

Green Deal – What are the consequences of **climate ambitions** for your portfolio?

12 March 2021

2020, the fifth anniversary year of the Paris climate agreement, was one of the three warmest years on record. 2020 was also an important year for the environment for a number of other reasons. Europe raised its climate targets, in the United States the election of Joe Biden as president revived the climate debate, and even China committed for the first time to a date for becoming carbon neutral, while other countries also raised their climate ambitions. In addition, 2021 is also expected to be an important year for the planet.

Stimulus packages in the wake of the health crisis have provided the financial means to make these ambitions a reality. These plans will largely serve to achieve the energy transition and will lead to a real acceleration of green investments over the next decade. But these investment plans also pursue other objectives than the simple development of a climate-neutral economy.

In this note, we look at what has already been achieved on the climate front and detail the climate plans of the three major economic blocs. In addition, we look at some recent green trends within the financial sector that may influence your investments and analyse what climate ambitions may mean for your portfolio in the long term.

• Climate ambitions: a long-standing trend

In the late 1970s, climate change was first recognised by scientists as a serious global problem. Emissions of greenhouse gases (especially CO2 and methane, which together account for as much as 90% of emissions) from industry, transport, agriculture, power generation and building heating cause global warming. Between 2015 and 2019, the earth's average temperature was 1.1 degrees higher than the pre-industrial average. If global warming is not controlled, this trend will not only have ecological consequences, such as a decrease in biodiversity, more extreme weather events, rising sea levels, etc... It will also have economic and social consequences, such as migration, risks to water and food supplies, damage to infrastructure and disruption of production chains.

It was not until 1992 that the United Nations Framework Convention on Climate Change was concluded at the Rio Summit. This treaty provided a general framework for industrialised countries to reduce their greenhouse gas emissions to 1990 levels by the year 2000. However, the Convention did not contain any concrete recommendations. In 1997, the Kyoto Protocol set for the first time concrete binding targets for reducing emissions of six greenhouse gases (-5.2% compared to 1990 levels for the period 2008-2012). It also marked the creation of the Emissions Trading Scheme. Under this protocol, developing countries were not imposed reduction obligations, even though their economic development would later make them major emitters of greenhouse gases. Subsequent summits (Copenhagen, Cancún, Durban, Doha) took place under difficult conditions. In 2010 (Cancún), an official UN document established for the first time the objective of limiting global warming to no more than 2 degrees above pre-industrial levels. In 2011 (Durban), it was agreed to start negotiations on a binding global agreement (including developing countries) by 2015. In 2012 (Doha), a second commitment period (2013-2020) of the Kyoto Protocol was set. In the meantime, however, Canada had left the Protocol, the United States had never ratified the first one, and the Russian Federation, Japan and New Zealand decided not to extend their commitments for the second period. The remaining countries accounted for only about 15% of greenhouse gas emissions. They pledged to reduce their emissions by at least 18% compared to 1990 levels.

• The Paris climate agreement

Negotiations started after the Durban summit in 2011 led to the Paris Agreement of 2015. Through this agreement, the 195 participating countries intend to keep the increase in global temperature below 2 degrees compared to the pre-industrial period and preferably to limit it to 1.5 degrees. To achieve this, participants will cap global greenhouse gas emissions as soon as possible, before reducing them through progressively stricter measures and achieving carbon neutrality by the middle of the century. Countries will also adapt to try to mitigate the impact of global warming (so as not to jeopardise food supply, for example). The financial means necessary for the transition to a low-carbon society were defined. Each country has an obligation to translate its short-term and long-term objectives into action plans (Nationally Determined Contributions or NDCs). However, the targets are not binding and no sanctions are foreseen. Unlike previous agreements, developing countries will be required to meet their targets according to their capacity.

Seven countries have not ratified the agreement, including Iran, Iraq and Turkey, significant carbon emitters. On 1 June 2017, President Trump announced the withdrawal of the United States from the agreement. Following his inauguration as President, Joe Biden signed an executive order on 20 January 2021 leading to the reinstatement of the United States into the climate agreement.

