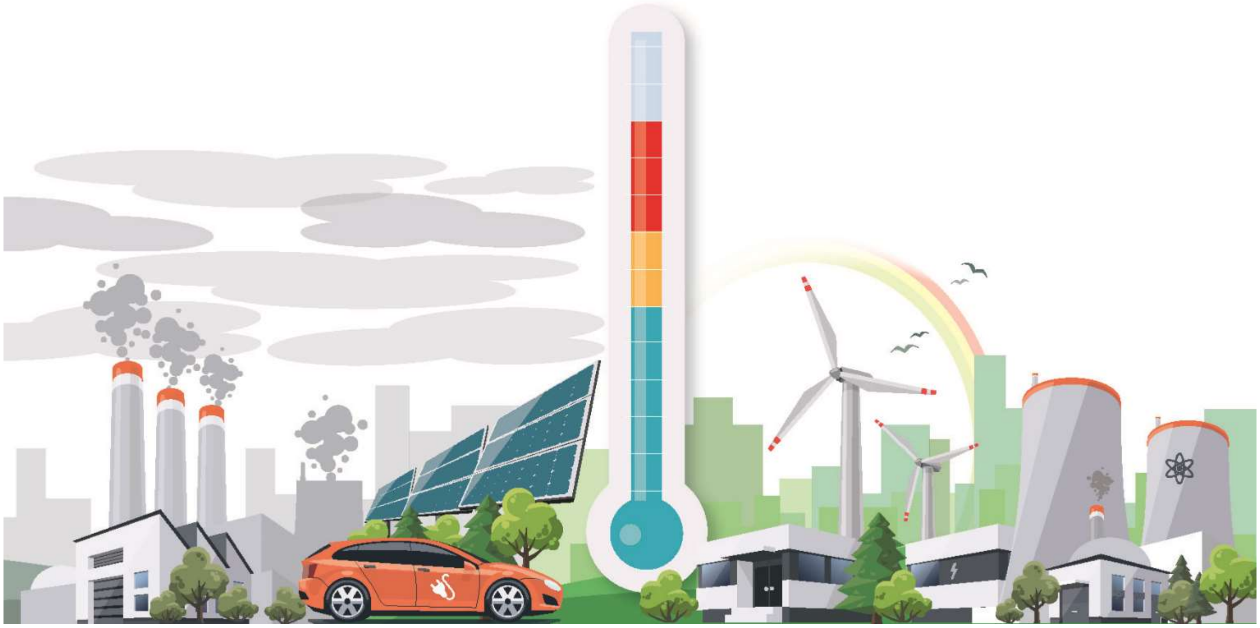
AXA's new climate strategy
November 2019



AXA launched a new phase in its climate strategy during its "Climate Impact Day" event on November 27th. This new strategy features four main new developments, supporting the concept of aligning our business with the Paris Agreement (COP21). This public document, which complements AXA's Press Release, summarizes the context and explains our new initiatives.

Context : the Paris Agreement provides a roadmap for climate action

The science is clear: climate change is a reality and carbon emissions are the main cause. The likely impacts of climate change are well documented – flooding, heat waves, coastal erosion, biodiversity loss, new diseases etc. - and indeed some of the effects that had been predicted by science in the past are now occurring. Certain regions, populations and economic sectors will be significantly impacted. The 2015 COP21 "Paris Agreement" commits Governments to collectively hold warming below safe levels by reducing greenhouse gas emissions within specific thresholds and timeframes, which require rapid and significant emissions reductions. This low carbon transition target will have significant consequences for the "real economy", and in turn for investors and insurers. These can choose to develop a long-term risks & opportunities framework derived from the Paris Agreement roadmap. This is the backdrop for AXA's climate action.

Our journey: where do we come from?

