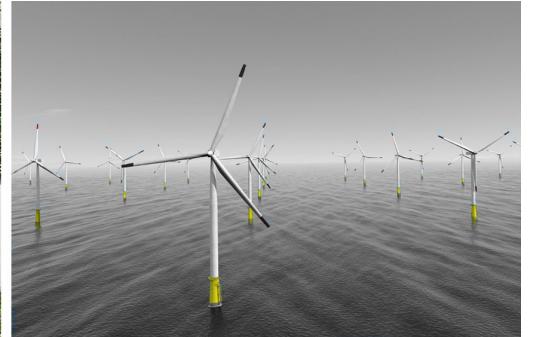




## Climate Report 2021

Our commitment for the future



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New high school in Clermont-Ferrand (Puy-de-Dôme)  
Positive energy building with exceptional E4C2 rating  
Fully traceable bio-sourced materials:  
locally-sourced wood, straw from Limagne, lava stone



# Context and challenges

In the face of the current public health crisis and the immediate economic and social consequences of the Covid-19 pandemic, climate change remains the fundamental challenge for modern societies.

2020 will have been a milestone year for several reasons:

- The Covid-19 global pandemic took governments by surprise from north to south of the planet, causing economic and social upheaval, the impact of which is yet to be determined.
- This crisis developed within a context already marked by the existential threat posed by global warming. According to the World Meteorological Organization, 2020 was one of the three warmest years on record, along with 2016 and 2019. According to the European network Copernicus, temperatures increased by 1.6°C compared to average temperatures recorded between 1981 and 2010 and were 2.2°C higher than the pre-industrial baseline.

- The temporary slowdown in human activities due to the public health crisis caused anthropogenic emissions to fall by just 7%, according to the Global Carbon Project. National meteorological agencies estimate that in 2021, atmospheric carbon dioxide concentrations will be more than 50% higher than pre-industrial levels, made worse by the massive forest fires burning for several months in Australia, Siberia, California, the Amazon, etc.

## A EUROPEAN FRAMEWORK DRIVING CLIMATE ACTION

Following adoption of the European Green Deal at the end of 2019, the European Union introduced additional measures in December 2020, in an effort to further reduce the continent's greenhouse gas emissions, from minus 40% by 2030 to minus 55%, confirming its goal of being carbon-neutral by 2050.

At the same time, the European Union is working to strengthen the financial attractiveness of economic activities considered as "sustainable" according to a common European Union definition.

### GLOBAL FIGURES



**+67%**

increase in global  
CO<sub>2</sub> emissions  
between 1990 et 2017



**5**

last years  
were the warmest on  
record since 1850,  
the warmest being  
2016, 2019 and 2020



**+9 cm**

rise in sea levels  
between 1993 and 2019

### FIGURES FOR FRANCE IN 2018



**445**

M t<sub>eq</sub>CO<sub>2</sub> in 2018  
French territory  
emissions



**+70%**

due to emissions  
linked to imports



**749**

M t<sub>eq</sub>CO<sub>2</sub> in 2018  
France's carbon footprint  
domestic emissions and  
import-related emissions

In addition to the harmonising of non-financial reporting currently underway, the European Union is also launching its European Taxonomy, a major tool for the classification of economic activities according to their contribution to six specific environmental objectives, the first two relating to climate change mitigation and climate change adaptation.

The European Taxonomy will gradually come into force as of 2021. Although this new European Union approach differs because it integrates environmental and social challenges, it nevertheless fits within a global context that is marked by:

- an increased sensitivity to managing climate-related financial risks, characterised by the rapid uptake of the Task Force on Climate-related Financial Disclosures (TCFD) reporting framework by economic and financial stakeholders;
- the various economic recovery plans being adopted in relation to the Covid-19 pandemic, with the stress on environmental issues being confirmed throughout Europe.

## EIFFAGE COMMITTED TO THE 1.5°C TRAJECTORY

Listed on the SBF 120 (French stock market index), Eiffage, one of the leading European construction and concessions companies, has committed to formalising its climate strategy according to the TCFD reporting recommendations.

Following our first Climate Report published in April 2020, this second report confirms the commitment of the Group's governing bodies, the identification of climate-related risks and the development of ecological transition opportunities.

The major advances described in this 2021 report include:

- the decision by Benoît de Ruffray, Chairman and CEO of Eiffage, to align the Group's strategy with the 1.5°C trajectory according to SBTi (Science-Based Targets initiative) criteria;
- to apply this 1.5°C trajectory to all the Group's business lines;
- to publish Scope 3 upstream emissions for works activities in France (see chapter 4, pages 42 to 46).

