London 21-23 September

Mercer Global Investment Forums 2020

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The Future of Energy in the Transition

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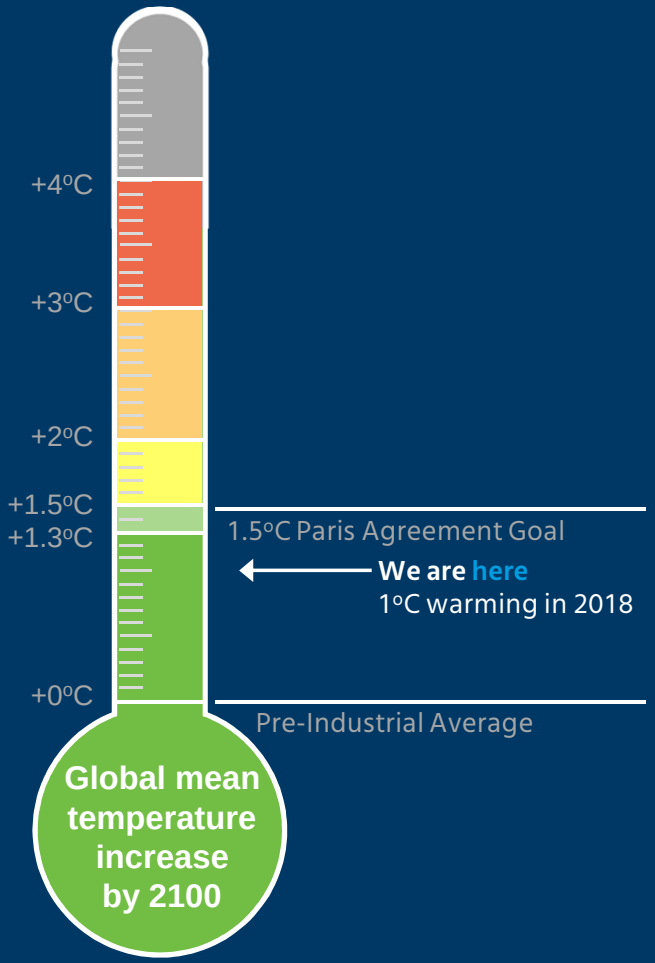
Climate change - the transition imperative

Higher

Natural catastrophe & resource impacts

Lower



+4ºC Not for tens of millions of years

+3ºC Not for 3 million years

+2ºC Not for 150,000 years of human beings

+1.5ºC Recommended scientific ambition

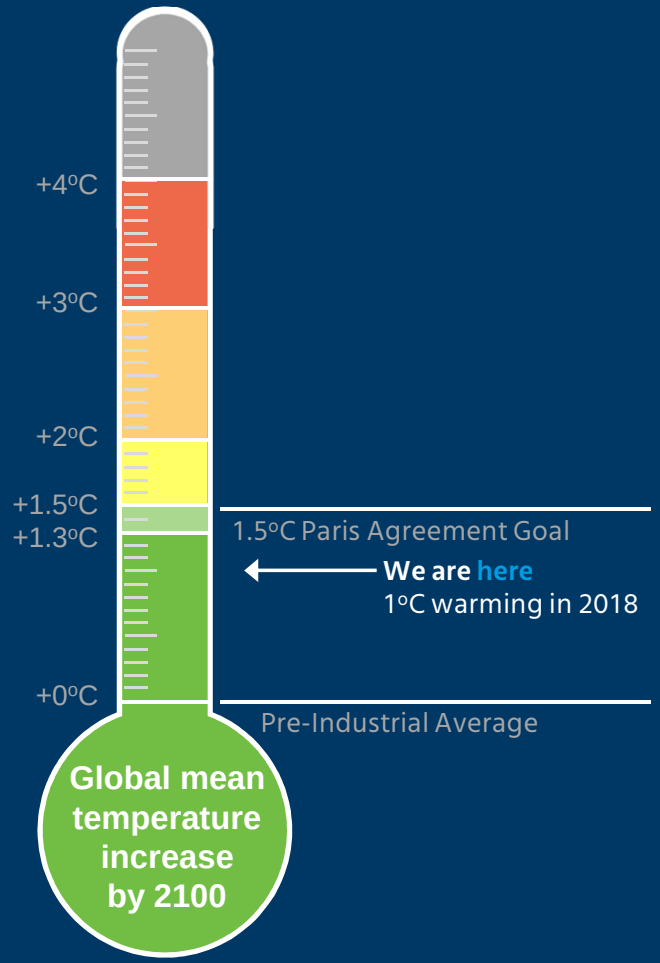
Source: Climate Action Tracker (http://climateactiontracker.org/) - last updated December 2019

Climate change - the transition imperative

Higher

Natural catastrophe & resource impacts

Lower

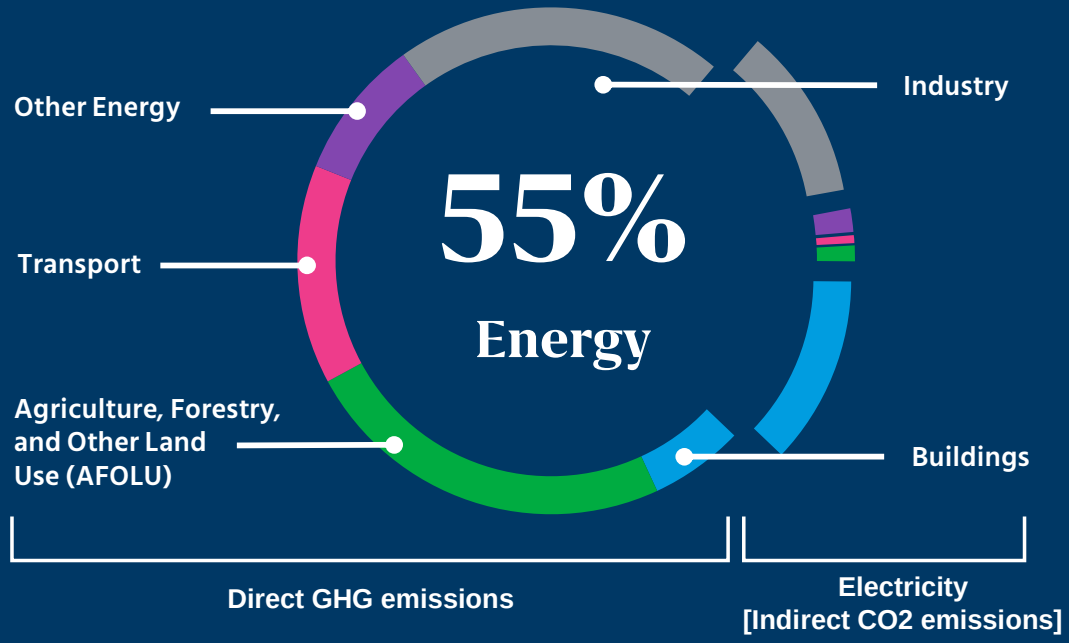


Source: Climate Action Tracker (http://climateactiontracker.org/) - last updated December 2019