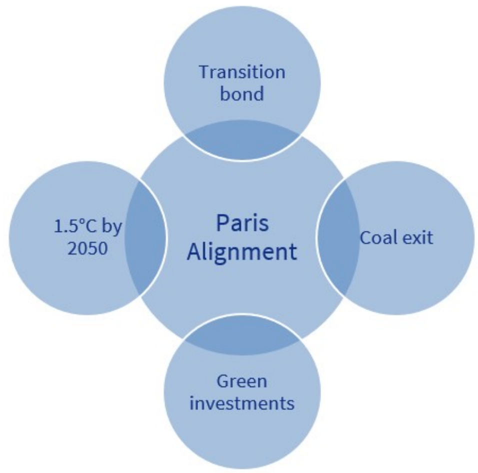
We first sounded the alarm when we said that « a 4°C world is not insurable ». By this we meant that runaway climate change will create risks so large that conventional market mechanisms may no longer be suitable. We also legitimized **coal divestment** in early 2015. Coal is by far the most carbon intensive form of energy. Phasing it out is key to achieve the Paris Agreement. In 2017 we pioneered **coal and oil sands restrictions in our insurance business**, which is a difficult business decision, then extended it to our new Commercial Lines entity, AXA XL in 2018. We have also committed to and achieved an ambitious **green investment** target. We promoted a strong **collective agenda** with the TCFD and EU initiatives. In 2019 we reframed the **biodiversity** crisis as a financial risk, together with the WWF teams. And finally, we have explored **new climate metrics** in our 2019 Climate Report.

Our new ambition

Our new ambition is to provide a longer-term perspective on what it means to align our business with the Paris Agreement. This is based on 4 new developments:

1. "Warming potential" of AXA's investments under 1.5°C by 2050
2. Green investment target doubled to Euro 24 billion by 2023
3. Launch of "Transition Bond" asset class
4. Total exit from the coal industry

In addition, we support climate resilience / adaptation initiatives.
This new strategy leverages every asset and expertise: investments, underwriting, research, outreach.



"AXA has been a pioneer by setting up an ambitious climate change strategy, notably by starting to divest from coal, defining green investment targets, restricting coal-related insurance business and building collective action frameworks. These actions helped our industry to put climate change at the top of our collective agenda. But the climate emergency requires further efforts. Today we are launching a new phase in our climate strategy to accelerate our contribution to the transition towards a low-carbon and resilient economy, notably by focusing our sustainable finance efforts towards the energy transition of major industries. We are convinced that it is an absolute priority if we want to reach the objectives of the Paris Agreement", said **Thomas Buberl**, CEO of AXA.

1) 1.5°C "Warming potential" by 2050 ; Net Zero Asset Owner Alliance

Our overarching target to align our investments with the Paris Agreement, thereby committing to achieve a 1.5°C warming potential by 2050.

The Paris Agreement's goal to contain global warming "well below 2°C" (in effect 1.5°C since revised reports in 2018) invites all market participants to "reorient financial flows" in line with this target. This is confirmed by the TCFD (Taskforce on Climate-Related Financial Disclosures) guidelines. More generally, various stakeholders believe the finance industry's best contribution to the climate debate is to embrace the concept of "Paris-aligned investments". We have tested this concept in our 2019 Climate / TCFD report with the "warming potential" metric, a dynamic forward-looking concept explored here. Now **our target is to contain the "warming potential" of our investments under 1.5°C by 2050**.

Our 2019 modelling shows that our investments have a 3.1°C "warming potential". While this is well below our market reference of 3.7°C, it still is far from 1.5°C. This means most investors operate in a business environment which is not "Paris-aligned", and where mainstream investment strategies can only lead to a world which is above 1.5°C. We remain largely constrained by a carbon intensive global economy.

This is why we undertake this commitment in the expectation that governments will implement their own commitments. We have also decided to join and support the recently launched "Net Zero Asset Owner Alliance" which is precisely designed for this agenda. As part of this Alliance, we will contribute to the development of metrics and methodologies: measuring the "warming potential" of investment is still work in progress. We will also work with peers on an adequate annual reporting framework in order to update stakeholders on progress vis a vis our collective long-term target.

2) Green investments

We are committed to double our green investments by 2023.

