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Carbon neutrality by 2050: the major European groups are committed

3 billion equivalent tones of CO₂ to eliminate and compensate by 2050 for 24 European groups, so as to align with the Paris agreement

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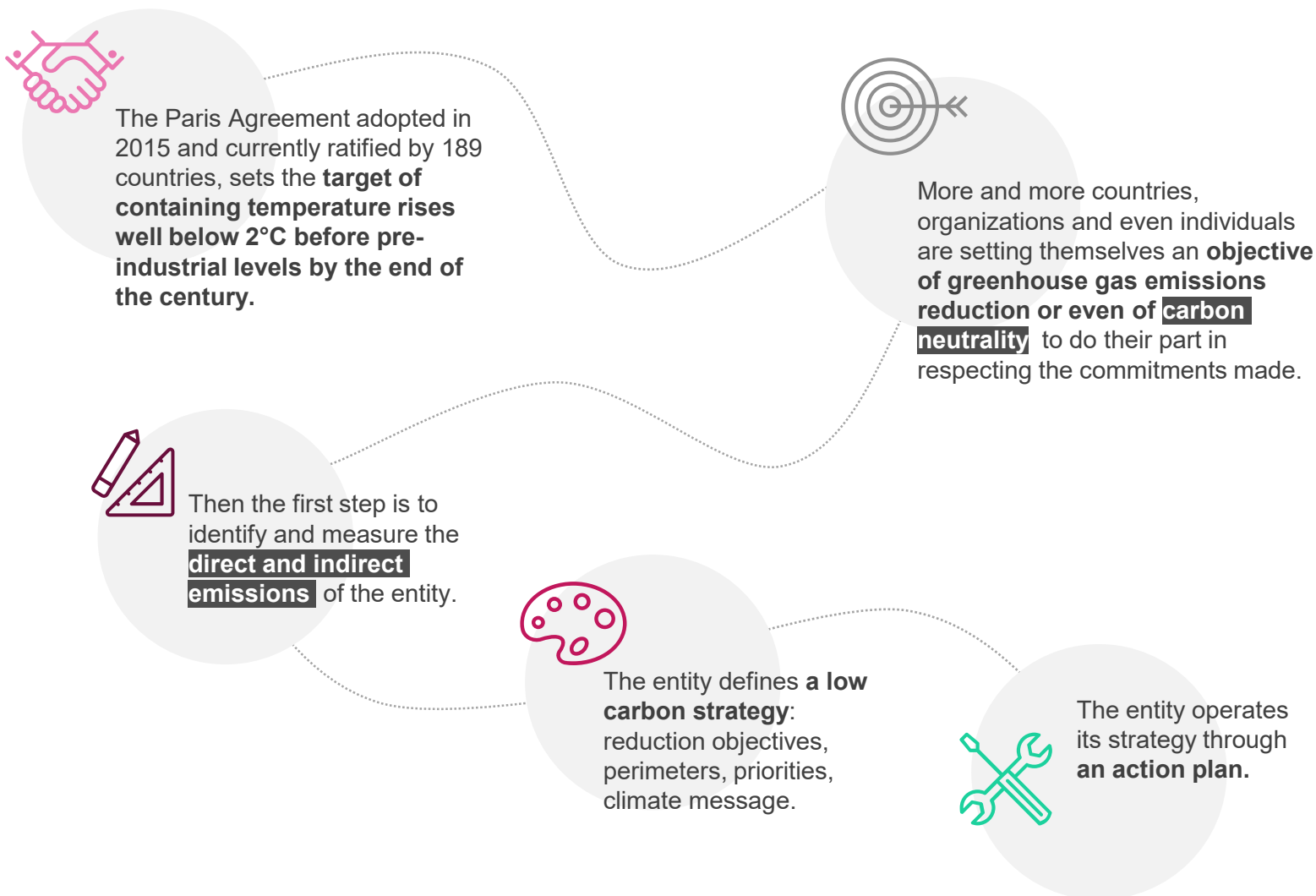
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Carbon neutrality: from political ambition to European groups taking action




































- **Carbon neutrality** is achieved when the activities of the entity concerned do not emit more greenhouse gases than they absorb, thanks to the reduction of direct and indirect emissions and the compensation of residual emissions.





















The GreenHouse Gas Protocol distinguishes and defines three scopes of direct and indirect emissions (see Appendix 1):

- **Scope 1 of greenhouse gas emissions** groups together all direct emissions resulting from emission sources owned or controlled by the entity (including the vehicle fleet).
Indirect emissions, resulting from the activities of the organization, but whose actual sources of emissions belong or are controlled by other entities, are divided into two scopes.
- **Scope 2 of greenhouse gas emissions** groups the indirect emissions due to the production of electricity, heat or steam consumed by the entity.
- **Scope 3 of greenhouse gas emissions** includes all indirect emissions that are not part of scope 2, in particular indirect emissions linked to purchases, logistics and transport, sales and the end of product life.


European groups are expected to reduce their greenhouse gas emissions

Following the Paris agreement in 2015 and the European Union's commitment in 2019 to achieve carbon neutrality by 2050, many European groups have strengthened or made for the first time commitments to reduce their greenhouse gas (GHG) emissions. We focused on the commitments made in this regard by major players in the European market and representative of their sector of activity.