Our survival depends on us reducing emissions to no more than

+1.5ºC Recommended scientific ambition

55% of all emissions are from direct and indirect energy



Source: IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp

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Position for transition

1. Determine your current emissions – set the baseline

2. Analyse your portfolio possibilities for transition

3. Define your target and timing

Possibilities for:

- The energy sector
- A transition scenario
- Action
  - Portfolios
  - Asset classes

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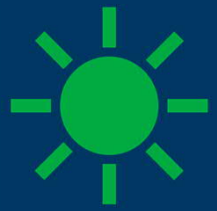
The energy transition is a multi-trillion dollar investment opportunity

$5.3Tn

Investment in wind to 2050

$4.2Tn

Investment in solar to 2050

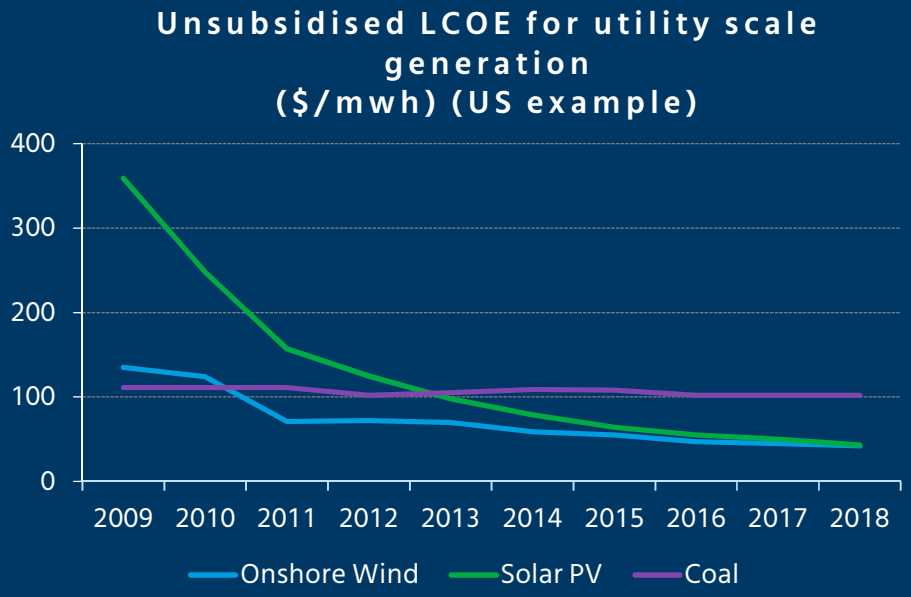


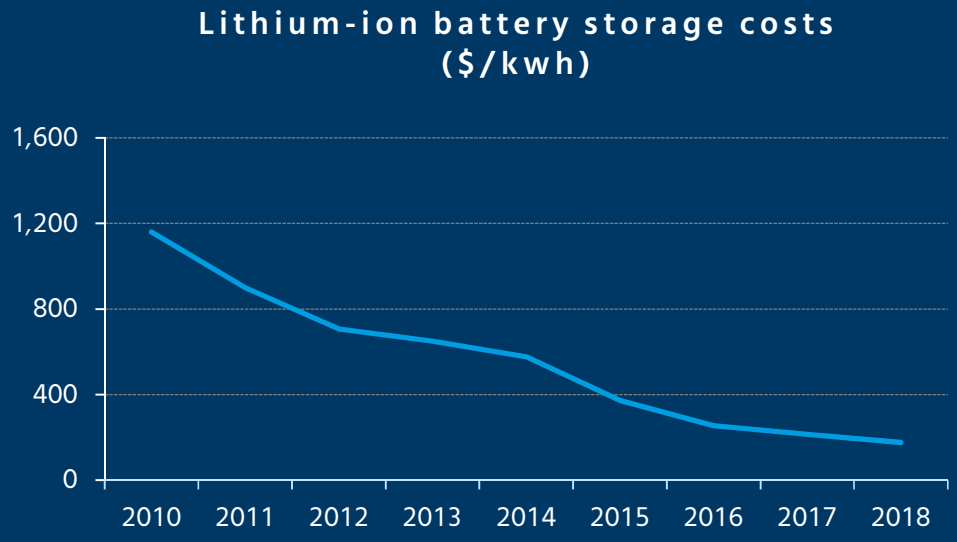
$0.8Tn

Investment in batteries to 2050

Source: BNEF (2019)

The energy transition is accelerating as technology costs decline





Source: Lazard and BNEF

The transition will proceed through a series of tipping points

It will not be smooth

1.

New renewable power generation is cheaper than new fossil fuel plants

2.

New renewable power generation is cheaper than the operating cost of fossil fuel plants

3.

New renewables plus storage are cheaper than new fossil fuel plants

4.

New renewables plus storage are cheaper than the operating costs of fossil fuel plants