Even before the agreement came into force, doubts existed as to whether the Paris targets would be sufficient to limit warming to 1.5 or 2 degrees, even if they were fully implemented. According to a 2020 Report published by the UN Environment Programme on the gap between needs and prospects for emission reductions, the current nationally determined contributions (NDCs) of governments under the Paris Agreement are largely insufficient. If governments were to live up to the commitments made so far under the Paris Agreement, this would still result in a warming of 2.7 degrees. Moreover, it has emerged that most countries have not met these targets. Projected emissions for 2030 put global warming on a trajectory of 3.2 degrees during this century.

• The climate ambitions of the three largest economic blocs

The United States, the European Union and China are the three largest economic blocs, and are also major emitters of greenhouse gases. China is the world's largest CO2 emitter with 28% of the global total, more than the US and the EU combined. China's role in the fight against climate change can hardly be overestimated.

A new dynamic has been established in 2020, not just in the three largest economic blocs. The growing number of countries that are moving towards zero emission targets is encouraging. Japan, South Korea, Canada, South Africa and the United Kingdom have also recently raised their climate ambitions. It remains to be seen whether other major emitters such as Russia and India will also take similar steps.



It also remains to be seen whether the intentions will be translated into stronger nationally determined contributions (NDCs). The next climate summit in Glasgow in November 2021 will be very important to formalise the targets up to 2030.

In many countries, the recovery plans adopted in the wake of the Covid-19 pandemic will serve as catalysts. If there is one thing that the coronavirus crisis has demonstrated on the climate front, it is that the contraction of industrial and social activity has had only a limited and temporary impact on CO2 emissions (estimated at -6.4% worldwide). This indicates that the path to achieving the targets is not "less", but "differently". If the stimulus packages focus on investments in sectors that achieve a low-carbon energy transition, the 2030 targets could be very achievable. It is more important than ever to make the right investment choices so as not to divert resources to assets that may no longer be desirable in the near future. Moreover, the objectives for 2030 should not divert attention from the real challenges in 2050, as it is possible to achieve the 2030 objectives with certain choices, but these choices will hinder the road to 2050.

European union

By launching the Green Deal for Europe in December 2019, the European Commission presented its medium and long-term sustainability objectives for all sectors of the economy (energy, construction, industry, mobility and agriculture). It also defines financial mechanisms to achieve this objective and proposes a roadmap for the necessary legislative initiatives. In 2020, the European Council reached an agreement on the Climate Act, which must set the objective in legislation. Unlike the Paris Agreement, the climate objectives aimed at achieving a climate-neutral EU will be binding on the Member States. Member States must develop long-term national strategies to achieve the EU targets by June 2021.

In 2020, ambitions from 2019 have been revised upwards. By 2030, the EU aims to reduce its CO2 emissions by 55% (down from 40%) compared to 1990 and achieve climate neutrality by 2050. With the 2019 targets, Europe would only achieve a 60% reduction in emissions by 2050. Additional steps have also been taken to achieve a circular economy and more sustainable agriculture. A hydrogen strategy has also been proposed.

The EU can be seen as a forerunner in decoupling CO2 emissions from economic growth. Between 1990 and 2019, GDP grew by 62%, while emissions fell by 25% over the same period. This difference can be attributed in part to the relatively high importance of nuclear sources in energy supply, but also to the accelerated shift from polluting coal to gas. This is partly due to the EU's Emissions Trading Scheme, which came into force in 2005.

The system sets maximum CO2 emissions for certain sectors and allows large companies to buy or sell emission allowances. This cap-and-trade system is sometimes referred to as a "cap-and-trade" system. The market mechanism therefore determines the price of CO2 emissions. As the maximum allowed emissions are reduced and allowances become more expensive, the price provides an incentive for large emitters to reduce their emissions. In the beginning, the system was not very effective because the price of allowances was still too low. But in recent years, prices have risen considerably and emissions from the sectors covered by the scheme have fallen by 21% in 2020 compared to 2005.

Reducing emissions by 55% by 2030 will require significantly higher investments in the period 2021-2030 than in the previous decade. According to the commission's proposal, the Green Deal will be part of the EU's multiannual budget for 2021-27 with a budget of \leq 1,100 billion and the Covid-19 recovery fund of \leq 750 billion (Next Generation EU).