SECTOR	GROUP	GHG EMISSIONS (SCOPES 1 AND 2) IN 2019	EMISSIONS / EMPLOYEE RATIO
 Bank	 BPCE	46,624 teqCO ₂	
	 BNP Paribas	461,030 teqCO ₂	
	 HSBC	414,000 teqCO ₂	
	 Deutsche Bank	153,721 teqCO ₂	
	 Agricultural credit	89,380 teqCO ₂	
 Industry	 Siemens	1,281,000 teqCO ₂	
	 Airbus	927,529 teqCO ₂	
	 Schneider Electric	436,376 teqCO ₂	
	 ArcelorMittal	182,400,000 teqCO ₂	
	 Saint Gobain	10,800,000 teqCO ₂	
 Construction	 Bouygues	17,400,000 teqCO ₂ *	
	 ACS Group	3,282,098 teqCO ₂	
	 Vinci	2,338,928 teqCO ₂	
	 Eiffage	580,421 teqCO ₂	
	 Skanska	290,678 teqCO ₂	

SECTOR	GROUP	GHG EMISSIONS (SCOPES 1 AND 2) IN 2019	EMISSIONS / EMPLOYEE RATIO
 Energy	 BP	106,100,000 teqCO ₂	
	 Shell	80,000,000 teqCO ₂	
	 Total	59,000,000 teqCO ₂	
	 Engie	56,500,000 teqCO ₂	
	 EDF	33,390,000 teqCO ₂	
 Automotive	 Volkswagen	7,570,000 teqCO ₂	
	 Renault	1,244,897 teqCO ₂	
	 PSA	1,179,741 teqCO ₂	
Food industry	 Danone	1,310,000 teqCO ₂	

Legend of the two ratios

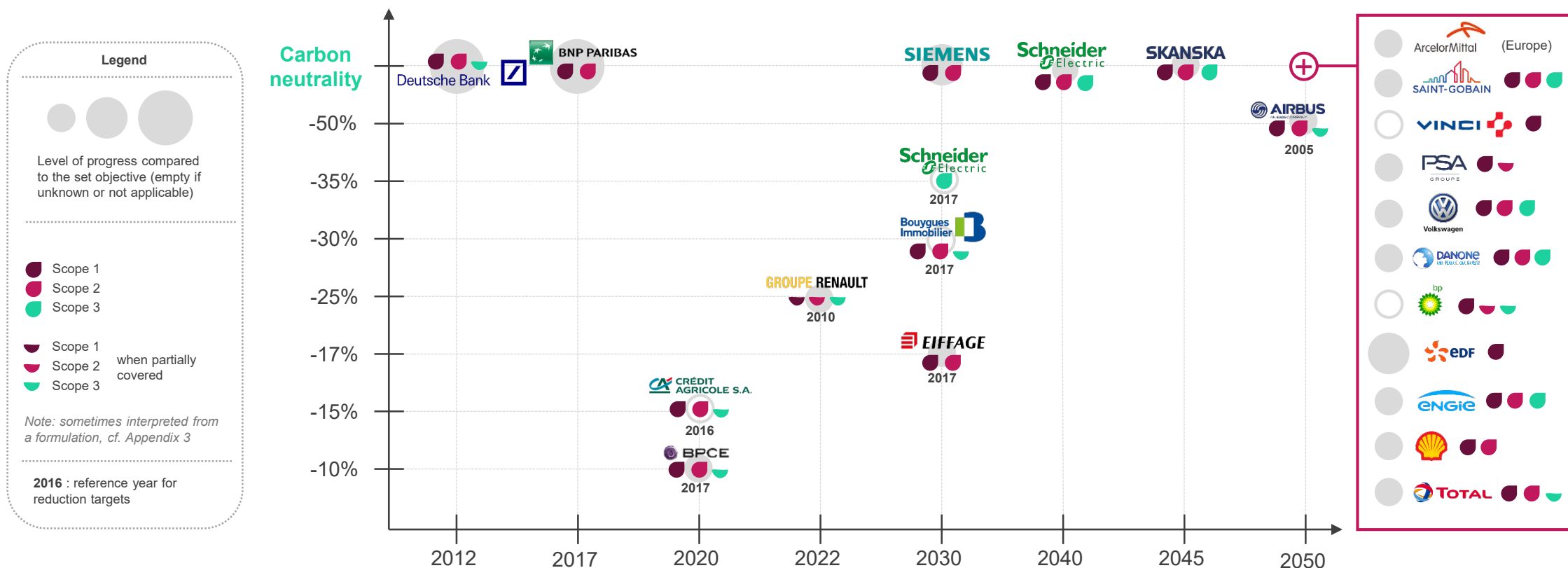
 Ratios of tonnes of emissions eq. (see previous column) per employee: one bar for a low ratio to three bars for a high ratio

Notes: not all groups communicate their scope 3 emissions.

* Including part of scope 3

More and more groups are aiming for carbon neutrality by 2050, including some on their scope 3 emissions

European groups have all set ambitious targets to reduce their greenhouse gas emissions. The comparison is, however, uneasy because they set these objectives on different emission perimeters and without always referring to the scopes of the GreenHouse Gas Protocol (see Appendix 1), sometimes also by distinguishing the objectives by scopes. The groups are gradually adopting the GHG methodology and also setting other objectives outside this methodology, more suited to the specific challenges of their activities. The ambitions presented in this matrix are those set for the furthest date, but many groups have also defined intermediate milestones.



Note: for a certain number of groups, the information communicated does not make it possible to monitor progress towards the objective (unclear scope, emissions in the reference year used not communicated, progress not communicated).

To achieve this ambition, sectoral strategic orientations emerge and low-carbon products are brought to market



Two of the five banks analyzed have already achieved carbon neutrality (including through emission compensation systems) on their scopes 1 and 2. However, **the main stake in this sector is the destination of the financing which they grant**. The low-carbon strategies of European banks therefore consist of three components: 1) reducing the financing of the most polluting energies (from extraction to power plants), 2) increasing green investments, 3) offering green financial products.



The selected manufacturers have set themselves ambitious targets for 2050, with quantified intermediate targets. For these players, low-carbon strategies are based on a variety of components: **energy efficiency of industrial processes** and buildings, **supply of energy from renewable sources**, use of recycled materials, optimization of transport and logistics, development of a range of key components or products in the energy transition.



Compared to other sectors, the emissions reduction targets for construction players are less ambitious. Emissions during the construction phase are mainly due to **construction materials** and **construction machinery** used, and **energy consumption during the building use phase**. The development of certified green buildings must be able to change the situation in terms of design and construction.



Energy and oil companies have set **targets of investment amounts and of production capacity levels from renewable sources**. Energy companies, but not oil companies, also set targets for closing the most emitting assets. These changes are notably driven by the **development of offers for end customers**: supply of green gas and electricity, recharging networks for electric vehicles, energy renovation works.