### SOURCES OF GREENHOUSE GAS EMISSIONS IN FRANCE IN 2018, EXCLUDING LULUCF\*



**4%**

Waste



**9%**

Industrial  
Processes  
and Solvents



**9%**

Energy



**12%**

Manufacturing  
and Construction



**17%**

Agriculture



**19%**

Residential and  
Tertiary Buildings



**30%**

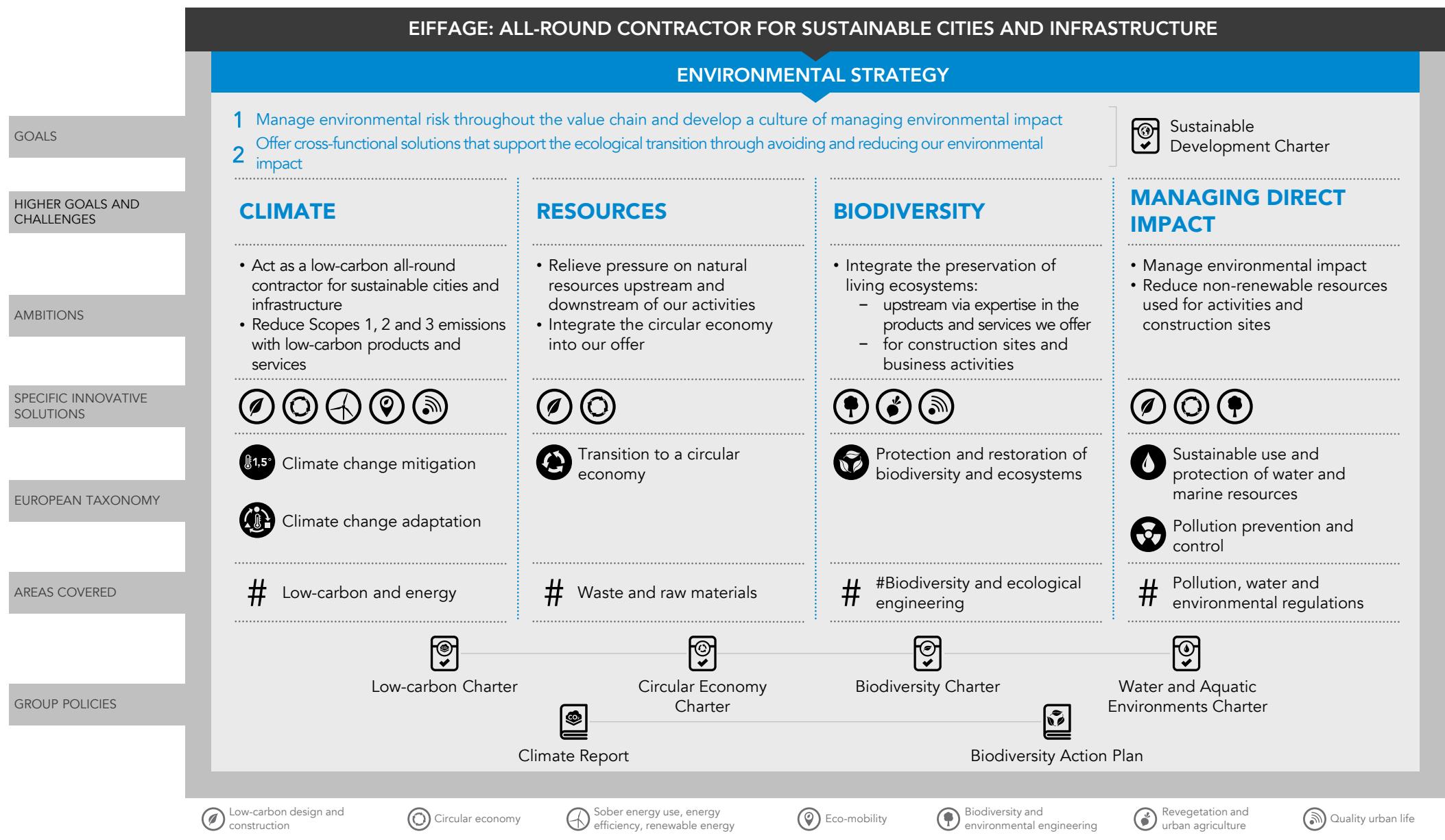
Transport

2017 - 2018  
TREND



\* Land use, land use conversion and forestry / Source : Report on the environment in France, SDES, MTEs – January 2021

This report focuses on Eiffage's climate strategy as well as its operational and commercial application. This climate strategy is part of the overall ecological transition of our activities. Its general context, higher objectives and Group responses are set out below.