In addition to the broad "temperature" target, green investments encourage various sectors to ramp up their climate strategy. After reaching our first €3 billion green investment target in 2017, AXA scaled up its green investment target to €12 billion by 2020, using a broader set of asset classes as well as growing our underlying commitment in each of these asset classes. In November 2019, we have decided to double it to invest **24BnE in green investments by 2023**.

We define "green" investments as: green bonds, infrastructure debt & equity, impact investments, real estate, and Commercial Real Estate loans. To qualify as a green investment, AXA applies the following environmental standards to different asset classes described below:

- **Green Bonds:** AXA's green bonds are externally labelled, notably by the Climate Bonds Initiative as well as ratings agencies which confirm that definitions and use of proceeds are respected. However, AXA adds an extra review to confirm the actual "greenness" of the bond using more stringent criteria. See 2019 Climate report for examples of green bond investments.
- **Infrastructure:** AXA's definition of "green" infrastructure is derived from accepted and demanding market-based approaches. Here also, AXA also relies on the Climate Bonds Initiative, with a focus on renewables, water treatment, and clean transport.
- **Impact investments:** impact investments classified as green are those in our Impact Funds that target climate impacts.
- **Real Estate:** for property assets, our strict definition is limited to assets with a high level of environmental certification (minimum level "Excellent" or "Gold") and a minimum Energy Performance Certificate (EPC) rating of "B".
- **Commercial Real Estate:** for CRE debt, we use a strict definition of "green" as well as for loans backing buildings with a high level of environmental certification (minimum level Excellent or Gold). Here, we do not reference the EPC as it is not influenced by the debt holder.

3) Launch of "Transition Bond" asset class

We launch and invest in a first-of-a-kind 100ME "Transition Bond"

Green or climate bonds are a relatively new type of financial instrument intended to fund projects with climate or environmental added value. Interest in such bonds has soared recently, with the market now worth more than $500 billion, as companies and investors become increasingly engaged in building diverse portfolios with positive environmental impacts. However, supporting carbon intensive players that are actively decarbonizing but have not yet reached the "greenness" that makes these efforts eligible to green bonds requires new instruments. This is why AXA developed the concept of "transition bonds" in 2019.

Even if the world adopts a steep low-carbon trajectory, it will not be enough to meet the global energy demand in the short to medium term. This is where AXA's transition bonds come in. Green bonds have strict eligibility criteria to determine what can be classified as a "green project". AXA's transition bonds will fill the gap between "already green" projects that are eligible for green bond funding, and those that are not, but would nevertheless make huge strides towards lowering carbon footprint.

During its "Climate Impact Day", AXA announced the launch of a first of its kind "transition bond" in partnership with Crédit Agricole CIB. AXA will **entirely finance a 100 million euro bond** in a private placement where the proceeds will be used to refinance existing commercial loans made by Credit Agricole. The main difference with conventional bonds is that the use of proceeds will be directed to industrial companies with the aim to decarbonise.

Use of proceeds

In this transaction, the use of proceeds from the bond will be used in the following ways:

- **Electricity production**: Loans made to an electric utility company in an Asian emerging market country which is currently dependent on coal and oil for power generation. These loans are for the development of gas fired power stations. By allowing a switch from carbon-intensive fuels in emerging countries with an oil and coal dependant electric grid and a constant growth in the energetically demand, gas is expected to play a prominent role in the transition towards a low-carbon economy. Current Combined Cycle Gas Turbine technologies have an average carbon intensity of 353 tCO_2/kWh, *60%* lower than the average coal production unit.
- **Marine transport**: Loans made to shipping companies. Switching from heavy marine diesel oil to liquid natural gas propulsion is the most efficient improvement currently available at scale to reduce emissions for large scale commercial shipping. Shipping is currently one of the few activities where transition technologies can be implemented on a large-scale. By enabling a 25% reduction in GHG emission from freight and passenger vessels, LNG is important for the transition of marine shipping sector before the development of low carbon solutions such as wind or hydrogen powered vessels.
- **Industrial resource efficiency**: Loans made to a South American industrial company implementing resource efficient measures such as energy efficiency and waste-water treatment. Industry sector must aim to produce twice as much value per unit of energy use in 2040, compared to current levels. Overall manufacturing energy intensity could improve by 44% between now and 2040 with 70% of the energy savings potential in less energy-intensive manufacturing sectors.