- €560 billion of the recovery fund will be devoted to achieving the objectives of the Green Deal and the digital single market.
- The commission proposed that at least 25% of the EU's multi-annual budget (€275 billion) be devoted to climate investment.

Together with €150 billion from the Just Transition Fund (which aims to reduce the social and economic costs associated with the transition to a climate-neutral economy), the Green Deal budget will amount to at least €1,000 billion in total to be invested until 2030. The commission itself estimates that the annual investment needed to meet these targets is between 1.0% and 1.8% of EU GDP. The resources provided for in the multiannual budget and the recovery fund correspond to 0.7% of GDP per year. Other funding will come from national co-financing and public-private partnership. The national recovery plans and the use of the recovery funds will have to be fully adapted to the ecological and digital transition. Intelligent use of these funds can stimulate significant private sector investment.

The themes are :

- 1. Renewable energies: Europe will put a strong emphasis on solar and wind energy. By 2030, 85% of total electricity production will be of non-fossil origin (compared with 57% today, including nuclear). In the case of wind power, this means more than doubling the installed capacity by 2030, and in the case of solar power, almost tripling it.
- 2. Batteries: To cope with the fluctuations in production from renewable sources, gas-fired power plants still need to be relied on currently. To cope with these fluctuations without a back-up solution based on fossil fuels, large-scale electricity storage is needed. In 2017, the EU launched the European battery alliance. The main objective of the alliance is to develop battery technology and production capacity in the EU for storage and mobility purposes (electric vehicles). At the time, Europe had almost no capacity for large-scale production of battery cells. By 2025, Europe should be able to meet its own demand.
- 3. Hydrogen: it accounts for less than 2% of current energy consumption in Europe and is mainly used in the chemical sector. Hydrogen is produced almost entirely with natural gas, which generates significant amounts of CO2. "Green" hydrogen can be produced by separating water into oxygen and hydrogen using renewable electricity. Green hydrogen can in turn be used in industry or in the mobility sector, particularly in heavy transport and long-distance transport. It will take until the second half of this decade for renewable hydrogen to become competitive in some sectors. The priority for the EU is now to develop renewable hydrogen, produced mainly from wind and solar energy. From 2025 to 2030, hydrogen should become an intrinsic

mainly from wind and solar energy. From 2025 to 2030, hydrogen should become an intrinsic part of an integrated energy system with a strategic objective of installing by 2030 at least 40 GW of electrolysis capacity for the production of renewable hydrogen.

Analysts estimate that clean hydrogen could satisfy 24% of global energy demand by 2050. It represents the great hope for the future and could be the missing link to complete the energy transition after 2030. However, the technology is still in its infancy and analysts still debate whether the energy source will live up to its potential.

4. Electric vehicles: Electric vehicles require an adapted infrastructure. In order to support the transition, a fast and extensive recharging infrastructure must be deployed by 2030 (including outside major urban centres to solve the autonomy problem). As part of the Green Deal, the Commission intends to install 1 million new charging stations across the EU. But existing electricity distribution networks will also need major improvements. They are not built for fast-charging stations and need to cope better with the fluctuating production inherent to renewable sources.

As part of sustainable mobility, rail transport will also be revitalised.

- 5. Buildings: heating of buildings accounts for 36% of greenhouse gas emissions in the EU. Around 75% of existing buildings are energy inefficient, as they were constructed before the legislation on the energy performance of buildings came into force. It is estimated that 80% of today's buildings will still be in use by 2050 and, on average, only 1% of buildings are renovated each year. The commission wants to at least double the current rate of renovation of public and private buildings.
- 6. Agricultural sector: The development of an EU initiative for carbon sequestration in agricultural soils offers farmers new business opportunities in carbon sequestration. However, the agriculture and land-use sectors so far do not have access to the EU carbon market, the Emissions Trading Scheme. This would allow them to be paid for storing carbon on their agricultural land through emissions trading.