Automakers are under great pressure to reduce their emissions on every one of their scopes: from their supply of resources and components to the use of the vehicles sold. They have made quantitative and qualitative commitments in these different fields: **reduction of the carbon footprint of vehicles over their lifecycle, release of electric vehicles ranges over the next few years**.

Low carbon strategies are motivated by their strategic impacts on the activities and the economic resilience of groups

Low-carbon strategies are based on a balance and an ambition: to decarbonize while preserving the creation of value. For some groups, they are even a source of growth and a guarantee of the sustainability of activities in the medium and long term. Those companies highlight the expected positive consequences on the activities and results of the groups.



Environmental responsibility

Responsibility vis-à-vis the various stakeholders and as an actor in a high-emitting sector (directly and / or indirectly)



Group image

Attractiveness of the brand as an employer and as a vendor of solutions, customer expectations increasingly aware of climate issues



Regulatory obligations

Compliance with regulations concerning greenhouse gas emissions and anticipation of their hardening, adoption of standards (GHG Protocol, TCFD report, internal carbon price, etc.)



Competitiveness

Cost reduction (lower energy expenditure, use of recycled materials) or even industrial independence (batteries for electric vehicles in particular)



Economic results

Conviction of the profitability of green activities, growth drivers, ambition to be the leader of such activities, shareholder expectations in terms of value creation

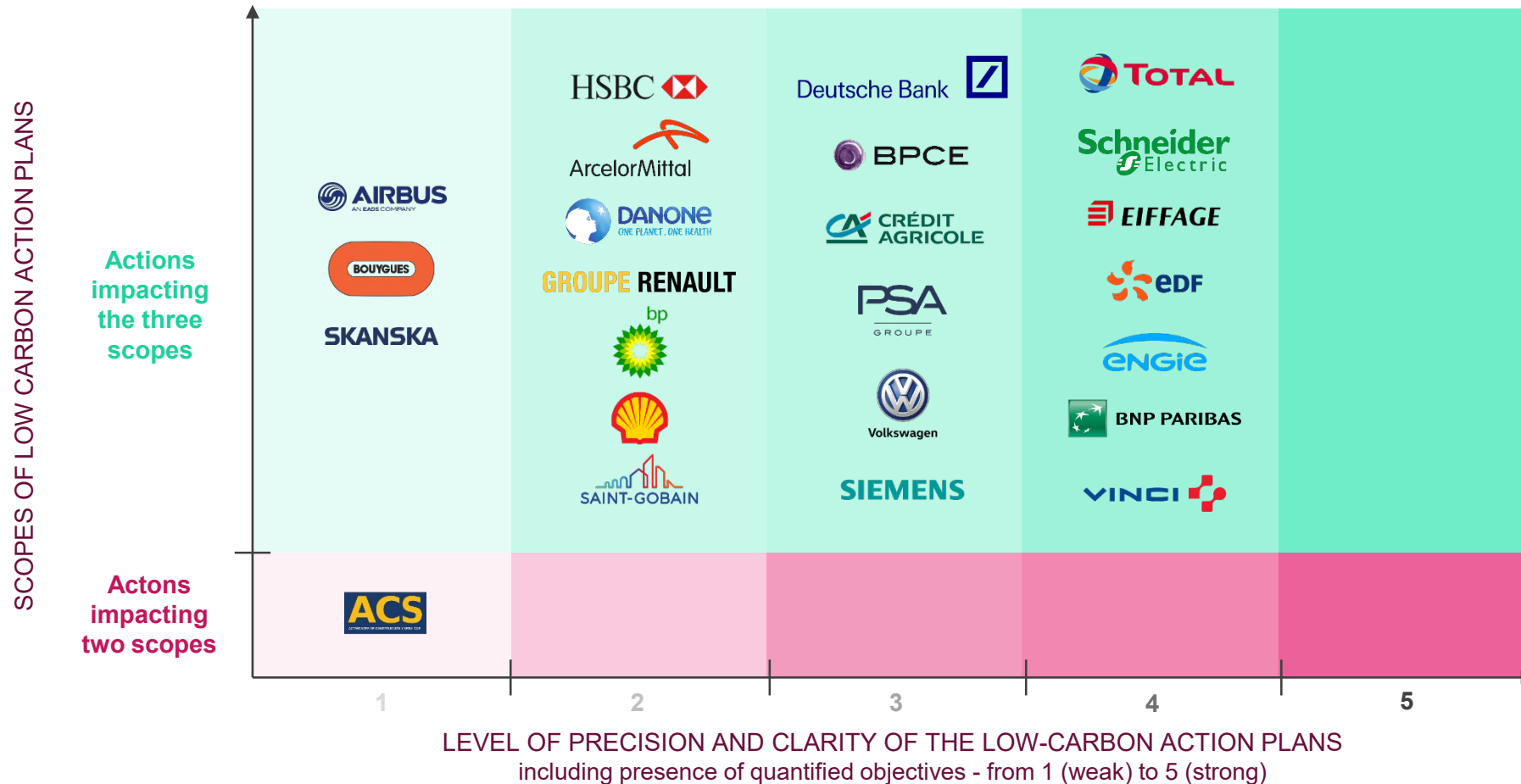


Sustainability of activities









Anticipation of risks (scarcity of resources), end of emitting activities and development of low-carbon activities, resilience and adaptation to already existing impacts (heat waves, extreme weather events, etc.)






Large groups have initiated low-carbon action plans and must strengthen them to accelerate changes

Depending on their activities, groups are urged to put in place a carbon strategy for a longer or shorter time and over a more or less wide scope. For some, these strategies are also more easily a continuation of their corporate culture or of their CSR strategy than for others. For everyone, the structuring, development and continuous improvement of the climate action plan promises to be rich in opportunities.








