

An aerial photograph of a large dam structure with water flowing through its spillways. The dam is surrounded by lush green forest. The CLIM8 logo is visible in the top left corner of the image.

CLIM8



## CLIM8 INVEST THEMES

Themes help us navigate climate impact in all its complexity and variety. We use them to draw threads through the most climate positive companies and funds, tying them into categories that tell a story about how the net zero transition is unfolding - and how your investments will play a part.

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# Green Energy

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## GIVING GREEN ENERGY A POWER BOOST

Everything we do relies on energy. It powers our homes, communities and economies. And due to growing populations and developing economies, demand is growing.

But as the biggest global source of emissions, the power sector needs a total transformation.

We need to change more than just how energy – and specifically electricity – is produced. We need to rethink how it's consumed, stored and transported on a previously unimaginable scale.

It's a massive undertaking that relies on collaboration from governments, policymakers and industry. And the way we all invest will play a huge part in getting us there.

Join us as we shine a light on how we can reach a green energy future – and how it needs to be financed.

With investing, your capital is at risk

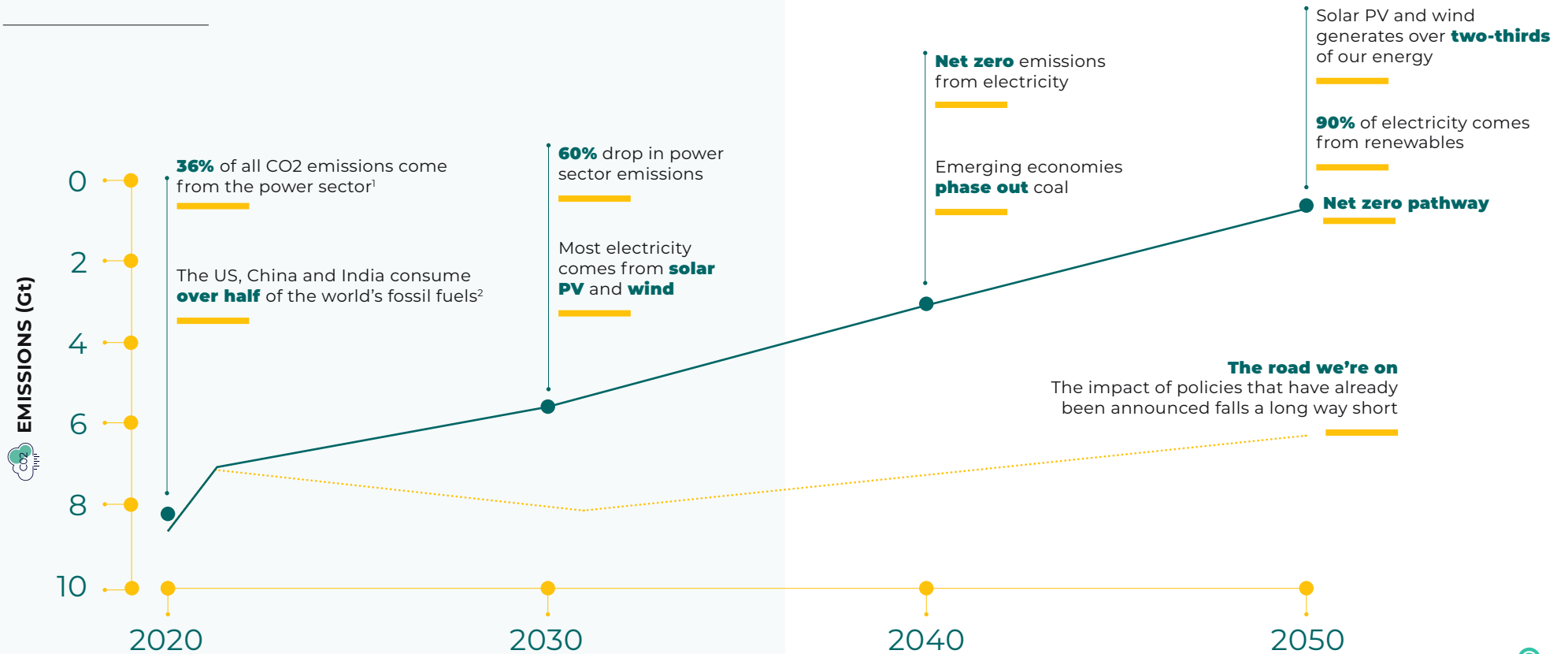


CLIM8 INVEST THEME: **GREEN ENERGY**

### REWIRING OUR APPROACH TO ENERGY

Even with the various pledges by governments across the world, we're a long way from reaching net zero by 2050, as the chart below shows\*. The technology is here but we need to scale up – and fast.