The energy transition is not only about renewables

Zero-carbon power

Energy productivity

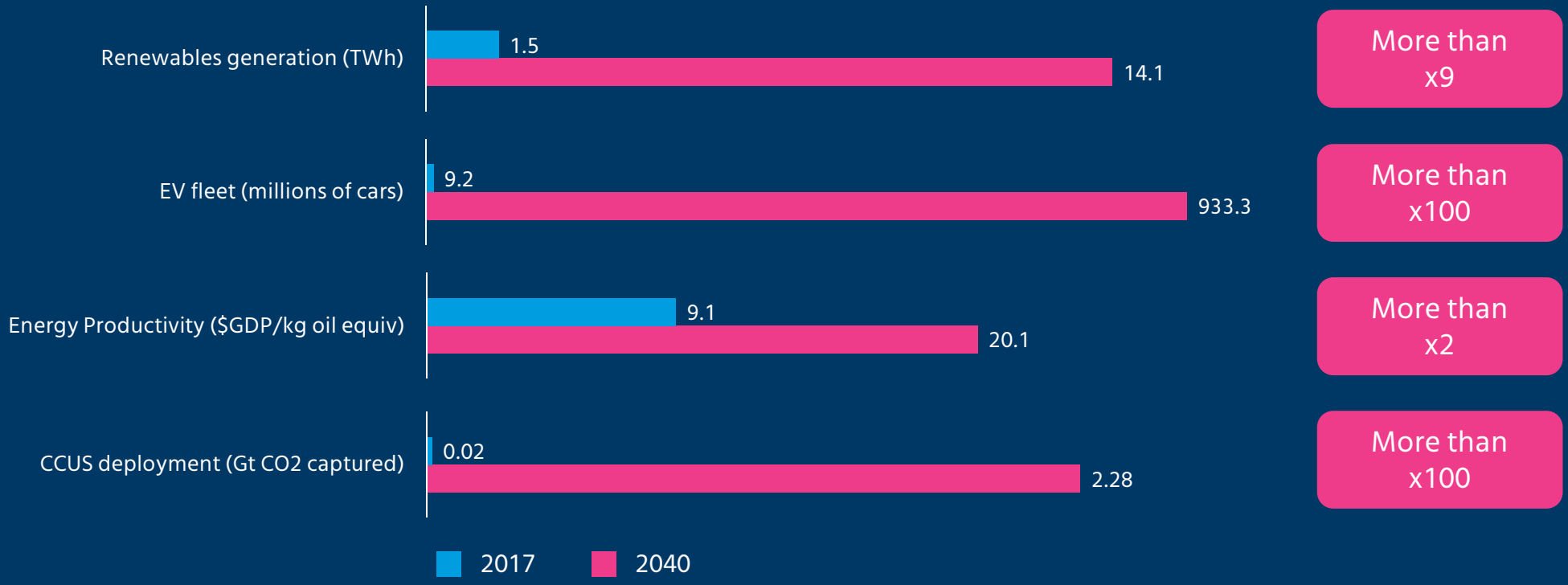
Electrification

New energy carriers

Carbon capture, utilisation & storage

There is a long way to go

Shifts in the energy system from 2017 to 2040 for a 2^{0}C pathway



More than x9

More than x100

More than x2

More than x100

Source: IEA, World Bank, Marsh & McLennan Analysis

There will be surprises

Technologies

Natural gas is a bridge to where?

Prospects for hydrogen networks?

National context

Uncertainty around subsidies for renewables and fossil fuels

Societal acceptance of new technologies

Liberalisation of power markets

Recovery plans

Will pandemic stimulus plans be green?

Which technologies will be favoured?

Policy ambition

Ambition of countries' 2030 emissions reduction targets must quintuple to get on track for 1.5°C

How will the gap be closed?

Orderly or disorderly transition?

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Position for transition

Use scenario analysis to plan for the surprises

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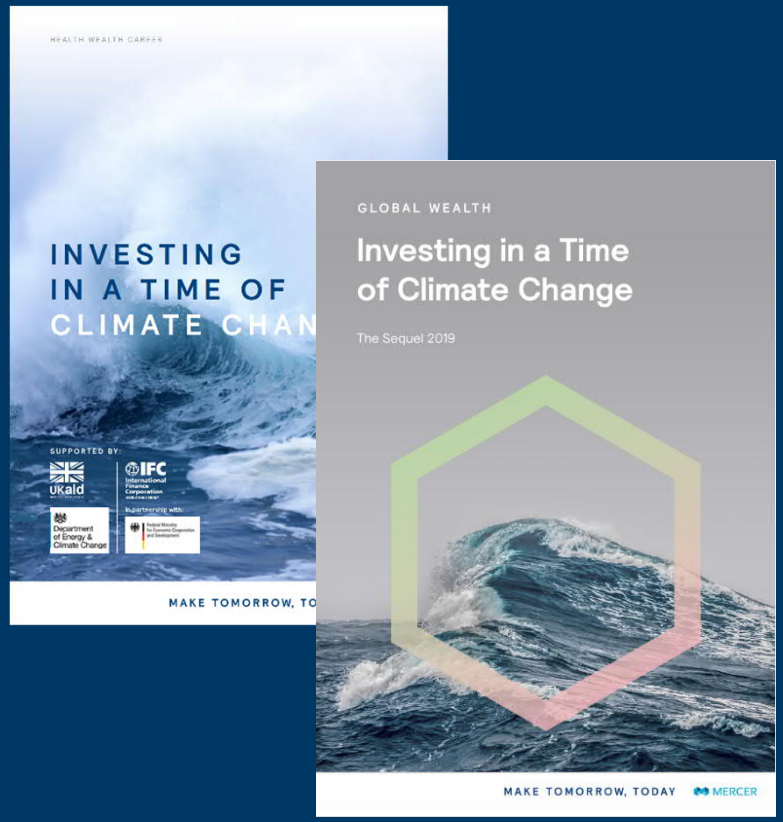
<2ºC scenario – an investor priority