# CLIMATE CHALLENGES AND CSR GOVERNANCE

Pierre Berger Campus  
Vélizy-Villacoublay (Yvelines)  
Labels: Effinergie, HQE Exceptional rating,  
BREEAM Excellent rating, BiodiverCity® Construction



# Introduction

"2020 was the warmest year on record, on a par with 2016, and confirmed what we already knew: global warming is getting worse, its consequences are proven and our timeframes for effective action are being reduced.

The Covid-19 global pandemic, however serious and far-reaching it may be, should not cause us to forget the structural crises linked to global warming and the erosion of biodiversity. While these battles being fought on several fronts are part of national and international strategies, they also directly impact and concern private companies that are willing to play their part.

Having committed to the TCFD framework, following more than a decade of in-depth work on our social and environmental responsibility, we published our first Climate Report in 2020, formalising our commitment to reducing carbon emissions in line with the Paris Agreement, the physical and transition risks linked to climate change, as well as the opportunities arising from the ecological transition of our business lines.

This work continued throughout 2020, with two key highlights:

- the extension of emissions calculations to Scope 3 upstream emissions, and revised calculations for Scopes 1 and 2 on the basis of reliable data for the year 2019;
- the validation of CO<sub>2</sub> action plans for each of the Group's business lines, both in terms of their internal scope and the products and services they offer.

These in-depth efforts, including the mobilisation around our low-carbon strategy plan of all our teams – operational, R&D, support functions and management – leads me to believe as realistic the dual objectives, by the year 2030 and based on our 2019 emissions levels, of reducing the Group's internal greenhouse gas emissions by at least 40% on the one hand and our external emissions by 30% on the other.

According to the Science-Based Targets Initiative (SBTi), this objective places us on the 1.5°C trajectory, which is compatible with the goal of achieving carbon neutrality by 2050 at the latest. Fully aware of the challenges that need to be met, but also the technological advances that can be reasonably expected, these goals represent an amazing challenge for all the Group's employees and we are fully convinced that we can achieve them.

Building sustainable cities and infrastructures that fully respect environmental challenges and are compatible with the need for peaceful and united societies, is the noble and exciting goal that I encourage us all to work towards."

**BENOÎT DE RUFFRAY**  
Chairman and CEO of Eiffage





**LAURENT DUPONT**  
Eiffage Director  
representing employee  
shareholders since 2012,  
and Chief Operations  
Officer at Eiffage  
Construction

### **Do you think that employees are now more sensitive to climate issues?**

Climate change is not something new and Eiffage didn't wait for the growing media coverage of this issue to tackle it.

Eiffage has been a pioneer both in terms of reducing greenhouse gas emissions and preserving biodiversity. As early as 2007, we created Phosphore, a research and development laboratory dedicated to the sustainable city. The pioneering Smartseille eco-district in Marseille (Bouches-du-Rhône) was developed by this laboratory in 2014, as well as other major projects such as the LaVallée eco-district in Châtenay-Malabry (Hauts-de-Seine), currently under development.

In terms of biodiversity, the turning point came in 2008 when the Group won the contract to build the A65 motorway linking Pau (Pyrénées-Atlantiques) to Langon (Gironde), which carried environmental requirements that were particularly ambitious in the wake of the Grenelle Agreements.

Today, we are harnessing the work already done and the work still in progress. This is true for the "Make the invisible visible" low-carbon campaign, which pursues the double objective of raising awareness among both our internal and our external stakeholders.

# **The Board of Directors, an active stakeholder in the climate strategy**

### **Does the extent of Eiffage employee share ownership influence the choice of a responsible strategy for future generations?**

It's often said that employee share ownership is in Eiffage's DNA. In fact it is a fairly unique business model, with almost 20% of capital being held by employee shareholders, representing more than 80% of total employees. It is an attractive feature of our company and I have seen how it differentiates us in the eyes of new hires, proof if any were needed of the importance of the human aspect for rising generations. Even though it is difficult to establish a clear and absolute link between employee shareholding and climate awareness, it seems to offer fertile ground for taking into account the range of internal stakeholder expectations, including the issue of global warming, which is clearly something rising generations are concerned about.

I would add that despite unprecedented circumstances due to the Covid-19 global pandemic, the subscription rate for the capital increase reserved for employees rose to almost 71%. This shows that not only is employee share ownership resistant to economic crisis, it can also be a solid ally during structural ones.

### **What do you consider to be the most significant event in recent months in terms of the Group's climate strategy?**

I was particularly impressed by the renegotiation of credit facilities on the basis of two non-financial criteria: workplace safety and the reduction of the Group's carbon footprint. Traditionally based on financial criteria alone, compensation can now be linked to environmental and societal performance.