Good practices are emerging among the actions implemented and can be replicated to all sectors

	ACTIONS	SECTOR(S) *	EXAMPLE(S)
OFFER	Define business policy and objectives		Airbus wants to offer a zero-emission commercial aircraft from 2035. Bouygues wishes to offer a portfolio of low-carbon solutions to its customers. EDF wants to double its renewable electricity capacities between 2014 and 2030 to reach 50 GW.
	Define exit targets for the most polluting energies		By 2040 BNP Paribas wishes to have withdrawn from the coal sector. BP is committed to reducing oil and gas production by 40% by 2030, and not to launch exploration in new countries.
	Move product by product		Danone's Evian is certified carbon neutral. Saint-Gobain is working to reduce the weight of vehicle components.
	Target disadvantaged populations		Engie mainly offers energy access solutions EnR off-grid in Africa. Schneider Electric wants to facilitate access to communications and light for disadvantaged people.
INTERNAL	Match the climate message with the culture of the company		Danone draws a parallel between the historical value of the group, human health, and that of the health of the planet. EDF and Engie mention carbon neutrality in their raison d'être.
	Frame emissions measurement and target setting	All	Almost all the European groups use the segmentation into scopes of the GHG Protocol and 13 of the 24 groups analyzed have or are in the process of having their objectives validated by the SBT (cf. Appendices 1 and 2).
	Integrate the carbon factor into decision-making processes		Many groups are developing internal tools for measuring the carbon emitted by activities, purchases, products sold, projects financed and to be testing or already using an internal carbon price.
	Reduce emissions from scopes 1 and 2	All	Improving the energy efficiency of buildings, machines, IT systems and data centers, digital sobriety strategies (Engie), limitation of travel, greening of fleets.
	Offset residual emissions	All	Crédit Agricole has several projects with the Livelihoods Funds and Reforest'ation (including a target of one million trees planted by 2022).
PROCESS	Better control of purchasing and logistics		Some groups are strengthening their environmental policies (coal, deforestation, drilling in the Arctic, controversial extraction techniques and conditions). Many are increasing their supply of electricity, or even energy, from renewable sources (RE100 initiative in particular), including through PPAs. Volkswagen uses an LNG vessel to transport its vehicles. Total and PSA have created a joint venture to produce batteries for electric vehicles in Europe.
	Improve industrial practices and processes		Oil companies are working to reduce methane leaks. Schneider Electric wants to eliminate SF6 gas from products by 2025. Total wants to eliminate routine burning at its facilities by 2030. Several manufacturers are working on recycling and using recycled and remanufactured materials, to develop the recovery of heat, CO ₂ capture and storage projects, etc.

Legend	
	Bank
	Industry
	Construction
	Energy
	Automotive

* Sectors for which the action is mainly observed

Focus on banking - The main actions to be generalized address the issue of controlling indirect emissions from financed projects and activities






GROUP	OPERATIONS / PRACTICES *	FINANCING SOLUTIONS *
 BNP PARIBAS	<ul style="list-style-type: none"> - Sobriety (including travel) encouraged through remuneration criterion - Energy efficiency of buildings and data centers (ISO 14001, 9001) - Purchase of renewable electricity (35% in 2019), low carbon (72% in total) - Funding of several compensation programs 	<ul style="list-style-type: none"> - € 18 billion invested in renewables by 2021 - 2030: end of exposure to coal in the EU and OECD - 2040: end of exposure to coal in the world - No support of arctic drilling or unconventional extraction
 BPCE	<ul style="list-style-type: none"> - Actions on purchases (low carbon), mobility practices (train versus plane, electric vehicles for fleets, carpooling, teleconferencing, etc.) and the environmental impacts of digital technology - Green Weighting Natixis Factor to promote green financing 	<ul style="list-style-type: none"> - € 10 billion to finance the energy transition by 2020 - Natixis Assurances will devote nearly 10% of its new investments each year to green assets with a target of 10% of green assets in its total outstanding, by 2030 at the latest.
 CRÉDIT AGRICOLE	<ul style="list-style-type: none"> - 92% of energy from EnR (RE100) for Crédit Agricole S.A. - Compensation for residual emissions (Livelihoods) - Transition note: evaluation of customer engagement and adaptability - Use of ESG criteria at Amundi and Crédit Agricole Assurance 	<ul style="list-style-type: none"> - Financing 1/3 of energy transition projects in France - Double the size of the green loan portfolio to € 13 billion by 2022 - End of funding of the most polluting extractive activities: offshore in the Arctic, coal mines and power stations, etc.
 Deutsche Bank	<ul style="list-style-type: none"> - Electricity supply 100% renewable by 2025 (80% in 2019) - Offsetting programs for residual emissions - Introduction of a methodology to measure the climate impact by 2022 	<ul style="list-style-type: none"> - € 200 billion sustainable financing and portfolio of sustainable inv. by 2025 - End of funding of coal mines by 2025, new projects in the Arctic (from the end of 2020), tar sands projects, hydraulic fracturing in regions under hydraulic stress.
 HSBC	<ul style="list-style-type: none"> - 100% renewable electricity by 2030, 90% by 2025 (RE100) - More efficient building management, videoconferencing solutions to reduce the use of transport - Development of the use of ESG criteria 	<ul style="list-style-type: none"> - \$ 100 billion in financing and sustainable investment by 2025 - Gradual end of coal financing, no financial services for new offshore gas and oil projects in the Arctic, tar sands, large dams or source of deforestation



Banks also offer various energy transition financing tools: green bonds, low carbon funds, loans for individuals and SMEs (purchase of electric vehicles, energy optimization), etc. It is by exploiting these multiple approaches that the banks believe they can reverse the balance of power between polluting energies and low carbon energies.

