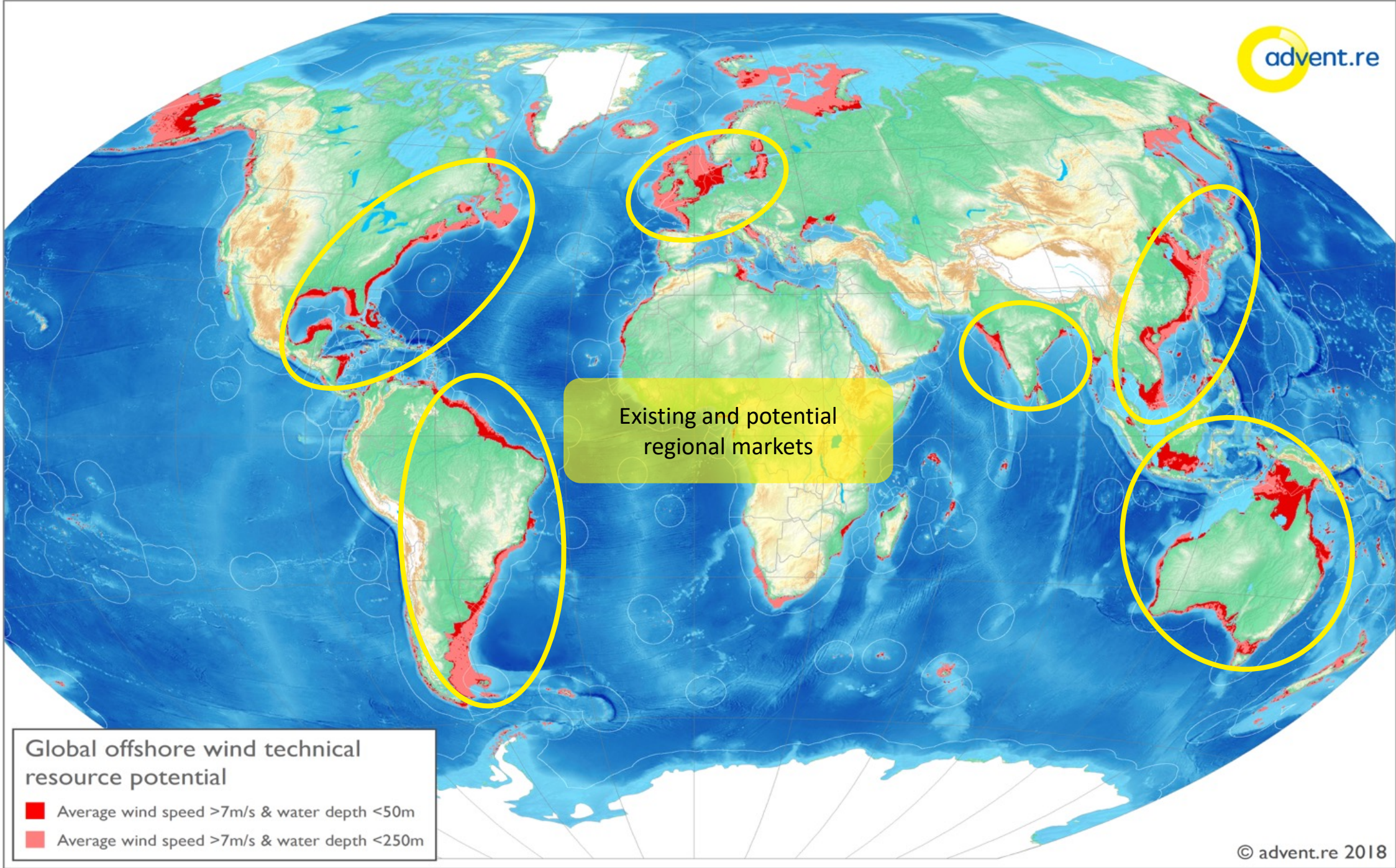


Taking offshore wind global

8 Oct 2019

Alastair Dutton



Existing and potential regional markets

Global offshore wind technical resource potential

- Average wind speed >7m/s & water depth <50m
- Average wind speed >7m/s & water depth <250m



GWEC
OFFSHORE WIND TASK FORCE



equinor   

SIEMENS Gamesa
RENEWABLE ENERGY 

MHI VESTAS OFFSHORE WIND  MAINSTREAM RENEWABLE POWER

+ Wind Energy Associations, Carbon Trust, IFC

Activities

- 1 Market intelligence
- 2 Market readiness assessment
- 3 Market entry opportunities
- 4 Policy advocacy
- 5 In-country events
- 6 Knowledge transfer
- 7 Skills training
- and more to come...



OFFSHORE WIND FOR EMERGING MARKETS
A NEW ESMAP WORK PROGRAM
IN PARTNERSHIP WITH IFC

FEBRUARY 14, 2019



- Utilising knowledge management techniques:
 - To provide a structured approach to market creation
 - To identify where countries, and regions, are in maturing their elements of the market
 - To focus on specific topics for improvement
- Applied in-country with governments, developers and supply chain
- The approach is proven in other sectors
 - Education
 - Oil and Gas
 - Healthcare
 - Computing/telecoms

Offshore Wind Market Readiness Assessment

To assess the readiness and attractiveness of new and emerging offshore wind markets for offshore wind deployment and to identify where improvements would be best focused.