The production of high-tech equipment and green technologies often requires special raw materials, called rare earths. This is a group of special metals used in high-tech products such as smartphones and military equipment, as well as batteries or wind turbines. Europe itself has few of these raw materials and has to import over 90% of these metals, mainly from China. In September 2020, the EU drew up an action plan to reduce dependence on third countries and ensure the transition to a green and digital economy. Lithium (used in batteries), among others, was added to the list of critical raw materials for which there is scarcity or a high dependence on third countries. The list serves as a guide for research and development investments in recycling and replacement materials. It is also taken into account when the EU enters into trade agreements with other countries.

The EU's efforts to achieve climate neutrality by 2050 could be undermined by less ambitious targets in other countries or from trading partners. EU companies could shift production to countries with less stringent emission targets. This is known as carbon leakage. If this happens, global emissions would not be reduced. To avoid this, the EU wants to set up the "border carbon adjustment mechanism". The new mechanism would reduce this risk by imposing a carbon price on imports of certain goods from third countries. The commission plans to present concrete proposals in the second quarter of 2021.

The Green Deal also confirms the EU's commitments to sustainability in the context of its trade policy. The EU had already committed itself in 2017 to include a binding reference to the Paris Agreement in all new trade treaties to be concluded (in the framework of the WHO). Such a clause was added in September 2018 in the trade agreement with Japan and the AACC agreement with Canada.

United States

In 2017, President Donald Trump withdrew the United States from the Paris Agreement. He also withdrew a number of environmental protection measures, the most important of which was the Obama administration's Clean Power Plan. This aimed to reduce CO2 emissions from the energy sector by 32% by 2030 compared to 2005. It was replaced in 2019 by the Affordable Clean Energy Rule. Unambitious (1.5% reduction by 2030), it was challenged by Democrats in court.

However, this does not mean that nothing was done on the climate front during the Trump presidency. Governors and mayors from 25 states have united in the United States Climate Alliance and have pledged to live up to the agreement.

President Biden got the United States back into the Paris Accord. As a result, the United States will redefine its Nationally Determined Contributions (NDCs). The US is committed to being CO2 neutral by 2050. Accession is also of symbolic importance, as it can provide an incentive for other countries to pursue more ambitious climate targets. John Kerry will be the "Special Presidential Envoy for Climate". He was one of the people who participated in the negotiations of the Paris Agreement for the United States. In January, President Biden also announced a moratorium on new authorisations for oil development on public land and cancelled Canada's Keystone XL pipeline license.

During the election campaign, Biden launched his climate plan, which aims to invest in clean energy and sustainable infrastructure. The \$2 trillion plan would be spread over four years. Its main points are :

- 1. Zero emissions from the energy sector by 2035: increased efficiency and clean energy in electricity production;
- 2. Making buildings energy efficient in the private, public and commercial sectors. By 2035, CO2 emissions from buildings are expected to decrease by 50%;

- 3. Supporting the automotive industry through the purchase of clean public transport, financial incentives for individuals and investment in charging stations for electric vehicles;
- 4. Investment in battery technologies and clean energy, creation of the Advanced Research Projects Agency on Climate;
- 5. Rebuilding infrastructure: from traditional bridges and roads to upgrading the power grid and providing broadband Internet access for all Americans;
- 6. Sustainable agriculture and nature conservation: supporting diversified agriculture and innovation;
- 7. Equitable sharing of environmental and economic opportunities: communities most affected by pollution and global warming must benefit from investments in climate and infrastructure.

A central theme of the plan is the Social Cost of Carbon. This is a measure used in cost-benefit analyses that guide climate policy. It gives a financial value to the damage caused by climate change by calculating all future damage of a tonne of carbon dioxide emitted today.

President Biden can take a number of decisions on his own initiative (through a presidential decree), such as limiting emissions from electricity generation or regulating car emissions. The purchasing policy of governmental institutions (annual budget of around \$600 billion) should also play the green card more and thus create a market for new green technologies.

However, most of the plan requires congressional approval. Even if the Democrats have a (small) majority in the Senate, a consensus will have to be found within the Democratic Party. It is therefore unlikely that more radical measures such as a CO2 tax or a cap-and-trade system can be introduced at the national level, as is the case in some (democratic) states. However, each state can expand its existing programmes.