1. In investors' best interests over the long term – beneficial to aim to influence the outcome.

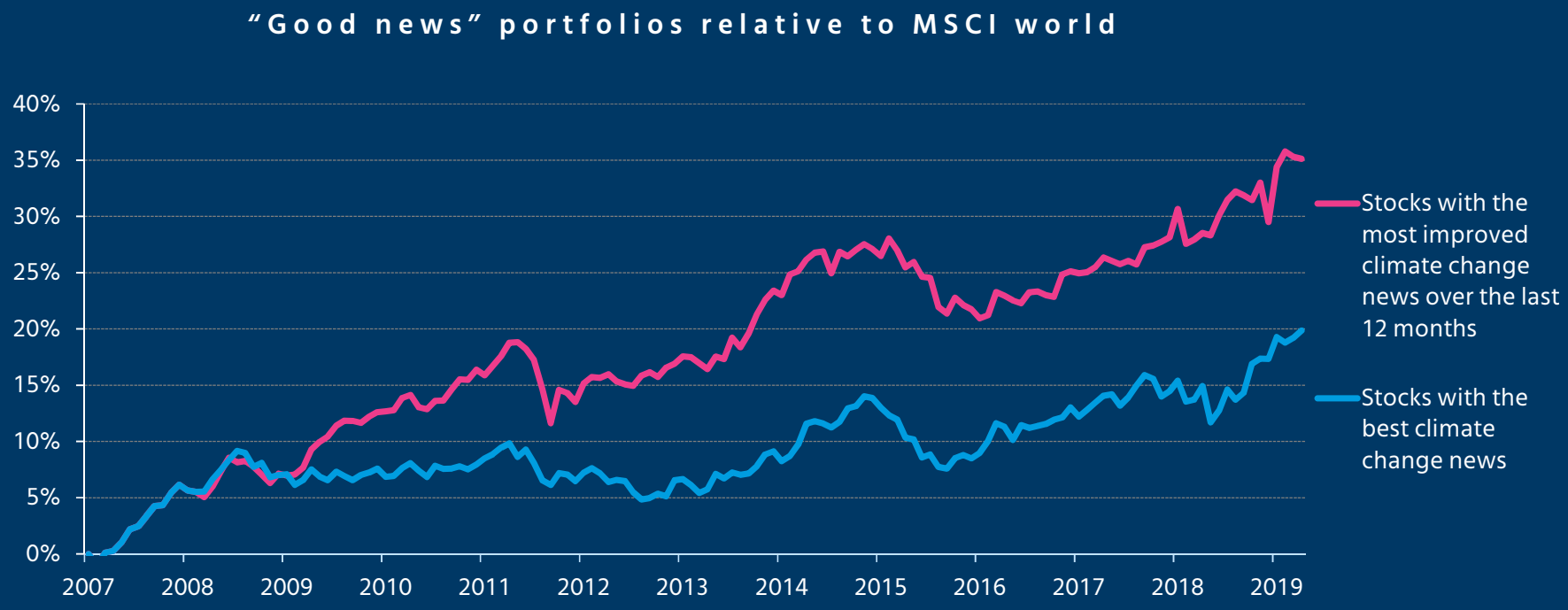
2. The greatest opportunities this decade – particularly where solutions are targeted.

3. The greatest risks in the short term – divergence in sectors (for example energy and utilities) and asset classes (for example equities and infrastructure).

A virtuous circle?

Planet, people, price, policy

A virtuous circle?
Planet, people, price, policy



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A virtuous circle?

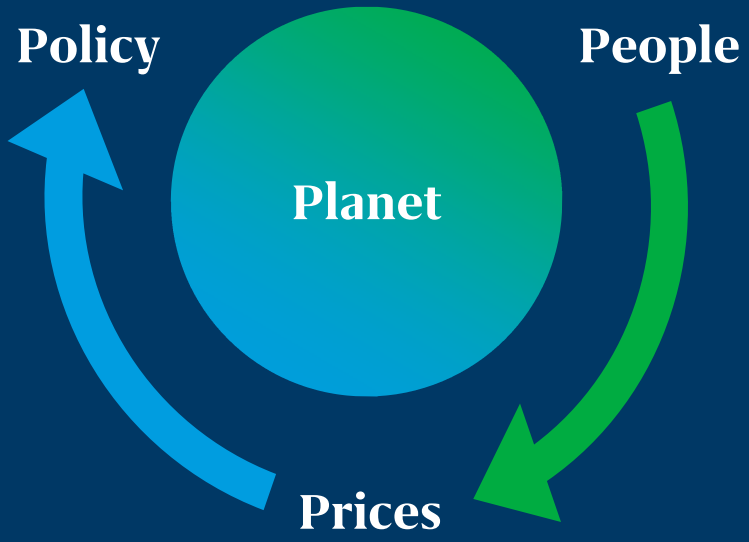
Planet, people, price, policy

25%

of global Co2 emissions

50%

of global GDP



A virtuous circle?

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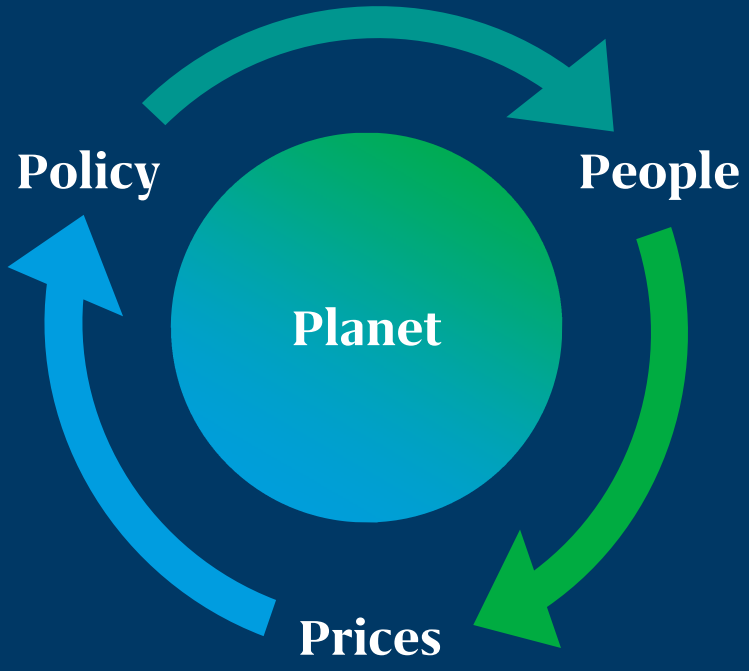

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Position for transition

Develop an action plan

1. Determine your current emissions – set the baseline

2. Analyse your portfolio possibilities for transition

3. Define your target and timing

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Transition plan principles

What we don't mean

Immediate ...

... divestment from only fossil fuel energy ...

... only in equities ...

... regardless of price ...

... or capacity for emissions reduction in the future ...

... with disregard for broader investment and ESG principles.

What Mercer does mean

- A multi-year plan, with 2030 critical to a 2050 target.
- Emissions for the portfolios and the real world.
- A total portfolio approach.
- "Decarbonisation-At-the-Right-Price".
- Going beyond emissions to transition and transformation.
- Including transition in investment and ESG process.