In addition to these strategic considerations, as Operations Officer, it's on construction sites that I can really see these developments. Eiffage won lot E of the contract to build the Athletes Village in Saint-Ouen (Seine-Saint-Denis), where new practices have been adopted to achieve our ambitious targets in terms of reducing greenhouse gas emissions. This requires technical expertise but also an increase in skills in our business lines. Climate change is driving us to effect the low-carbon transition of our business model and profoundly review all our methods and processes.



**CHRISTIAN CASSAYRE**  
Eiffage Financial Director

## THE EIFFAGE FINANCE DEPARTMENT LOW-CARBON ROADMAP: 3 KEY ELEMENTS FOR 2021

### Participate in improving the non-financial reporting system

- Bring the scope of non-financial reporting in line with that of financial reporting, which is standardised and proven
- Interface the Group's financial software to extract real-time monetary and quantitative data linked to carbon and our consumption

### Financial practices in a carbon-conscious era

- Continue refinancing the Group through calls for tender with carbon performance-linked criteria

### Integrate carbon into strategy decisions

- Within the Group's investment committees responsible for validating all external growth operations
- Refer to the Strategy and CSR Committee for investments exceeding €30 million

# A committed Finance Department

### To what extent do you find financial rating agencies and investors are sensitive to the TCFD framework?

For the past ten years or so, we have noted the importance of non-financial ratings for the assessment of risks related to climate change.

The pioneer in this area was the CDP (Carbon Disclosure Project), launched in 2003 and recognised internationally. Today, it is still the largest carbon database in the world for businesses and local authorities. It is creating emulation among stakeholders anxious to demonstrate their consideration of climate issues. In 2020, Eiffage achieved an A- rating, one of the best in the construction sector, which in Europe averages a C rating.

I noticed a growing sensitivity to climate issues following the COP 21 and the Paris Agreements in 2015, which became even more pronounced with the finalisation of the TCFD recommendations in July 2017. This framework was very well received by investors and listed companies, because it structures companies' climate strategy reporting, both in terms of risk management as well as business opportunities, based on a logic of continuous improvement and a learning approach. All stock market indexes combined, 50% of listed companies are now aligned with TCFD recommendations, compared with 38% last year and 12% in 2018.

### Can we expect the TCFD framework to harmonise the risks and opportunities approach for companies' non-financial climate reporting?

We are seeing a huge increase in non-financial ratings, with converging indices that remain surprisingly low, which is not the case for financial ratings. This proliferation, which is time-consuming for companies, also affects the legibility of their ratings. Consequently, there are expectations in terms of rationalisation and improved legibility for these non-financial assessments. If the TFCD recommendations were to take the lead on the international arena, as seems to be the case, then it would be a good start.

We are also relying on work currently being carried out by the European Union, which is preparing the framework for future non-financial reporting based on harmonised key indicators. Convergent with the TCFD recommendations, the future European Taxonomy goes even further because it combines systemic environmental criteria as well as social criteria, thus making it possible to direct financial flows towards economic activities assessed as being sustainable at all levels.

# Governance, climate strategy and low-carbon action plans

The risks and challenges related to greenhouse gas emissions have a direct influence on the sustainability of the Group's business model.

This conviction explains the governance of this issue at the highest level, Group Chairman and CEO and the Board of Directors, as well as the mobilisation of all the Group's resources.

Operational entities and support functions contribute to the climate strategy and to the carbon strategy, its operational application, according to the responsibilities laid out in the chart below. This multi-level mobilisation is a reflection of the cross-functional nature of the climate challenge.