* Examples of actions implemented

Industry focus - Actions around improving energy efficiency and renewable energy supply are key






GROUP	OPERATIONS / PRACTICES *	PRODUCTS AND SOLUTIONS *
	<ul style="list-style-type: none"> - Reduce energy consumption by 20% between 2015 and 2030 - Improve energy efficiency of fuels by 1.5% per year between 2009 and 2020 - Compensation for residual emissions - Energy efficiency of infrastructures and production processes. 	<ul style="list-style-type: none"> - Develop the first zero-emission commercial aircraft by 2035 - Urban air project mobility (solution for getting around town by air) - 27 satellites in orbit that monitor climate change
	<ul style="list-style-type: none"> - Research and investment to replace fossil fuels in processes, including by exploiting waste from factories - Carbon capture and storage, renewable electricity supply (solar capacities, PPA), infrastructure energy efficiency, iron recycling 	<ul style="list-style-type: none"> - Iron is a component of electric vehicles (engine, structure) and of renewable infrastructure (wind power in particular) - Modular and reusable iron components for building construction
	<ul style="list-style-type: none"> - Energy efficiency of sites (91 sites certified ISO 50001) - Use of recycled raw materials in the processes - Two internal carbon price levels set in 2016 - Objective of renewable energy supply for industrial processes notably 	<ul style="list-style-type: none"> - From three months of use on average, Saint-Gobain insulation solutions offset the emissions linked to their production, according to the group - Decreased weight of car components
	<ul style="list-style-type: none"> - Reach 80% of renewable electricity in 2020, 100% in 2030 (RE100) - Gain 10% of CO₂ efficiency for transport by 2020 - Doubling energy productivity between 2005 and 2030 - Compensation of residual emissions and internal carbon price 	<ul style="list-style-type: none"> - Save customers 120 million tonnes of CO₂ by 2020 - Facilitate access to communications and light for 80 million disadvantaged people by 2030 - Smart solutions grids and smart cities and energy management
	<ul style="list-style-type: none"> - € 100M in energy efficiency projects on its sites by 2020 - 75% of renewable electricity supply - Compensation and two pilot internal carbon pricing projects - Reduction of emissions linked to the vehicle fleet 	<ul style="list-style-type: none"> - Invest € 45M in distributed energy systems by 2020 - Design and construction of renewable infrastructure (Siemens Energy) - Charging infrastructure and batteries for electric vehicles - Intelligent management of buildings, public transport and railways



The financial stake of energy consumption will not only increase (prospect of the strengthening of the integrated carbon taxation through energy efficiency improvement projects or even internal carbon price) but will have an impact on the groups' image, taking more and more concrete form via ESG criteria established by industrial customers.

* Examples of actions implemented

Focus on construction - In compliance with the constraints imposed by the contracting authority, the actions initiated relate to tools and materials






GROUP	OPERATIONS / PRACTICES *	PRODUCTS AND SOLUTIONS *
	<ul style="list-style-type: none"> - Reforestation programs (Vias) - Greening of corporate fleets (Clece) - ISO 14001 certifications 	<ul style="list-style-type: none"> - Increase in the proportion of green-certified buildings (Hochtief , Dragados) - Energy efficiency services
	<ul style="list-style-type: none"> - Experimentation with industrial solutions for modular wood construction, platforms for the reuse and recycling of materials, use of bio-based materials, use of low-carbon concrete, bioclimatic design of structures, low carbon supply chain, etc. 	<ul style="list-style-type: none"> - Eco-design and eco-construction: positive energy buildings, eco-districts, low carbon constructions - Construction and operation of renewable infrastructure - Energy optimization of buildings and public transport
	<ul style="list-style-type: none"> - Design of low-carbon buildings - Biobased materials, proximity criteria, wood traceability - Carbon performance criteria in the variable compensation of Group executives 	<ul style="list-style-type: none"> - Renewable infrastructure : design, construction, operation, maintenance - Construction of low-carbon buildings (Eiffage Immobilier) - Electric mobility and carpooling infrastructure - Energy management of buildings and districts
	<ul style="list-style-type: none"> - Recycling of materials to produce a cement that emits up to 50% less carbon (for the same durability, strength and quality) - Development of less energy-consuming equipment for quarries - Measuring the carbon footprint of construction materials 	<ul style="list-style-type: none"> - Certified green buildings and positive energy buildings
	<ul style="list-style-type: none"> - Reduction of emissions from factories and buildings (renew. and n. gas) - Renewal of the fleet of light and utility vehicles and construction machinery - Eco-design of buildings, high energy performance 	<ul style="list-style-type: none"> - Public transport and renewable energy infrastructures - Installation and operation of electric and hydrogen charging stations, road improvements (carpooling, bus, intermodality) - Eco-Design and eco-construction of buildings



These five players are capable of designing and building certified green buildings, but the development of this offer depends on the evolution of the criteria (ESG and financial) of calls for tenders. They are nevertheless working on two key topics for their sector: reducing emissions from construction machinery and emissions linked to the use of construction materials.

* Examples of actions implemented

Focus on energy - The transition of asset portfolios to low-carbon production systems and uses are at the heart of strategies

GROUP	OPERATIONS / PRACTICES *	PRODUCTS AND SOLUTIONS *
	<ul style="list-style-type: none"> - CO₂ capture projects - The bonus of around 37,000 employees is partly linked to the achievement of targets in terms of GHG emissions - Internal accreditation system for activities " Advancing Low Carbon " 	<ul style="list-style-type: none"> - Invest \$ 5 billion per year in low carbon energies by 2030 - Reduce oil and gas production by 40% by 2030, and no exploration in new countries - Installation of charging infrastructure for electric vehicles
	<ul style="list-style-type: none"> - Compensation for residual emissions - Reduced employee travel 	<ul style="list-style-type: none"> - 50GW of renewable electricity capacity by 2030, inv. in hydrogen - Electric Mobility Plan and Storage Plan (10GW by 2035) - Nuclear energy and closure of oil and coal plants - Offers and solutions for individuals and businesses, PPA
	<ul style="list-style-type: none"> - Implementation of an internal carbon price since 2015 - Significant greening of the fleet by 2030 - Priority choice of Science Based Target certified suppliers - Digital sobriety strategy for three years 	<ul style="list-style-type: none"> - 58% of renewable in the mix of electricity production capacities in 2030 - Closure of coal assets, investments in hydrogen - Electric vehicle charging infrastructure - Offers and solutions for consumers, access to energy
	<ul style="list-style-type: none"> - Compensation criteria (issues, new energy activities) - Improve the energy efficiency of infrastructures - Low-carbon, hydrogen and biofuel electricity consumption - Carbon capture or compensation, watch for methane leaks 	<ul style="list-style-type: none"> - Diversification towards products with a lower carbon intensity: renewable electric, biofuels, hydrogen - Charging electric vehicles (NewMotion)
	<ul style="list-style-type: none"> - Elimination of routine burns by 2030, reduction of methane emissions - + 1% / year in energy efficiency of facilities between 2010 and 2020 - Integration of a CO₂ price and CEO compensation criteria - CCUS ** and compensation, coal => gas to produce electricity 	<ul style="list-style-type: none"> - Gross renewable electric capacity of 25GW in 2025 - Batteries and electricity storage (Saft , Automotive Cell Company) - Electric vehicle charging infrastructure - Offers and solutions for end consumers






For energy players, the key word is the diversification of assets and activities, in favor of the different renewable energies, recharging infrastructure for electric vehicles, batteries and means of storing electricity. A transition that involves the application of internal carbon prices and criteria in variable compensation, as well as research.