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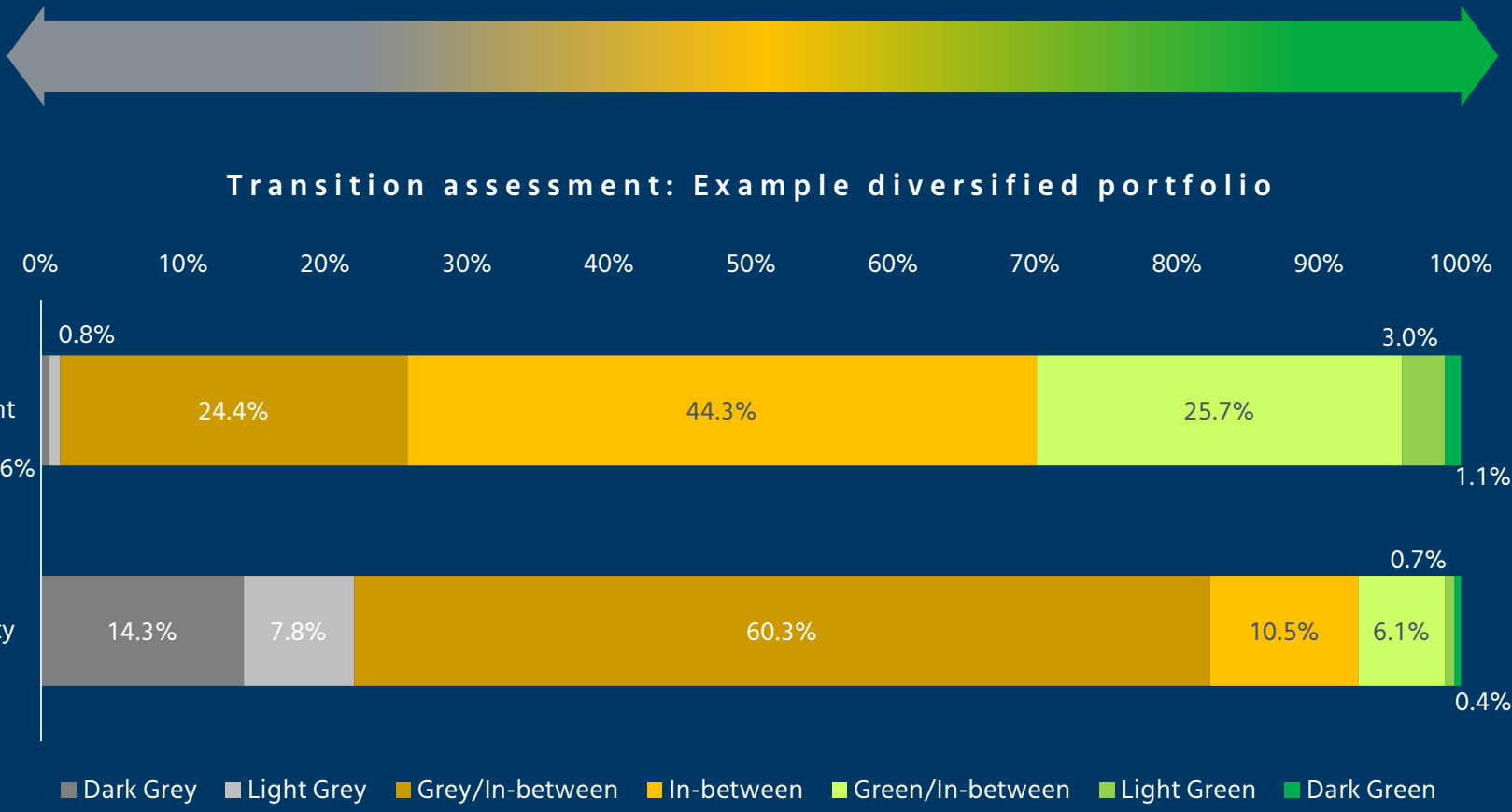
A transition spectrum – risks to opportunities

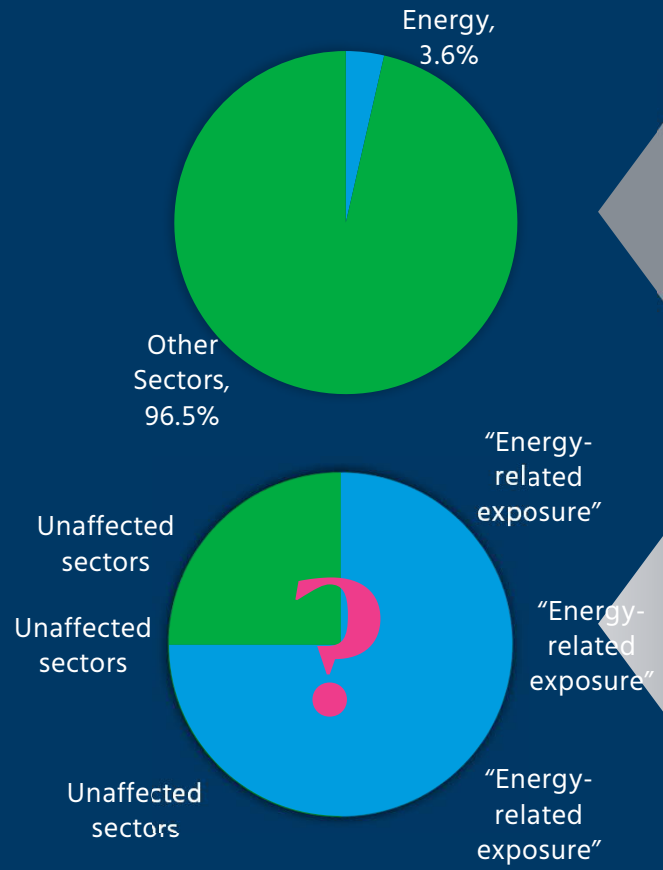
A transition spectrum – risks to opportunities