ENTITY	STAKEHOLDERS	CARBON AND CLIMATE STRATEGY ROLES AND RESPONSIBILITIES
BOARD OF DIRECTORS		<ul style="list-style-type: none"> <li>Validate the Group's <a href="#">climate strategy</a></li> <li>Validate <a href="#">CSR and climate risk mapping</a></li> <li>Validate <a href="#">external growth operations integrating climate risk</a></li> <li>Define the <a href="#">non-financial performance criteria</a> integrated into the compensation package for the Chairman and CEO</li> </ul>
EXECUTIVE MANAGEMENT		<ul style="list-style-type: none"> <li>Validate and steer the Group's <a href="#">climate strategy</a>: trajectory, objectives, investments and timescale for reducing emissions</li> <li><a href="#">Implement</a> the climate strategy, via the Executive Committee and support functions, by means of low-carbon operational plans within the Group's business lines</li> <li><a href="#">Report</a> to supervisory authorities, shareholders and the market</li> </ul>
SUPPORT FUNCTIONS		<ol style="list-style-type: none"> <li>Propose and update the Group's <a href="#">climate strategy</a> - Propose and monitor <a href="#">key performance indicators</a> designed with the divisions - <a href="#">Report</a> to supervisory authorities - Ensure the interface with non-financial ratings agencies</li> <li>Involve <a href="#">suppliers and subcontractors</a> in the climate strategy and low-carbon operational plans to act on Scope 3 emissions in association with Group divisions</li> <li>Contribute to the <a href="#">new carbon IT system</a> aligned with financial scope</li> <li>Update <a href="#">climate risk mapping</a> and set up appropriate insurance cover</li> <li>Integrate climate risks into the internal audit plan</li> <li>Design <a href="#">digital architecture adapted</a> to carbon reporting</li> <li>Apply the low-carbon strategy to the Group's <a href="#">real estate assets</a></li> <li>Inform and involve the <a href="#">workforce</a> in the climate strategy and low-carbon operational plans and inform the Group's <a href="#">external stakeholders</a> about the climate strategy</li> </ol>
DIVISIONS CONSTRUCTION INFRASTRUCTURE ENERGY SYSTEMS CONCESSIONS		<ul style="list-style-type: none"> <li>Design the low-carbon <a href="#">operational plan</a> applied per business line</li> <li><a href="#">Implement</a> emissions-reduction action for all scopes</li> <li>Design and market <a href="#">new low-carbon technical offers</a></li> <li>Invest in low-carbon <a href="#">R&amp;D</a></li> <li>Develop low-carbon <a href="#">production methods</a>: partnerships, external growth</li> <li>Design and implement <a href="#">ongoing training</a> for employees in new skills linked to the low-carbon economy</li> </ul>

The Sustainable Development and Transverse Innovation department (DDDIT) acts as the control tower for the Group's low-carbon strategy. The department has around thirty employees working in complementary teams, and is in charge of:

- managing environmental risks within the Group's business lines;
- adding value to responses to calls for tender in three areas: carbon avoidance in the products and services offered, preserving biodiversity and circular economy-based solutions;
- transverse innovation, to support from an organisational and financial perspective, the development and diffusion of the Group's sustainable innovations;
- CSR strategy, reporting and associated controls.

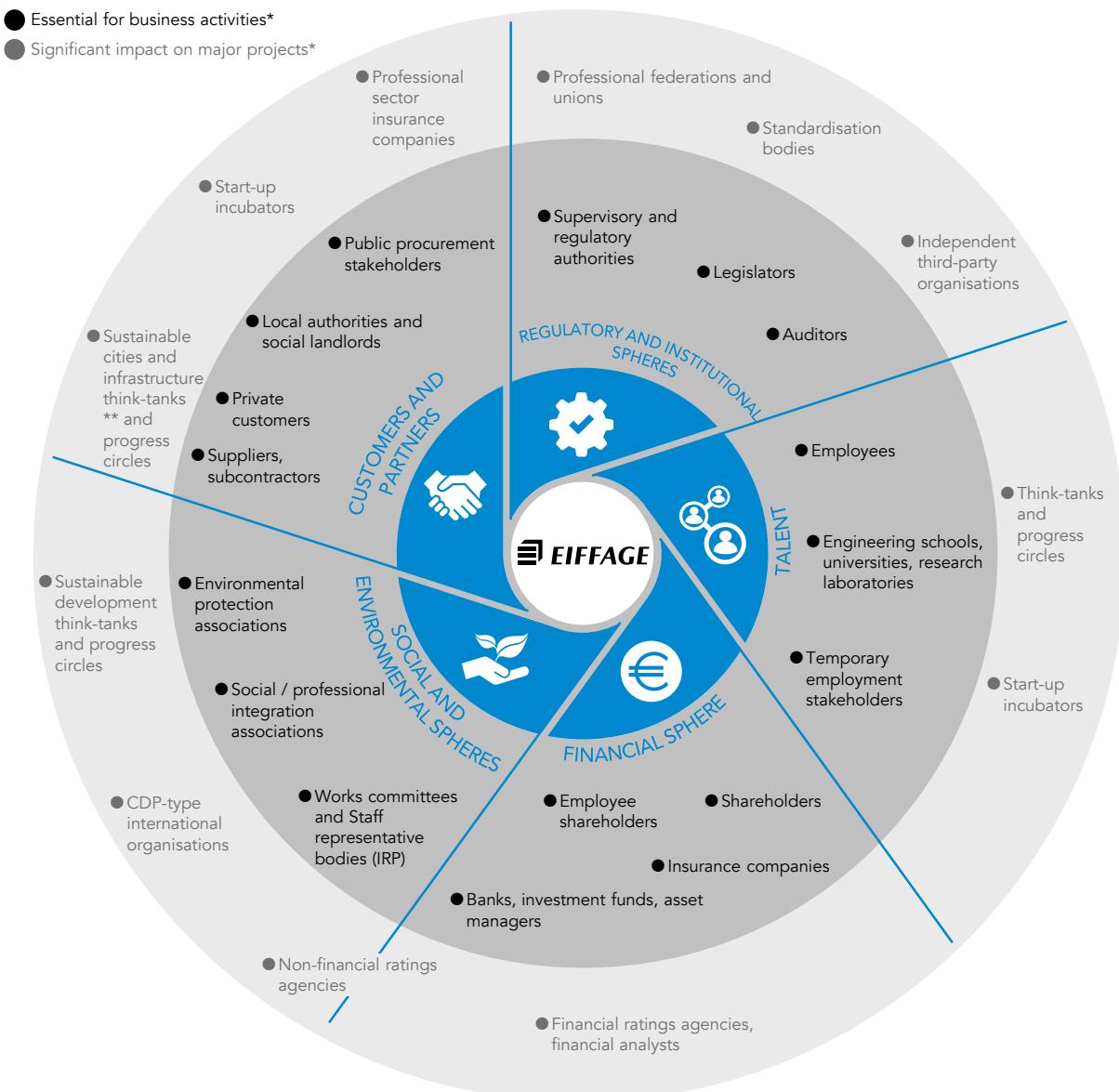
#### The DDDIT:

- reports directly to the Chairman and CEO twice a month;
- reports to the Strategy and CSR Committee of the Board of Directors twice a year;
- intervenes in the Executive Committee at the request of the Chairman and CEO.

This dual approach involving support functions and operational-related tasks, is made possible by Group's compact business model. This is also the reason why Eiffage can effectively interact with an increasingly large ecosystem.

This may include traditional stakeholders – private or public-sector clients, supervisory authorities, shareholders or professional unions – but also assessment bodies and non-financial ratings agencies. In recent years, new stakeholders have emerged around climate and biodiversity challenges, and have become frequent partners in the Group's reflections and work, including progress circles (OREE) and associations (LPO bird protection league, Humanité & Biodiversité, etc.)

## STAKEHOLDER MAPPING

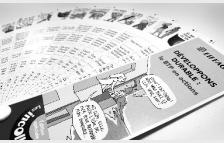


\* Non-exhaustive list \*\* Think-tank: a private organisation that produces studies on societal themes for the benefit of decision-makers

# Sharing the climate strategy with our various stakeholders

The climate strategy and its operational application in terms of carbon, need to be explained to our internal and external stakeholders. In addition to regulatory information such as the Universal Registration Document, or technical publications such as this Climate Report, Eiffage develops various communication tools according to the target audience and the issues covered.

Eiffage University is responsible for providing low-carbon training for all employees, in addition to the initiatives developed by the DDDIT department: freely accessible technical documents, low-carbon open-innovation seminars and day events. For the first time in 2020, several initiatives aimed at new hires and external stakeholders concerning Eiffage's climate strategy solutions, were organised in conjunction with radio stations and on social networks.

SCOPE							
INTERNAL AUDIENCE		INTERMEDIARY		EXTERNAL AUDIENCE			
TRAINING	TECHNICAL DOCUMENTS	SEMINARS	DIGITAL PRACTICES	ECOLOGICAL TRANSITION OF THE CONSTRUCTION INDUSTRY	RADIO DEBATES	LOW-CARBON OPEN INNOVATION	LOW-CARBON PUBLIC AWARENESS CAMPAIGN
 <b>2</b> methods available (online and face-to-face)	 <b>4</b> internal sustainable business guides published in 2020	 <b>7</b> "Innovation Conferences" organised since 2017	 <b>23</b> million emails deleted thanks to the IT department's "digital sorting campaign"	 <b>144</b> educational questions on sustainable development in the construction industry	 <b>10</b> debates on sustainable cities and infrastructure	 <b>2</b> calls for low-carbon solutions since 2019	 <b>1st</b> public communication campaign on low- carbon solutions in Eiffage's business lines
<b>120</b> employees completed the "Standing out thanks to sustainable development" module in 2020	<b>100</b> participants in "Innovation Conferences" between 2019 and 2020	<b>2,000</b> ideas proposed on the Start.box platform since 2018	<b>23,000</b> copies distributed in France and Spain	<b>280,000</b> downloads in one year	<b>115</b> candidate solutions	<b>11</b> award-winning low- carbon solutions implemented by Sekoya member companies	
<b>587</b> employees in 2020 completed the Group's carbon strategy e-learning module							
TECHNIQUE							GÉNÉRALISTE



# RESPONSIBLE STRATEGY AND GROUP COMMITMENTS

**Micro hydroelectric power station in Terrasson-Lavilledieu (Dordogne)**  
Over 2 GWh produced in 2020, the equivalent of 449 households  
Eiffage Concessions

# Managing our risks

Every year, Eiffage updates its mapping of the risks likely to have an impact on its business operations, its financial results and its reputation. This exercise identifies the risks and determines the priorities in managing those risks.