Transparency

One of the principles of green bonds is that issuers must provide a means of mapping the invested funds to be able to clearly demonstrate that they are used for green projects (use of proceeds). Transition bonds can function in exactly the same way. Transparency is critical in this regard: investors must be regularly informed of how money is being used and what environmental outcomes are being achieved.

AXA will require transition bond issuers to regularly publish a number of key details, such as the projects to which proceeds have been allocated. The issuers are to use indicators, like those developed in the Green Bond Principles, either to demonstrate the environmental impact of transition bond-funded projects for the use-of-proceeds transition bonds, or the strategic shift to low carbon model of the company for climate key performance indicator (KPI)-linked bonds.

4) Total exit from the coal industry

We strengthen our investments and underwriting restrictions, and we complement them with a long-term complete phase-out.

Thermal coal is one of the most carbon-intensive sources of energy, and it remains one of the largest sources of anthropogenic greenhouse gas emissions. If our economies do not manage to reduce their dependence on coal-based power, the objectives of the Paris Agreement are absolutely certain to be missed. But contrary to general perception, the problem of coal is not yet behind us, and recent "coal development" trends are not positive.

We acted early in May 2015 with a pioneering coal divestment, later strengthened in 2017 with innovative underwriting restrictions, and extended these to our new entity AXA XL in 2018. In 2019, we decided to strengthen this approach further and complement it with a long-term perspective, as follows.

INVESTMENTS

AXA bans investments, for General Accounts and in Unit-Linked assets in fully controlled mandates, in the following companies:

- **Power generation companies** with coal share of power production (energy mix) over 30% and/or coal "expansion plans" producing more than 300MW (previously: 3000MW) and/or over 10GW of coal-based power installed capacity.
- **Mining companies** with coal share of revenues over 30% and/or with annual coal production over 20 Million Tons and/or developing new coal mines.
- Certain **coal industry partners**, defined as manufacturers (eg equipment suppliers) and infrastructure players (eg. port terminals, dedicated railways) developing significant new coal assets.
- **Exemptions**:
    - Affiliates of banned companies with an activity not related to coal (including financial arms) are not banned.
    - Green bonds emitted by banned companies are not banned.
    - Companies slightly over the above thresholds but displaying a robust energy transition plan, such as a publicly disclosed coal phase out / closure plan with a defined timeframe, as well as a positive "transition" track record, are analyzed for potential exemption on a case by case basis. Such exemptions are to remain exceptional; they are not granted in cases of "coal expansion". In November 2019, there are less than 5 such exemptions.

Process

- Since 2017, the database supporting these criteria is the "Global Coal Exit List". However, AXA reserves the right to diverge from the GCEL on a case by case basis when more up to date data is identified.
- Equity assets are divested immediately (via annual database updates); corporate debt assets are run off and not renewed.

UNDERWRITING

Since 2017

- **"Standalone" coal mines and coal power plants**:
  - Construction and Property covers as well as Liability and Marine covers related to coal plants / coal mines are banned.
  - Property covers (for existing coal assets) in a small number of pre-defined "least developed countries" is authorized. There are no such exemptions for "new coal" Construction covers.
  - Open cover "packages" (where "coal" risks are combined with "non-coal" risks) are not authorized when coal represents more than 30% (in Total Sum Insured or energy mix terms)
  - Construction-type covers for coal plant refurbishments / retrofits are authorized only when leading to significant energy efficiency gains, without significantly prolonging the lifespan of the plant.
  - These rules for existing coal assets are applicable in full by the end of 2021 (renewals are banned after 2020). Note: certain subsets of the above rules above, implemented in 2017, remain applicable in full by the end of 2020 (renewals are banned after 2019).

In addition, from 2019 onwards:

- **Power generation and mining clients developing new coal** capacity, defined as: <u>Powergen</u> clients developing new coal plants producing more than 300MW of coal-based power and <u>Mining</u> clients developing new coal mines:
  - Any <u>new</u> and <u>existing</u> business, in <u>any Line of Business</u>, is banned.
  - Applicable in full by end of 2021 (renewals are banned after 2020).