* Examples of actions implemented

** CCUS: Carbon Capture, Use and Storage

Automotive focus - Various actions focusing on both the processes and the products sold

GROUP	OPERATIONS / PRACTICES *	PRODUCTS AND SOLUTIONS *
	<ul style="list-style-type: none"> - Lower energy consumption and optimization of logistics - 30% recycled / used or biobased materials in vehicles - Supply of renewable energy and compensation - -37% of emissions linked to vehicle use between 2017 and 2034 	<ul style="list-style-type: none"> - Electric vehicle batteries (Automotive Cell Company) - Optimization of equipment and vehicle architecture - Electric and hybrid vehicles, with the goal of a 100% electrified range by 2025
	<ul style="list-style-type: none"> - Increase the share of renewable to 20% on production sites by 2020 - -6% of CO₂ emissions logistics related by vehicle km 2016-2022 - Reduce CO₂ emissions from tank to wheel for passenger and utility vehicles in gCO₂ / km by 25% between 2010 and 2022 	<ul style="list-style-type: none"> - Electric and hybrid vehicles
 Volkswagen	<ul style="list-style-type: none"> - -30% emissions over the life cycle of passenger cars and light commercial vehicles between 2015 and 2025 - Use of remanufactured and recycled parts, logistics optimization - Replacement of coal by natural gas, supply of renewable energy 	<ul style="list-style-type: none"> - 40% of electric vehicles by 2030 in the range - Electric, hybrid and gas vehicles - EV charging infrastructure - Lithium-ion battery plant project (late 2023-early 2024)



Apart from the now unavoidable reduction in emissions during vehicle use (notably via targets for the release of electric vehicle ranges), car manufacturers are also striving to act on the production phases (renewable energy, recycled and remanufactured materials, electric vehicle battery factory projects) and logistics. Following the dieselgate, the sector was called upon to become aware of its impacts and to make significant changes.

The actions already taken or planned by European groups demonstrate a real awareness of their responsibility with regard to their GHG emissions, on the various scopes, from their purchases to the use of the products they market. The challenge now is to move from emerging practices and solutions to majority and structuring practices and solutions for these groups and their various entities.

* Examples of actions implemented

A real low-carbon dynamic initiated by European groups, to be consolidated and accelerated

FINDINGS

ORIENTATIONS TO BE ADOPTED

Low carbon strategies

- Low carbon strategies that are becoming **strategic, environmental and economic evidence**
- Strategies are loosely **structured and scattered**
- **Carbon neutrality objectives** set by a very large majority of the group
- Targeted emission scopes that do not always cover **the three scopes in their entirety**

- **Aim for carbon neutrality on the 3 scopes**, in their entirety, by 2050
- **Structure and clarify climate strategies** and their message

Low carbon action plans

- Priorities and quick win already identified and **different depending on the sector**
- Concrete and targeted actions to **act on all scopes**, with intermediate quantified objectives, but still a little structured in a global action plan
- **Tools and solutions** which are starting to be developed by drawing inspiration from methodologies that are references, but whose implementation has yet to be confirmed

- **Structure** action plans to act **on all emissions** and not only on priority emission sources
- **Define with precision strong terms** for the objectives and actions
- **Manage and ensure the achievement** of the objectives set on time

Our recommendations to ensure the achievement of commitments towards carbon neutrality 1/2

1 - DEFINE THE LOW CARBON STRATEGY

- ▶ Identify, **measure** and monitor greenhouse gas emissions across the three scopes and for all group entities
- ▶ **Aim for carbon neutrality by 2050** for all perimeters and set intermediate emission reduction targets
- ▶ **Work on the climate message** and its consistency with the company's culture to tell a motivating story for employees

Legend

- Scope 1 Scopes impacted by the type of action
- Scope 2
- Scope 3

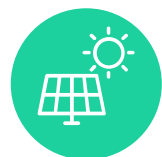
2 - DEFINE THE ACTION PLAN

2.1 - DEFINE STRONG ACTIONS TO ACT ON THE THREE EMISSION SCOPES



Define a goal of **100% greening of the company's vehicle fleet**

All



Purchase **100% renewable energy**, including via PPA, self-production, heat recovery

All

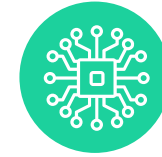
must gradually switch to renewable supply, with a strong stake for industrial processes



Improve the **energy efficiency** of buildings and industrial processes

All

Short-term optimization of operations, medium-term renovation works



Review **IT practices** with regard to environmental impacts and **integrate climate criteria in the choice of IT technologies**

All

must put in place a IT sobriety strategy and especially the sectors fond of videos and data storage



Develop **sobriety**: limitations of transport and movement, consumption, waste, (see page 17)

All

Our recommendations to ensure the achievement of commitments towards carbon neutrality 2/2

2 - DEFINE THE ACTION PLAN

2.1 - DEFINE STRONG ACTIONS TO ACT ON THE THREE EMISSIONS SCOPES ...



Develop **circular economy**: recycling and use of recycled and remanufactured materials, heat recuperation, etc.