The method adopted includes:

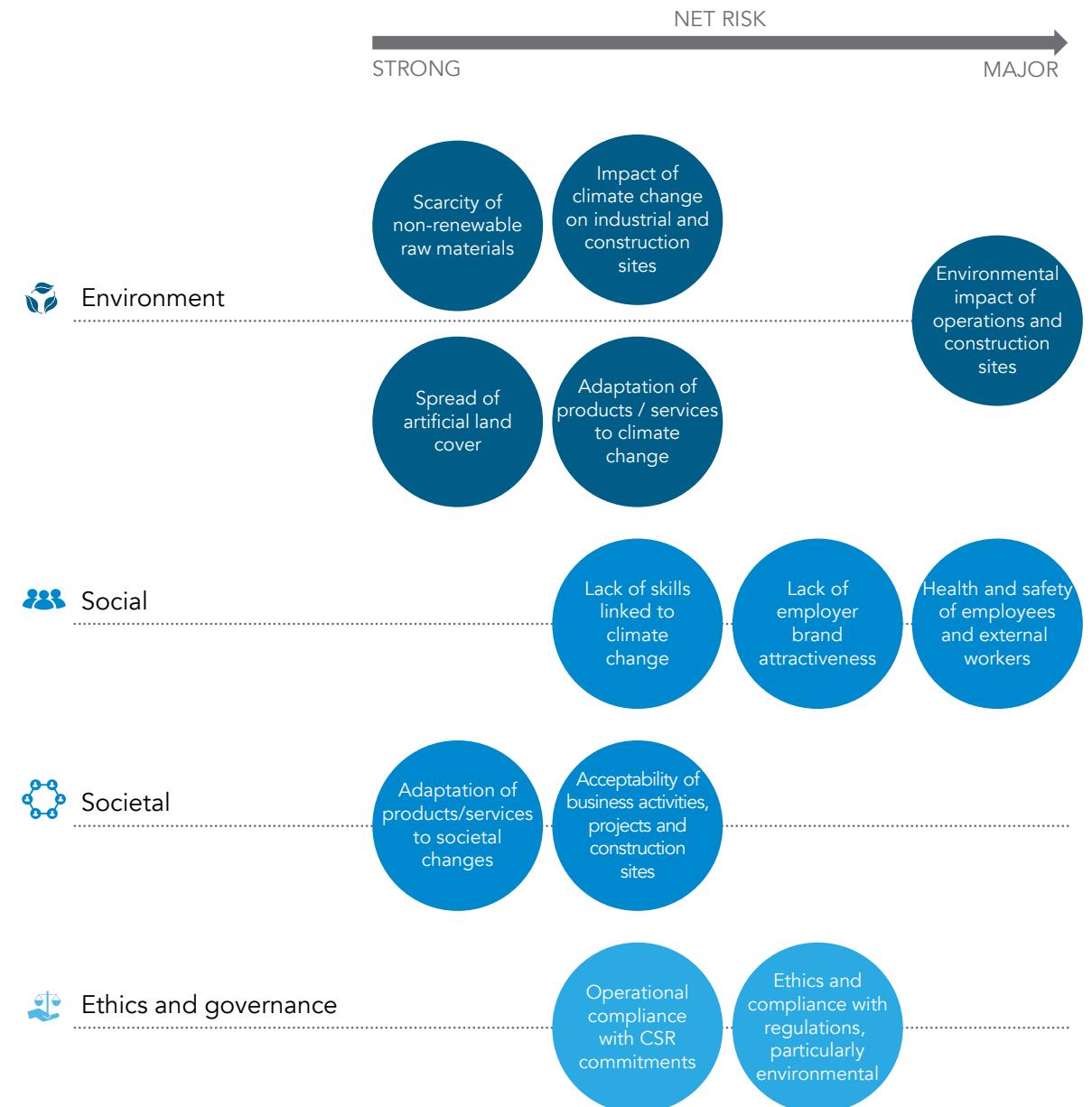
- an initial assessment of the risk identified by multiplying its frequency of occurrence by its severity, resulting in "gross risk";
- an evaluation of the procedures and actions put in place to manage this risk, in order to determine the level of risk management, resulting in "net risk";
- prioritising the risks affecting the Group's activities.