- **Power generation and mining clients with significant coal business,** defined as: powergen clients with more than 30% of coal share of revenues or coal-based energy mix and Mining clients with over 20MT of coal extracted per year:
  - Any <u>new</u> business, in <u>any Line of Business</u> is banned.
  - <u>Existing</u> business in <u>any Line of Business</u> is banned by 2022 (renewals are banned after 2021).
  - A long-term target to achieve a "0%" exposure to coal business by 2030 in the OECD, and 2040 in the rest of the world, is set.

- **Coal industry partners,** defined as manufacturers (eg equipment suppliers) and infrastructure players (eg. port terminals, dedicated railways) operating or developing coal assets, or standalone coal-related infrastructure assets, as identified by AXA's internal teams:
  - A nuanced case by case referral system is implemented with the aim to restrict business that would directly support further coal development but is not currently covered by the above restrictions.

- Exemptions: the above rules do not apply to Employee Benefits (health, savings, protection) or to Treaty Reinsurance.
- Contracts granted prior to the inception of underwriting restrictions are *not* required to be terminated before their initially agreed lapse date. This includes existing Long-Term Agreements which may extend beyond 2021 or 2022. LTAs remain uncommon and do not extend for particularly long periods.

The above investment and underwriting restrictions may be broadly summarized in the following table (but details above are the actual policy).

	Investment	**Underwriting - all LoBs** (cover lapse date)
Power Generation	• >300MW new coal • >30% coal share / energy mix • >10GW capacity • 0% coal by 2030 / 2040	• >300MW new coal (2021) • >30% coal share / energy mix (2022) • 0% coal (2030 / 2040)
Mining	• New mines • >20MT / year • >30% coal share • 0% coal by 2030 / 2040	• New mines (2021) • >20MT / year (2022) • >30% coal share (2022) • 0% coal (2030 / 2040)
Any company	n/a	• Standalone coal plant / coal mine (2021) – Property, Construction LoBs
Coal "partners"	• Banned (GCEL)	• Case by case

A 2030 / 2040 complete coal exit and engagement strategy

In addition to the above investment / underwriting restrictions, AXA commits to a long-term "exit" strategy **reducing exposure to the thermal coal industry to zero by 2030 in the European Union and OECD countries, and by 2040 in the rest of the world**, as suggested by the main climate scenarios (such as the IEA "Beyond 2°C" scenario). This approach is applied both to our investments and underwriting activity. A 10/20 years timeframe is necessary to fully accomplish the significant change in energy supply and demand that is required to achieve such a complete coal phase out.

AXA will notably encourage this transition through active shareholder engagement and client communication. In particular, as a shareholder, AXA will engage, alone or within specific investor coalitions such as Climate Action 100+, with the companies concerned (whether client or portfolio companies), in order to encourage them to develop and disclose an exit or closure plan by 2021 for their coal infrastructures, where possible. A case by case analysis of company feedback will be used to inform investment decisions going forward.

Climate resilience / adaptation initiatives

The above initiatives address climate "mitigation": reducing greenhouse gas emissions to reduce the risk of failing to achieve the objectives of the Paris Agreement. However, because some of the impacts of climate change are already occurring, and because these will likely worsen even if strong “mitigation” action is taken, “climate adaptation” initiatives are also required. Moreover, these are typically at the heart of our insurance business: to protect vulnerable populations from risk. During our November 11th 2019 conference, we also announce two new developments:

- AXA Climate, our parametric insurance business unit, launched **FastCat**, a new parametric insurance product leveraging satellite imagery to support communities facing natural disasters such as flood, earthquake, cyclones and wildfire. It will notably provide for faster claims settlements.
- AXA and **C40**, a network of the world’s megacities committed to addressing climate change, partnered to produce a public report on how cities’ understanding of infrastructure interdependencies informs their climate adaptation planning. The aim of the report is to help cities better manage climate risk. This report was unveiled during our conference.