Transition tool application



Source: Mercer, 2020

The grey, the green and the in-between



ExxonMobil

bp

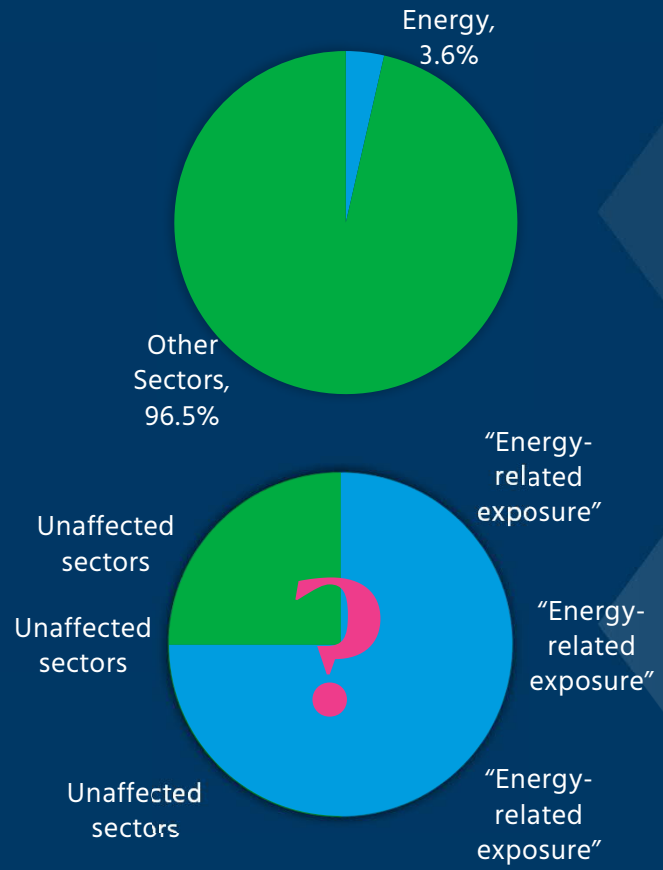
Ørsted

nationalgrid

BNP PARIBAS

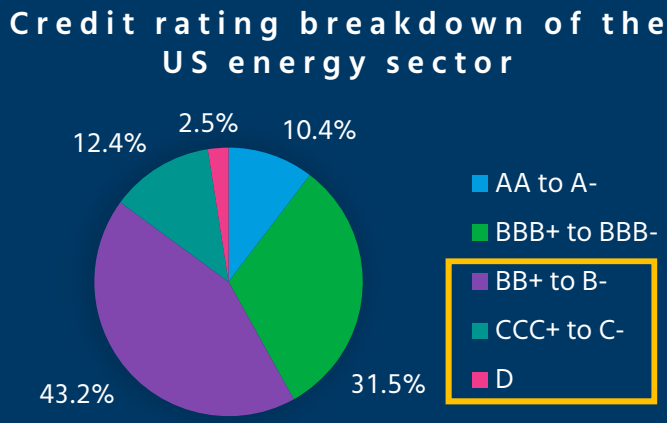
DELTA

The grey, the green and the in-between

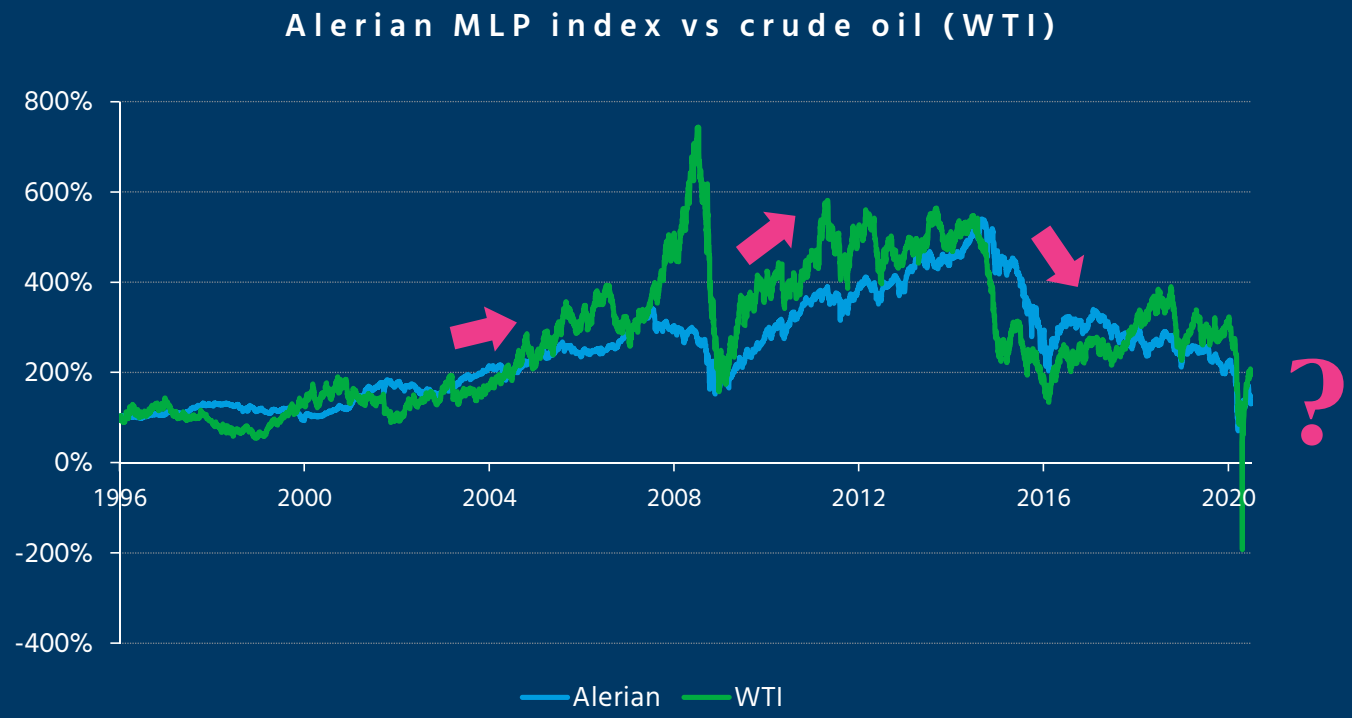


Building transition-resilient equity portfolios will require deeper analysis and better diversification

