#EnergyProspectives

# **Energy Prospectives**

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## **Energy Prospectives**

Naturgy Foundation - IESE Seminar



JULY 2020

# Already >1°C of warming, and rapidly approaching 1.5-2°C range



#### The largest emission drop since WWII



# Past crises have merely slowed down GHG progression by up to 5 years - So what next?





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### Reasons for hope

#### Technology

## We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten



#### Cost reductions over the last decade



#### Solutions exist for a large part of the problem



# Reasons for hope

# Technology Policies

#### Significant barriers to action

High investments, long pay-backs

Regulatory uncertainty; limited visibility on MT emission constraints Jobs at stake

International competition, no level playing field "Difficult to save the planet when you cannot make ends meet"

COVID already putting huge pressure on national budgets

#### Significant barriers to action

High investme long pay-ba

Regulat uncertainty; visibility of emission cor



"Difficult to ave the planet when you cannot make ends meet"

D already ing huge on national Idgets

### Reasons for



#### Technology



#### Societal engagement



#### Economics are unfavorable



cost of carbon-neutral steel, assuming CCS or H2 direct reduction cost of carbon-neutral cement, assuming Oxyfuel CCS cost of green ethylene, assuming non-fossil inputs and renewable production Economics are unfavorable **?** 



#### Policies will come

#### Subsidies

#### **Co-investment**

#### Building standards

# Product standards

Carbon price & border tax

Compulsory recycling Mandatory disclosures

#### Reasons for

nobe

### Technology

#### Policies

#### Societal engagement

#### Companies/investors



#### Technology

#### Policies

#### Societal engagement

Companies/investors

#### A global energy landscape changing faster than ever

Daunting 2°C challenge: Double down on the efforts to avoid an out of control spiral on climate

Technology-induced pace of change systematically under-estimated by stakeholders

• Our main reason for hope, and a source of further business model disruptions

For most countries, ~3/4<sup>th</sup> of decarbonation goals can be reached at positive GDP impact

• To go beyond, we need a global alignment... and a clean synthetic fuel

Hyper complex to get regulation right. But we know the general long term direction!

#### The sunset of fossil fuels?

Increasingly electrified world, yet limited upside in mature markets, stranded asset risks anywhere

A development challenge, and opportunity



#### Planning for uncertainty

### A call for action for <u>all</u> companies



Sustainability agenda

A hard look at own portfolio



New businesses opportunities?



#### The ostriches will get eaten (or drown)



#### Planning for uncertainty



#### Sustainability agenda

### Those who anticipate will thrive



New businesses opportunities?

A hard look at own portfolio

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