	Topic	Level
1	Policy	2
2	Stakeholders	2
3	Legal	3
4	Health and Safety	1
5	Consenting	2
6	Grid	3
7	Offtake	2
8	Projects	4
9	Manufacturing	2
10	Finance	2
11	Construction	1
12	Operation and Commissioning	1

Objective	Gap	Target Date
4	2	
3	1	
4	1	
3	2	
5	3	
4	1	
4	2	
4	0	
3	1	
4	2	
3	2	
2	1	

Assessment Dates		to	
Planned Review Date			

Subsequent sheets explain the separate topic rankings and how they have been derived in this assessment.

For further information please contact:

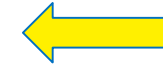
Alastair Dutton
adutton@advent.re
 +44 7836 229342

Market evolution

Established



Developing



Potential

Europe



Asia



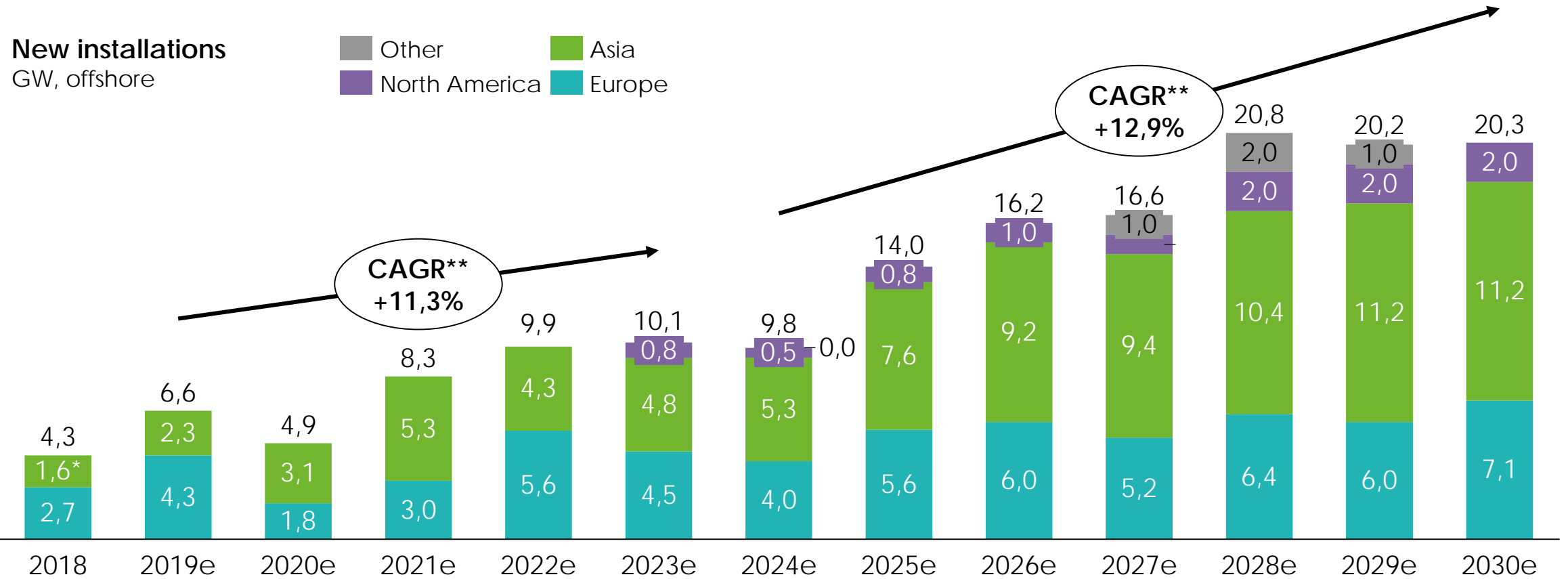
Americas



Elsewhere

	Established	Developing	Potential
Europe	UK, Netherlands, Germany, Denmark, Belgium	France, Ireland, Poland, Turkey, Sweden, Finland, Norway	Spain, Portugal, Greece, Italy, Estonia, Latvia, Lithuania, Russia
Asia	China	Taiwan, Vietnam, India, S Korea, Japan	Sri Lanka, Philippines, Papua New Guinea, ...
Americas		Massachusetts, New York, New Jersey, Delaware, Maryland, ...	California, Canada, Alaska, Brazil, Argentina, Venezuela, Colombia, ...
Elsewhere		Australia	New Zealand, S Africa, Morocco, Iceland, Hawaii, Madagascar, ...

GWEC Offshore Market Outlook to 2030



* Chinese installation adjusted to 1.6 GW new installations for 2018, Source: CWEA

** CAGR = Compound Annual Growth Rate

Source: GWEC Market Intelligence



Thank you

adutton@advent.re