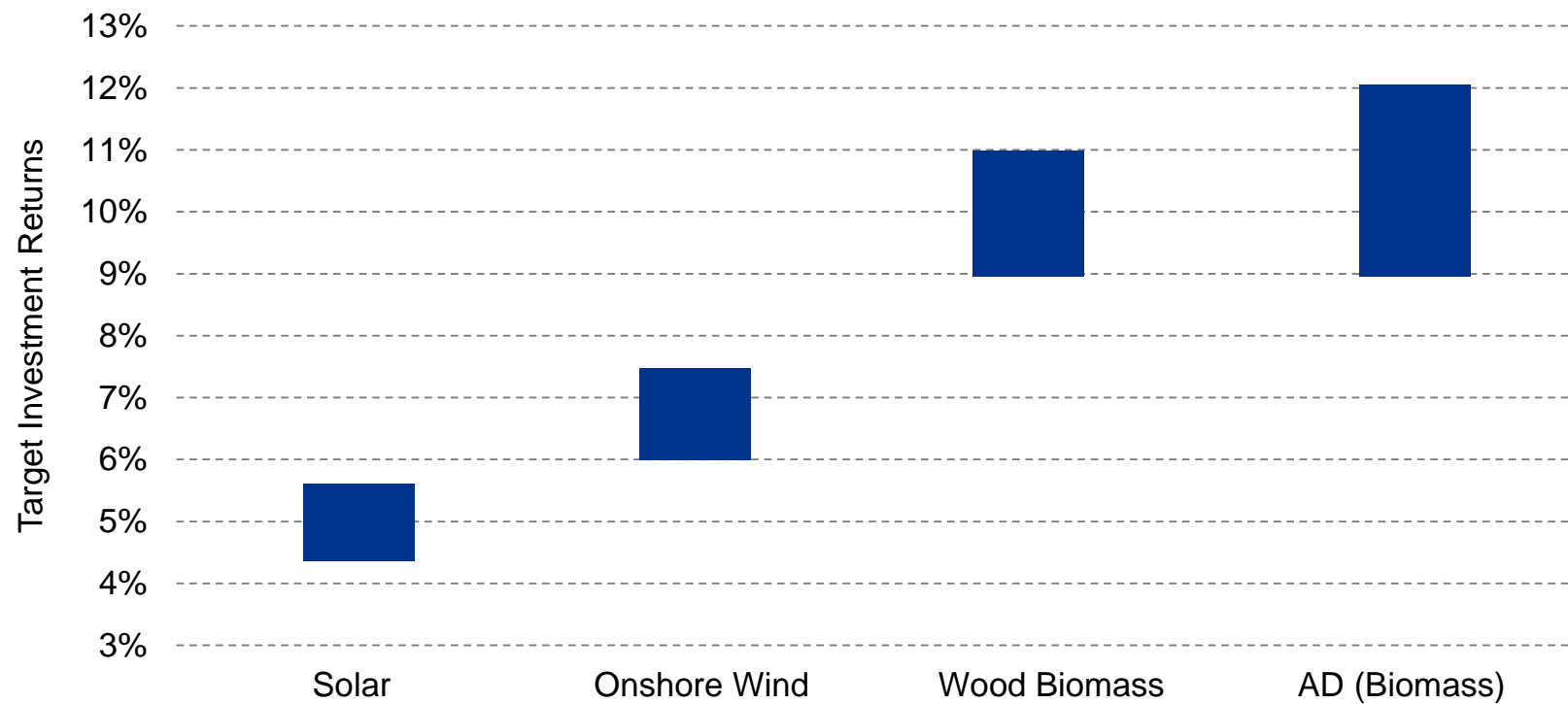


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# Market Return Expectations