The details of the plan are not yet known, a consensus within the Democratic Party has to be found and its financing remains to be defined. It is therefore expected that a concrete plan can only be approved in the last quarter of this year.

China

China surprised in September 2020 by announcing its desire to be CO2 neutral by 2060. According to the Paris Agreement, the country had already indicated that it wanted to reach its emission peaks before 2030, but had not yet given a timetable for reducing its (net) emissions to zero. This target can be described as ambitious because the transition from peak emissions to CO2 neutrality will be achieved over 30 years. The other major economies will take 50 years or more. If China were to achieve this, it would make a major contribution to the Paris Agreement's objective of keeping global warming below 2 degrees and preferably limiting it to 1.5 degrees.

China is thought to be making this effort because the consequences of global warming pose a risk to the country's water and food supplies (and therefore a risk of social unrest). In addition, the country is currently highly dependent on foreign energy supplies: 70% of oil consumption and 40% of natural gas are imported. An energy transition away from fossil fuels is therefore also in the interest of national security in a context of geopolitical tensions.

China can already boast some achievements in terms of "green" objectives. With an economy that is still largely based on industry (37% of GDP), it appears that the country should be able to keep its promise to reach its maximum CO2 emissions by 2030. The country is ahead in terms of the share of

non-fossil sources in the total energy supply. It currently stands at around 16% and is expected to reach the 20% target set by the Paris Agreement in 2030 as early as 2025. In December, China adjusted its Nationally Determined Contributions (NDCs) to reflect this situation.

But for China, there is still a long way to go. Compared to the size of its economy (kg of CO2 emissions per dollar of GDP), the country is by far the biggest polluter and current measures are insufficient to achieve the objectives, especially for the period from 2030 onwards. China will focus on three themes:

1. Greening the energy mix: today, about 90% of China's CO2 emissions come from energy production and 57% of this comes from coal, the most polluting fossil fuel. In a carbon-neutral scenario, coal should be almost completely phased out. Recent developments in this area are not encouraging. New coal-fired power plants are still under development and new permits have been issued in 2020. The additional capacity in coal-fired power plants under development is 20% of existing capacity and their "normal life" is 40 years. The 14th Five-Year Plan published in early March was also disappointing in this respect.

The establishment of a domestic emissions trading system will be a step in the right direction. It started in February 2021 for the energy sector (coal and gas-fired power plants) and will cover about one third of total emissions. It should speed up the phase-out of the oldest and most polluting power plants and lead to the flexible use of other plants as a back-up to renewable energies. An extension to other sectors is possible in the longer term, but not yet decided.

Although China is still investing in fossil fuels, it is relying heavily on wind and solar capacity within its non-fossil fuel range. Their share in total energy production was 4% in 2020 and will double by 2025 and double again (to 15%) by 2030. China has the capacity (60 per cent of the world's solar panels are made in China). The sheer scale (in absolute terms) of wind and solar power capacity already means that its cost has fallen sharply. Further efficiency improvements should make subsidies superfluous in the short term. More attention will be paid to investments in better connection to the distribution grid (through high-voltage lines to cover long distances between the place of green energy production and consumption) and in storage of surplus production.

2. Increasing energy efficiency

Energy efficiency measures already applied in the transport sector and in industry will need to be strengthened and extended to more sectors.

- Electric vehicles: Although there are 4.2 million electric vehicles on the road in China (2019), they account for only 5% of new sales and less than 2% of the vehicle fleet. The Chinese government has set a target of 20% of new electric vehicle sales by 2025 and 50% by 2035. Economies of scale allow for cost reduction and reduction of subsidies. In its policy, the focus is on improving technologies (batteries), deploying a network of recharging stations and tighter regulation of fossil fuel vehicles.
- Hydrogen: China is the leading producer of hydrogen, but the technology is still too expensive to be commercialised. It is already used (marginally) in industry and public transport. China is aiming for marketable vehicles by 2035.
- Heating of buildings: currently accounts for about a quarter of energy consumption. In this
 area, there is still a lot of potential for setting greener standards for new construction and
 renovation, as well as for alternative heating sources.
- 3. Development of carbon capture and storage technologies A long-term solution is to equip polluting industries with carbon capture and storage (CCS) technologies. CCS is the process by which CO2 is captured and stored before it is released into the atmosphere. The technology can capture up to 90% of the CO2 emitted from the combustion of fossil fuels in power generation and industrial processes.