Valuation of eco-products, financing of the circular economy



Offset residual emissions : reforestation and forest protection programs

All

With serious follow-up on the long and even very long term



Define quantitative objectives concerning the range of offers in order to **industrialize green products and solutions**



Share of green buildings designed and built



Acceleration of financing of renewables



Add one **proximity and / or climate criterion** (strategy, supply by renewables) in the purchasing policy or even **relocate key activities**



The industry sector must optimize its transport management and logistics



Ensure that the company's activities do not **cause deforestation** (tracing, guarantees)



As well as the sectors of furniture and food industry

2.2 - ENSURE THAT THE AMBITIONS ARE ACHIEVED WITHIN THE FIXED TIMES



Define and **use a carbon price** throughout the organization's value chain

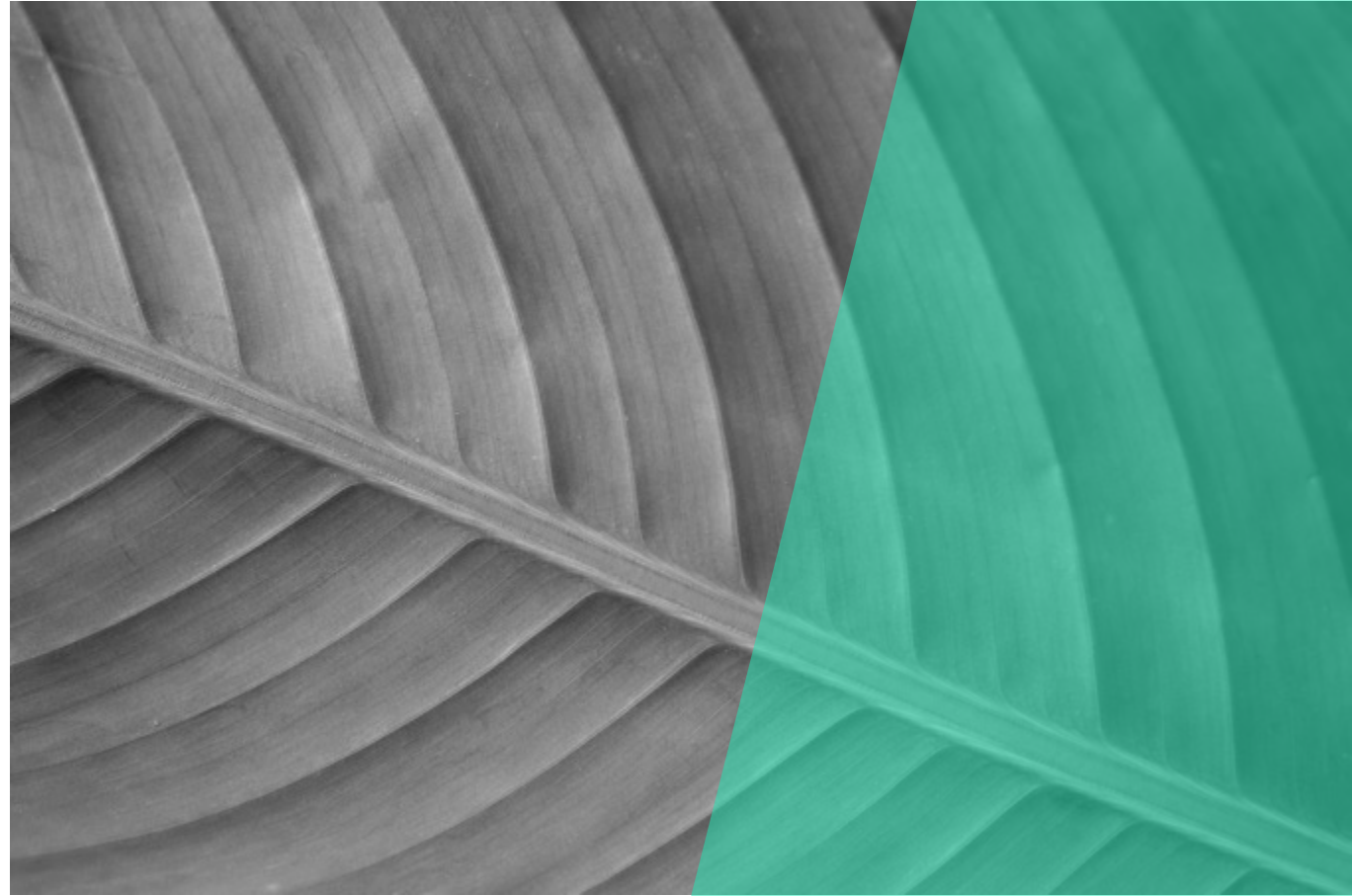


Define responsibilities for each objective, including through the **addition of variable compensation criteria linked to their achievement for managers and management**



Structure the actions in an action plan (define, classify, prioritize, quantify, plan, monitor) in order to ensure consistency, relevance and effective achievement of commitments made

Appendices



Annex 1 - The three emission scopes defined by the GHG Protocol

The Greenhouse Gas (GHG) Protocol is a private organization that has developed a **measurement, reporting and management standard of greenhouse gas emissions**. The first version of the standard, intended for companies, was published in 2001. The standard distinguishes three emission scopes: one of direct emissions, two of indirect emissions. It is the main GHG measurement standard used by companies around the world.

SCOPE 1

All direct GHG emissions resulting from sources of emissions owned or controlled by the organization (including fleet of vehicles).

SCOPE 2

Indirect scope 2 emissions correspond to the emissions due to the production of electricity, heat or steam consumed by the organization.

Indirect emissions are a consequence of the activities of the organization, but the actual sources of emissions are owned or controlled by other entities. The GHG Protocol distinguish indirect emissions into two scopes: 2 and 3.