Conventional energy – not gone yet



Source: S&P Capital IQ, August 2020

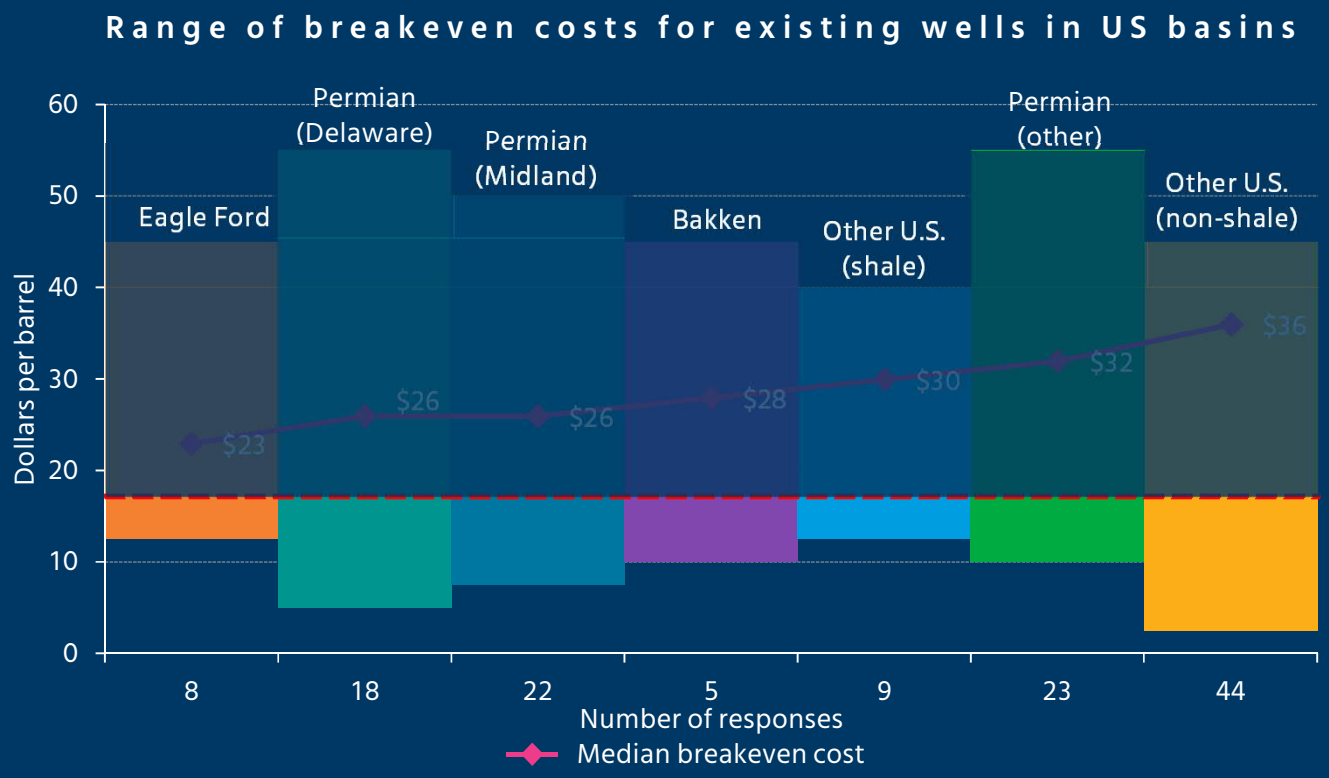


Source: Thomson Reuters Datastream

Conventional energy – not gone yet

The energy transition will be complex and non-linear

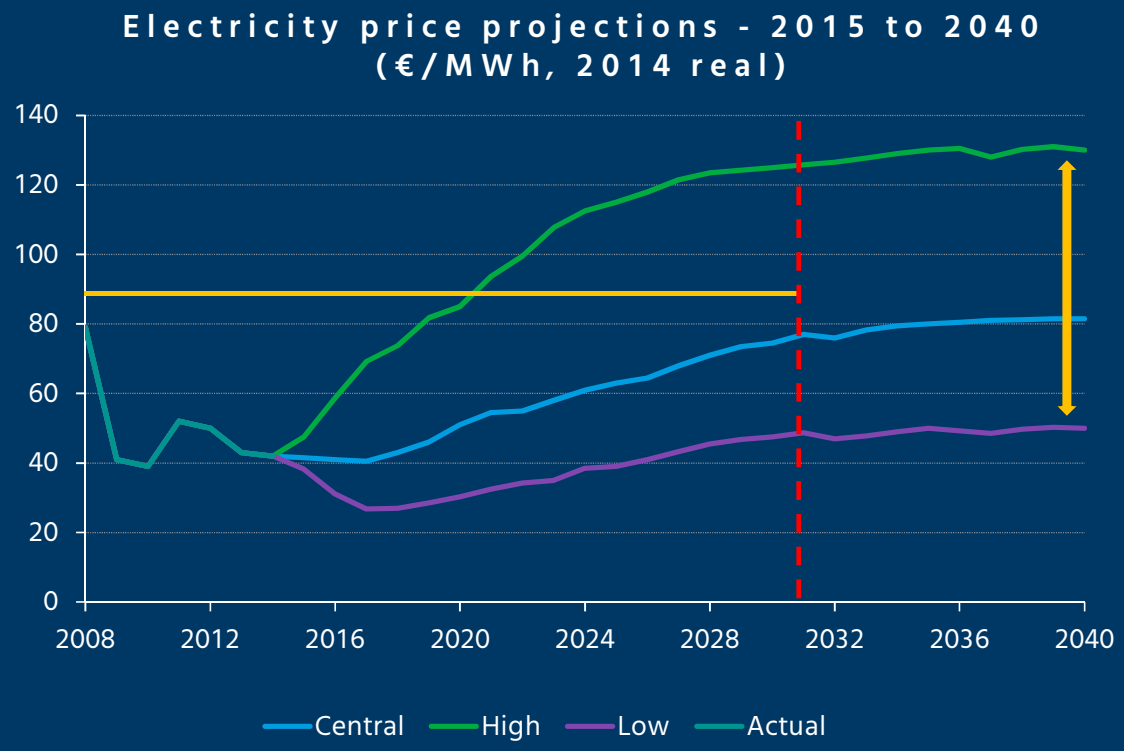
There will be 'winning-losers' and 'losing-winners'



Source: S&P Capital IQ, August 2020

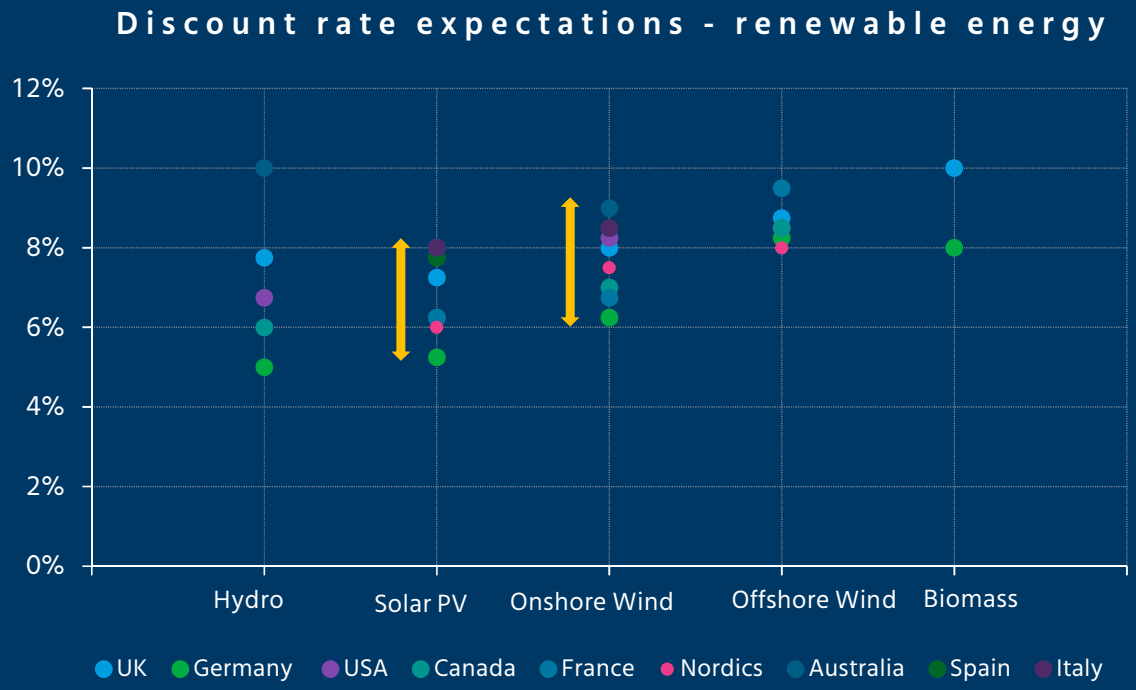
Source: Federal Reserve Bank of Dallas, August 2020