China currently has only one operational carbon capture and storage facility and seven others are under construction or planned. The technology is currently far from being cost-effective. The extension of the emissions trading scheme to industrial companies could eventually provide a financial incentive for this technology in a sector where there are few alternative techniques for reducing CO2 emissions.

The stimulus package adopted in the wake of the coronavirus pandemic, worth \$565 billion in 2020, did not specifically target green investments. The investments supported general technological development with a view to taking technological leadership in innovative segments such as the development of the 5G network, artificial intelligence (AI), the Internet of Things (IoT), but also infrastructure for electric vehicles or high-speed rail links that can be considered "green". After the financial crisis of 2008, the recovery plan focused on traditional infrastructures and did anything but reduce CO2 emissions. The 2020 recovery plan is therefore part of the new infrastructure programme presented by the National People's Congress in May 2020. According to this plan, China will invest around 1,400 billion dollars between now and 2025 in innovative technologies that it considers strategic.

More information on climate targets and investments related to the promise of carbon neutrality by 2060 is expected by the end of the year, when China will publish specific five-year energy and electricity plans. In addition, the Ministry of Ecology and Environment will publish a five-year climate plan and a peak emissions plan for the first time.

• Economic consequences

The impact on economic growth of green stimulus packages is difficult to assess. Green plans often include a wide range of measures that will influence a broad range of businesses and sectors over several years. At the same time, increasing regulation can weigh on economic activity. But there will be winners and losers among companies and sectors.

On the basis of previous plans, however, it can be stated that green investments are labour-intensive (e.g. renovation of buildings, development of infrastructure for renewable energy, etc.). It can therefore be expected that they will initially generate a positive multiplier effect.

Since, in most cases, the plans will only partially be financed by higher taxes, and also by loans, a positive impact on economic activity is expected when investment spending begins.

Many countries, such as the EU and China, depend on oil imports for their energy needs. For the EU, fossil fuel imports currently account for about 2% of GDP. By speeding up the climate and energy transition, the EU can significantly reduce fuel costs and imports, improve the trade balance and free up resources for other uses. Reducing greenhouse gas emissions by 55% by 2030 would mean a drop of more than 25% in the volume of fossil fuel imports compared to 2015 levels. This would represent a saving of €100 billion over the current decade and up to €3 trillion by 2050.

• Recent green trends in the financial sector

• The European Central Bank is looking into the possibilities of conducting a greener monetary policy. President Lagarde believes that this is one of the tasks of the Central Bank, as climate change can cause fluctuations in economic activity and price levels due to extreme weather conditions and, if left unaddressed, can have lasting consequences on growth and inflation. The ECB therefore established the Climate Change Centre in January. It will shape and steer the ECB's climate agenda. ECB policymakers are discussing the role that climate considerations could play in the bond purchase programme, for example by buying green bonds. So far, the ECB has been buying corporate bonds based on their outstanding amounts, but it could consider a more active approach and integrate climate risks. However, there are objections to this approach, as the purchase programme is a temporary mechanism and is therefore less suitable for tackling a long-term problem such as global warming. Another avenue for consideration is to integrate climate risks into the valuation that the bank applies when it accepts bonds as collateral for credit. Clarification may be provided when the ECB publishes the results of its strategic review in September.

- The rating agency Standard & Poor's downgraded its rating forecasts for thirteen oil companies at the end of January. These included major European, American and Chinese names such as Chevron, ExxonMobil, Shell, Total, China National Offshore Oil Corp. This is the first sector review of ratings related to climate issues. The adjustment was motivated by concerns about the risks associated with the energy transition and pressures on profitability linked to the growth of renewable energies. In mid-February, the ratings of ExxonMobil, Chevron and ConocoPhillips were effectively downgraded, notably due to disappointing quarterly results. This move is a reminder that climate risks can increasingly affect a company's credit rating and thus the cost of financing.
- The transparency of companies regarding their environmental impact is increasing in response to growing pressure from their investors and other stakeholders. Investors want to study more closely the environmental footprint of companies in their own portfolios and to know how management is responding to climate risks.