Change is on the horizon. But what will it take to get where we need to be?



### CONSCIOUS DECOUPLING: EMISSIONS AND ENERGY USE ARE GROWING APART

The good news is that in some countries, like Denmark, emissions haven't been rising at the same rate as energy consumption. This is mainly due to better efficiency, the growth in renewables (Denmark's Middelgrunden offshore wind farm is a notable example), gas slowly replacing coal and new innovations such as carbon capture technology.

1: IEA emissions Database 2019. 2: <https://cleantechnica.com/2019/05/03/which-countries-use-the-most-fossil-fuels/> \*These energy and emissions milestones are based on a scenario designed by the International Energy Agency. Their Net Zero Scenario is 'designed to show what is needed across the main sectors by various actors, and by when, for the world to achieve net-zero energy-related and industrial process CO2 emissions by 2050.' (IEA Net Zero by 2050)



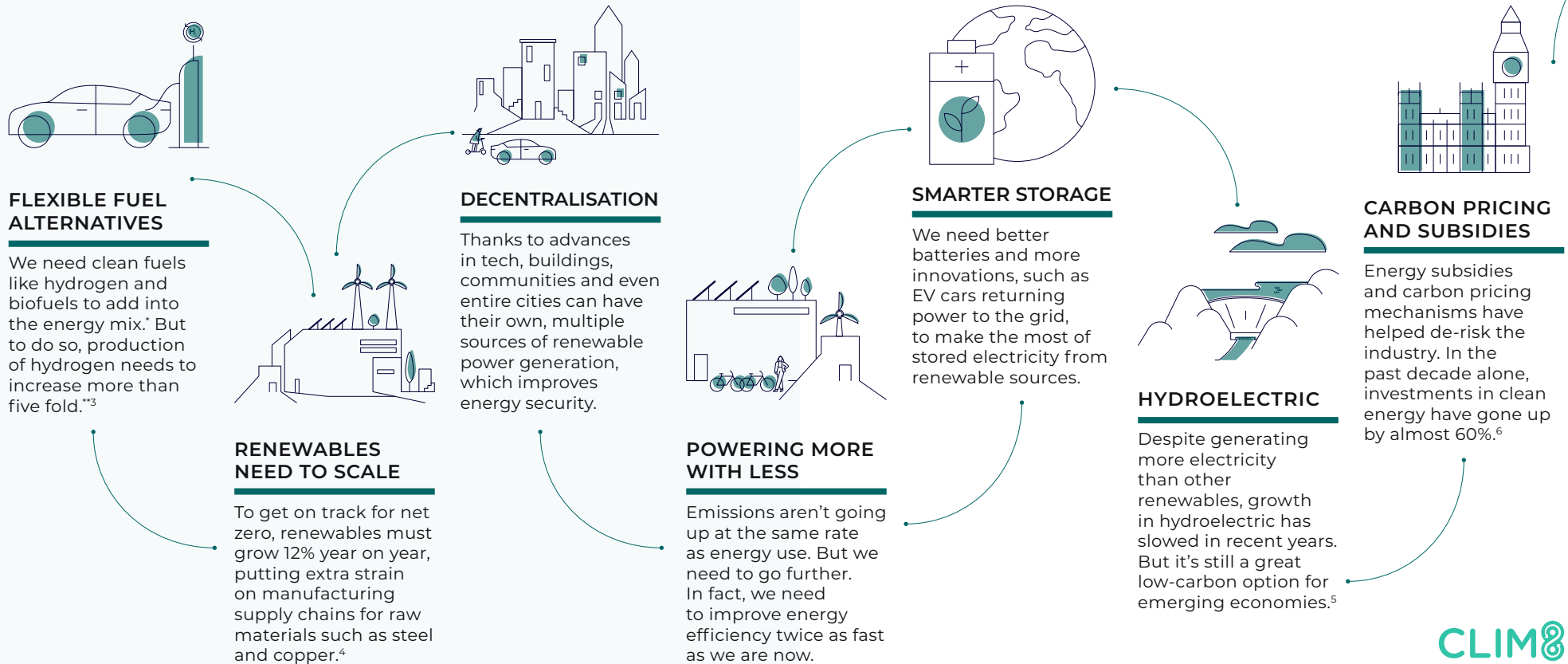


## CLIM8 INVEST THEME: GREEN ENERGY

### THE WINDS OF CHANGE

There's no one-size-fits-all solution when it comes to transforming the power sector. Although the cost of making wind turbines and solar panels has tumbled in recent years and sectors like transport and heating are becoming electrified, that still isn't enough for us to reach net zero by 2050.

But if we act now to make the right changes at scale, there's no reason we can't create an abundance of green energy that doesn't cost the earth.



\*Energy supply from electricity is likely to be a higher percentage. However, because it needs to be converted and stored in other forms, like hydrogen or other fuels, it makes up just half of consumed energy in the Net Zero Scenario. \*\*Low carbon or 'Green' Hydrogen is a liquid (or gas) fuel which is produced through the separation of water molecules using electrolysis, when it is powered by low-carbon electricity. 3: [IEA Net Zero by 2050](#) 4: [IEA World Energy Outlook 2021 - Page 127](#) 5: [IEA Hydropower 2021](#) 6: [IEA World Energy Outlook 2021 - Page 37](#)