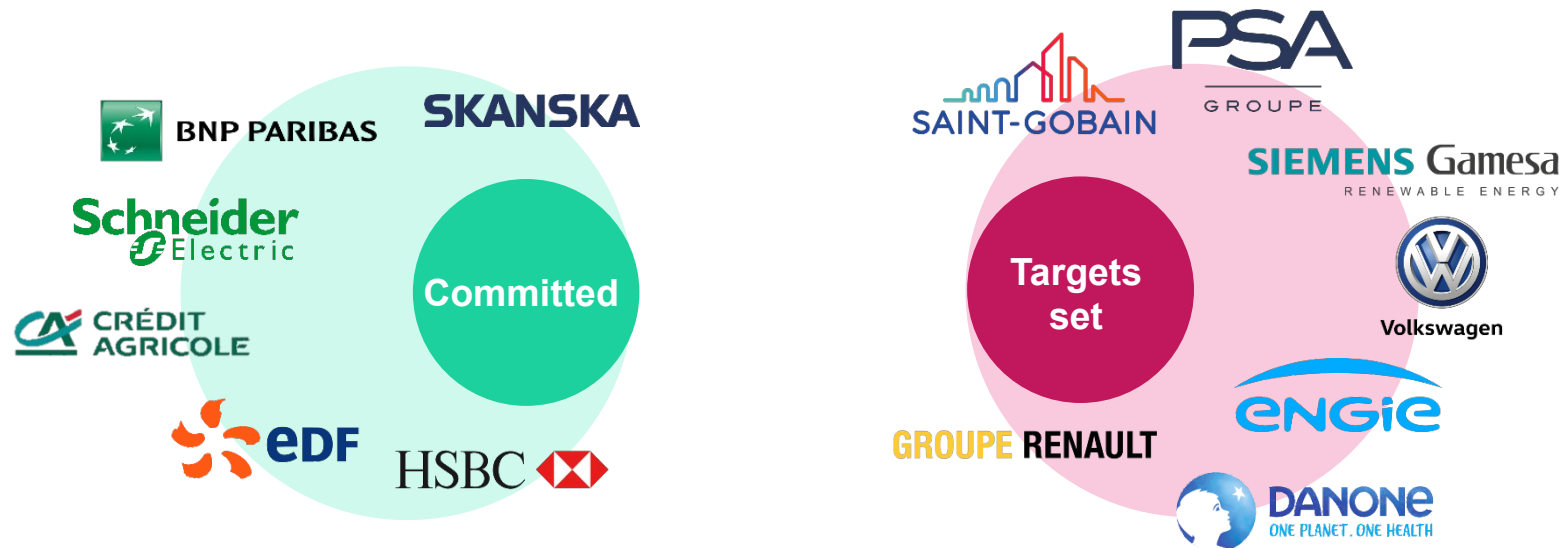
SCOPE 3

The other indirect emissions are grouped in scope 3:

- 1 - Purchased Goods and Services
- 2 - Capital Goods
- 3 - Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2
- 4 - Upstream Transportation and Distribution
- 5 - Waste Generated in Operations
- 6 - Business Travel
- 7- Employee Commuting
- 8 - Upstream Leased Assets
- 9 - Downstream Transportation and Distribution
- 10 - Processing of Sold Products
- 11 - Use of Sold Products
- 12 - End-of-Life Treatment of Sold Products
- 13 - Downstream Leased Assets
- 14 - Deductibles
- 15 - Investments

Annex 2 - The initiative Science Based Targets

The Science Based Targets (SBT) initiative urges companies to **set targets for reducing their GHG emissions that are compatible with the 2015 Paris climate agreement**, according to the latest scientific knowledge. It is a private organization resulting from the collaboration between the CDP, the UN Global Compact, the World Resources Institute and WWF. Companies first commit to setting objectives within 2 years, then once set, the body validates their compliance. Out of the 24 groups analyzed in this document: six have committed to setting targets (and are therefore within the two-year period or undergoing validation by the SBT) and seven have had their emission reduction targets validated.



Annex 3 - List of greenhouse gas emission reduction targets for selected groups

<p>BNP Paribas</p> <p>Carbon neutrality reached in 2017 on scopes 1 and 2</p>	<p>BPCE</p> <p>10% emissions between 2017 and 2020 on scopes 1, 2 and 3, excluding data centers</p>	<p>Crédit Agricole</p> <p>-15% emissions between 2016 and 2020 on the SA scope (energy and transport)</p>	<p>Deutsche Bank</p> <p>Carbon neutrality reached in 2012 on scopes 1, 2 and pro trips.</p>	<p>HSBC</p> <p>Reach 2 tons of CO₂/FTE by 2020 on scopes 1, 2 and professional trips.</p>
<p>Airbus</p> <p>-50% emissions between 2005 and 2050 on scopes 1, 2 and large transport</p>	<p>ArcelorMittal</p> <p>Carbon neutrality by 2050 in Europe</p>	<p>Saint Gobain</p> <p>Carbon neutrality by 2050 on scopes 1, 2 and 3 *</p>	<p>Schneider Elec.</p> <p>Carbon neutrality by 2040 on scopes 1, 2 and 3</p>	<p>Siemens</p> <p>Carbon neutrality by 2030 on scopes 1 and 2 (operations)</p>
<p>ACS Group</p> <p>Achieve lower emissions / € billed in 2020 than in 2015 on scopes 1 and 2</p>	<p>Bouygues</p> <p>-30% emissions between 2017 and 2030 on Bouygues Immobilier scopes 1, 2 and 3a **</p>	<p>Eiffage</p> <p>-17% emissions between 2017 and 2030 on scopes 1 and 2</p>	<p>Skanska</p> <p>Carbon neutrality by 2045 on scopes 1, 2 and 3</p>	<p>Vinci</p> <p>Carbon neutrality by 2050 on scope 1.</p>
<p>BP</p> <p>Carbon neutrality by 2050 of operations and upstream of gas and oil production</p>	<p>EDF</p> <p>Carbon neutrality by 2050 on scope 1</p>	<p>Engie</p> <p>Carbon neutrality eventually on scopes 1, 2 and 3</p>	<p>Shell</p> <p>Carbon neutrality by 2050 on scopes 1 and 2, -65% product footprint / 2017</p>	<p>Total</p> <p>Carbon neutrality by 2050 on scopes 1, 2 and for Europe 3 as well.</p>
<p>PSA</p> <p>Carbon neutrality by 2050 for factories, -37% by 2034 for vehicles compared to 2017</p>	<p>Renault</p> <p>-25% emissions between 2010 and 2022 over the entire life cycle of the vehicle</p>	<p>Volkswagen</p> <p>Carbon neutrality by 2050 on scopes 1, 2 and 3</p>	<p>Danone</p> <p>Carbon neutrality by 2050 on scopes 1, 2 and 3</p>	<p>* If the scope is identical to the 2025 intermediate objective ** 3a is defined as "other indirect emissions" by Bouygues</p>

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