In the United States, there is currently no mandatory framework for reporting climate-related risks. Nevertheless, under pressure from investors and consumers, 90% of S&P 500 companies did publish sustainability reports in 2020, compared to 20% in 2011. In Europe, climate-related reporting is mandatory for more than 6,000 companies. Europe is at the forefront of ESG reporting regulation and new sustainability reporting requirements are due to come into force in 2021 (Directive on Non-Financial Reporting, Taxonomy Regulation, Regulation on Sustainability Reporting in the Financial Services Sector, EU Green Bonds Standard). EU regulations may also have an impact on climate reporting by companies outside Europe.

• Our investment strategy

2020 was the year of the coronavirus, but could also prove to be the year that marked a turning point in the fight against climate change. In contrast to the last decade when Europe took the lead, the US and China have committed to making the transition to a climate-neutral economy. The consequences are significant:

- The investment budgets that the three major economic blocs will use, with the coronavirus crisis as a trigger, are much larger than what has been spent in the past on climate issues.
- Moreover, if the three major economic blocs commit to climate neutrality, it will be more difficult for other countries not to make efforts in this area.
- Now that governments have clearly played the climate card, businesses benefit from a more predictable environment in the medium to long term, allowing them to adapt their own investment decisions to the green agenda.

 Climate plans do not stand alone, but go hand in hand with investments that focus on the digitisation of the economy and the modernisation of the industrial apparatus. This means that it is not just about 'saving the planet'. It also involves geopolitical considerations and achieving leadership in new technologies and non-dependence on other powers in climate technologies (as is the case with information technology).

We therefore expect that the "green" investments of recent years are only the beginning and that they will accelerate in the years to come.

In addition to the economic aspect, we can also expect investment decisions to be increasingly based on climate considerations, as they influence asset valuations. They will therefore help to determine the allocation of investors' capital.

Geographically, the major economic regions each have their own strengths and weaknesses. The United States has so far lagged behind in energy transition investments. Nevertheless, the country has the financial and technological capacity and business flexibility to become a major market player. China is already a dominant player in a number of segments (solar energy, electric vehicles and batteries) and will most likely remain so. It will be difficult for the United States to gain a competitive advantage in these segments. However, there are still underdeveloped technologies such as hydrogen energy or carbon sequestration where the United States is in a position to take a leadership position. However, it remains to be seen whether there is the political will to address these.

Efforts to achieve a green economy will affect all sectors of the economy. However, it goes without saying that the sectors generating the most CO2 emissions will be the most affected. In order to meet the targets, it is very likely that greenhouse gas emissions will come at a higher cost. This could take the form of a tax on emissions or a higher price through emissions trading. Depending on the sectors covered by these mechanisms in the future, the repercussions will be felt on the profitability of companies in these sectors and therefore on the valuation and share price.

The main sectors that will benefit from the transition to a climate-neutral economy are:

- Renewable energies: the priority will be to produce renewable energies and to develop a suitable distribution network. This is a precondition for fully exploiting the opportunities offered in other sectors. An electricity grid powered by an abundance of clean energy reduces emissions from cars, vans, trains and buildings. Solar, wind and long-term hydrogen producers will be the clear winners.
- Sustainable mobility: several governments (China, France, Israel, etc.) have already announced a
 future ban on petrol and diesel cars. The manufacturers of electric cars, their suppliers (from
 semiconductors to batteries) and the development of recharging stations will benefit from this.
- Sustainable construction and renovation: the pace of sustainable construction and renovation of public and private buildings will need to accelerate considerably. In principle, all segments can benefit, but especially companies that offer products or services that improve energy efficiency and performance.

A "greener" investment portfolio can capture the opportunities offered by the fight against climate change and reduce the financial risk of the climate transition.

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