## CLIM8 INVEST THEME: GREEN ENERGY

### GROWING GREEN ENERGY THROUGH INVESTING

The political and social appetite for a greener future is strong and the technology to make that happen is already here. But the next challenge between now and 2030 is growth – and it has to happen on a monumental scale.

Thankfully, we're already on our way. The recent COP26 conference saw an eye-watering \$130 trillion of private capital pledged to meet net zero by 2050. And as the market for green energy gains momentum, this explosion of growth presents a significant opportunity for investors.

### POWERING UP THE MARKETS FOR NET ZERO

#### ANNUAL INVESTMENT NEEDED PER DECADE<sup>6</sup>



#### ENERGY EFFICIENCY<sup>6</sup>



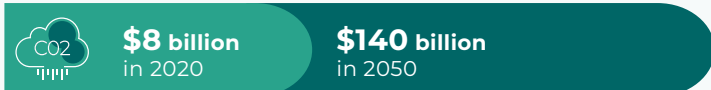
#### BUILDING AND RENEWING ELECTRICITY GRIDS<sup>6</sup>



#### NUCLEAR ENERGY<sup>6\*</sup>



#### CLEAN AND LOW-CARBON FUELS<sup>6\*</sup>



### GROWING A CLIMATE POSITIVE FUTURE TOGETHER

We believe that investing can be a critical tool in building a climate positive future. So we only invest in companies and funds who are actively enabling the net zero transition, not just paying lip service to it.

The technology to decarbonise the energy market is out there, but we need affordable, large scale power storage to make it a reality. For our Green Energy theme, this means focusing on companies that can operate at scale or have the potential to do so. As we get closer to 2050, we'll need to invest more in technologies that are currently in their infancy, such as hydrogen, battery storage and concentrated solar.

### OUR SIX INVESTMENT THEMES



**GREEN ENERGY** Generating electricity through renewable sources like wind, water and solar power.



**CLEAN MOBILITY** Moving away from fossil fuels towards electrified, zero-emission transport systems.



**CLIMATE TECHNOLOGY** Enabling systemic transition to net zero through smart tech, efficiency and more.



**WATER SYSTEMS** Providing clean, safe water for all and processing waste water responsibly.



**SUSTAINABLE FOOD** Ensuring plentiful food supplies while reducing emissions, deforestation and land use.



**THE CIRCULAR ECONOMY** Reducing waste, recycling materials and revolutionising the way things are made.



6: IEA Net Zero by 2050 \* Figures relate to cumulative investment needed