Renewable energy – invest in the whole value chain



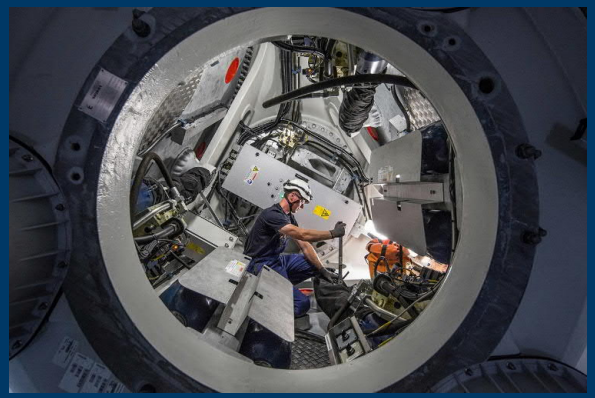
Source: Pöyry, July 2015

Renewable energy – invest in the whole value chain



Source: Renewable energy discount rate survey results 2018 – Grant Thornton

Renewable energy – invest in the whole value chain



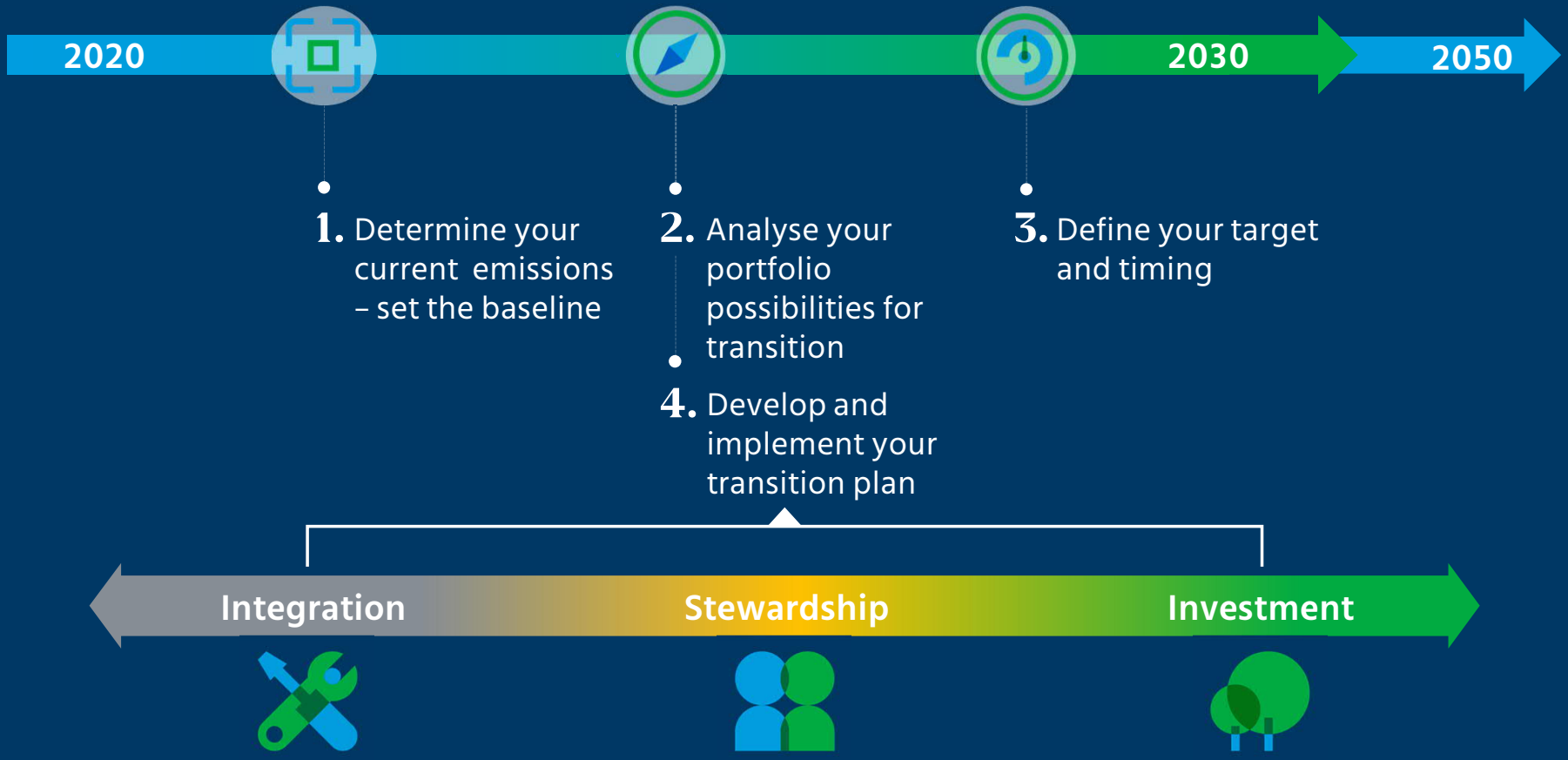
Caveat emptor – know what you're investing in!

Focus on specific alpha, not generic beta

Renewable energy – invest in the whole value chain

Position for transition

Where now? Where to? How to get there? Prioritise actions



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