**Unlevered Return**



*Source: KPMG Data*



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# Case Study

## Farm-Scale AD Plants

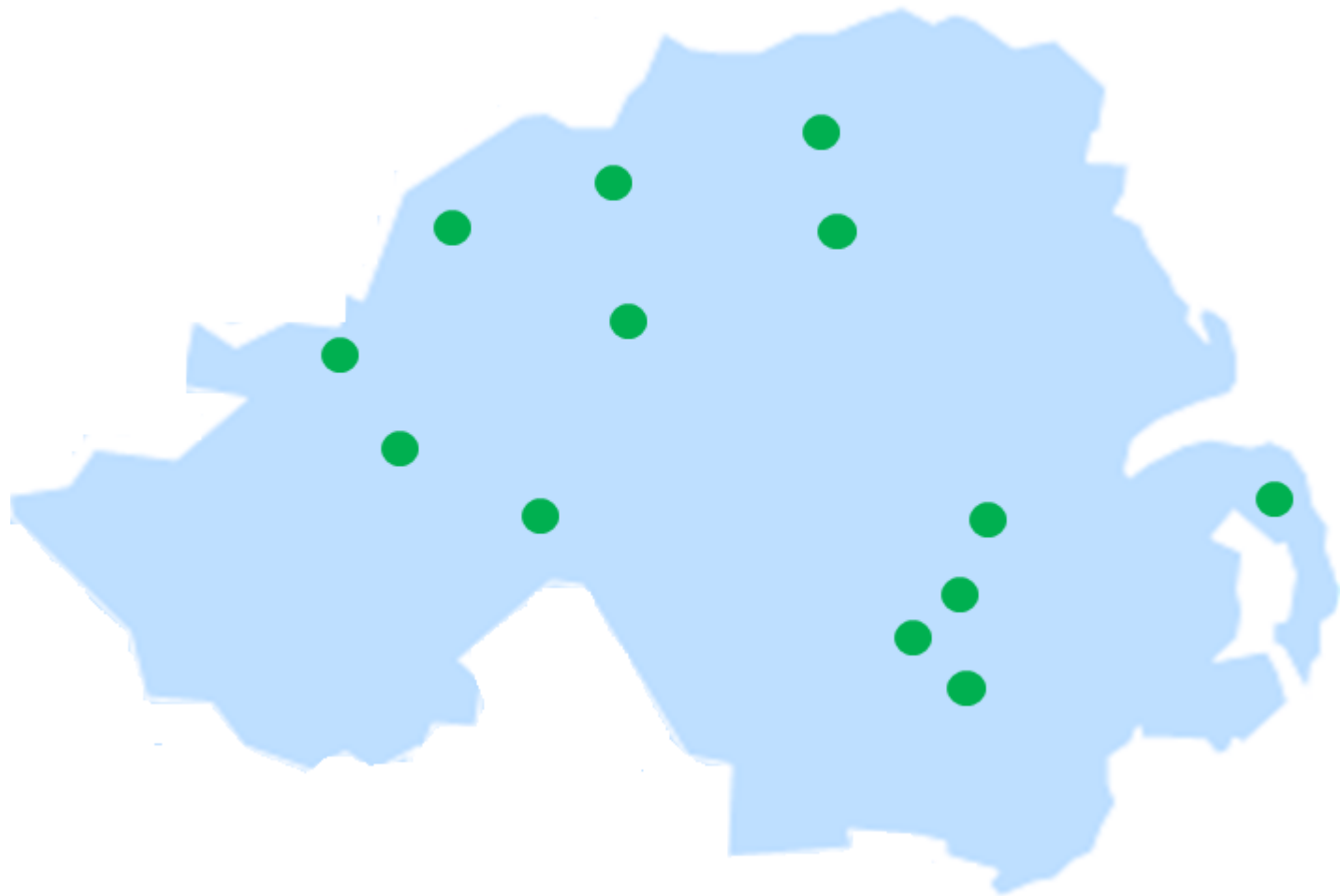
# Anaerobic Digestion Plant



# Anaerobic Digestion

- 0.5MW electrical output
- €2m - €2.5m per asset
- Converts grass silage, slurries, food wastes into electricity & heat
- Proven technology, yet unfamiliar in Ireland

# Farm-Scale Anaerobic Digestion Funding



# Project Structuring

- Project finance-standard contracts
- Maximise economies of scale
- Standardisation
- Ideal Funding:
  - Flexible
  - Matched to project risk lifecycle

# Case Study

## Large-Scale AD Plants

# KPMG Large-Scale Biomass Transactions (2014 - 2016)



Glenmore (4MW Anaerobic Digestion)

Glenmore (4MW)

Evermore (15MW)

Ballymena  
AD (3MW)



Evermore Energy (15MW Biomass)

Bombardier (15MW)



Ballymena (3MW Anaerobic Digestion)



Bombardier EfW (15MW Energy from Waste)

# Funding Options

- Secured Bank Debt / Promoter Equity
- Bank-led Project Finance / Promoter Equity
- Infrastructure Fund-led Project Finance

# Glenmore Generation - 4MW Donegal Gas Clean-up Plant



# Funding Structure

- Large-scale asset with economies of scale
- Sufficiently large to warrant project finance
- Medium-to-high technology risk
- Institutional debt with refinance flexibility

# Conclusion

- AD funding remains challenging, but is achievable
- Don't cut corners in terms of contractual protections or contracting approaches
- Try and identify synergies if projects are individually sub-scale for project finance
- Don't assume debt is always required in a capital structure



# Sourcing & Structuring Finance for AD

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