The updated mappings of risks are validated by the Executive Committee and the Audit Committee of the Board of Directors. The mapping of CSR risks was updated by the Compliance department in 2019 and 2020, after extensive consultation with cross-functional departments: Audit, DDDIT, Human Resources, Prevention and Purchasing.

In its 2020 Climate Report, Eiffage identified three climate-related risks that are still present in the 2021 mapping:

- lack of training in new skills linked to climate change;
- lack of employer brand attractiveness for new hires sensitive to climate issues;
- disruption in the supply of materials extracted from sites that are vulnerable to extreme weather events.

## MAPPING OF CSR RISKS RELATING TO CLIMATE CHANGE



# Evaluating our commitments

The main international standards and methods differentiate between three categories of emissions:

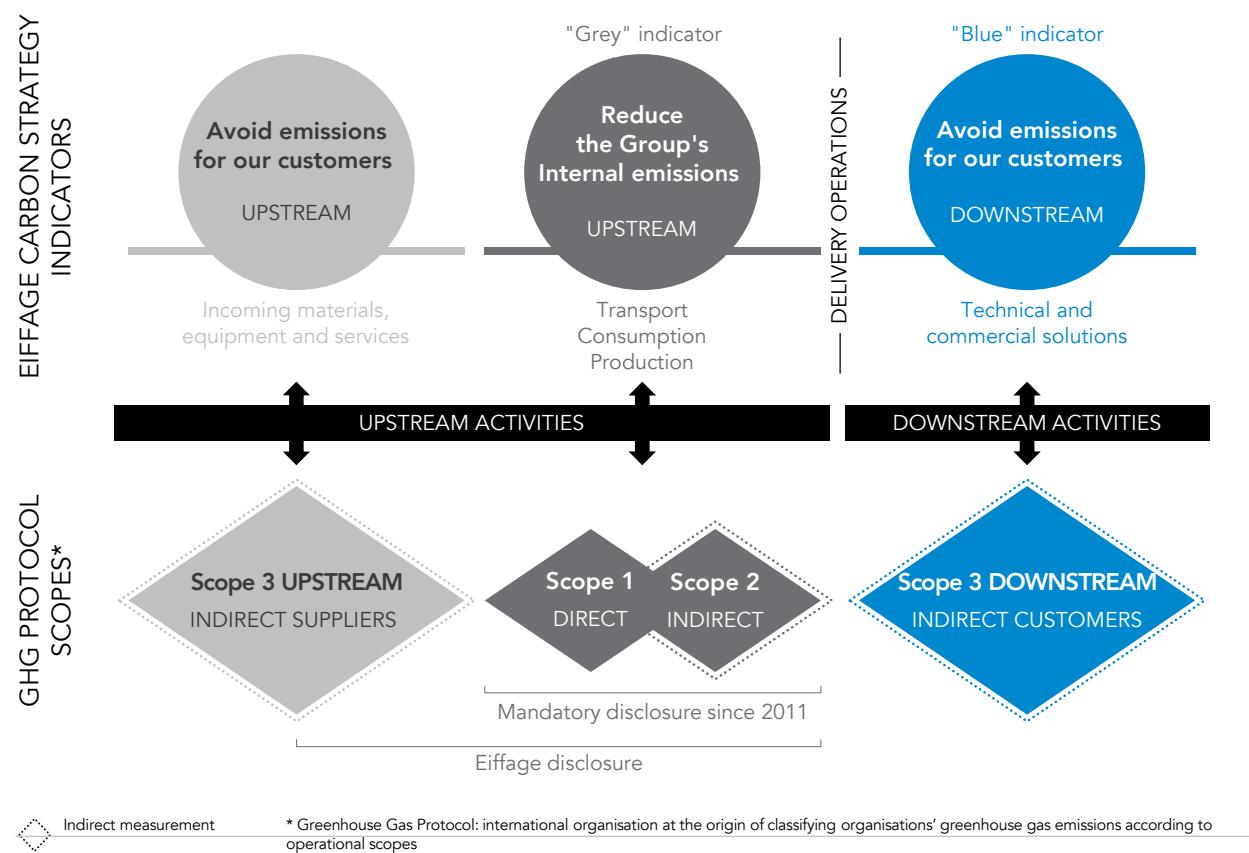
- Direct greenhouse gas emissions (Scope 1):** from fixed or mobile installations that are owned or controlled by the organisation. For example: stationary and mobile combustion, industrial processes, refrigerants, biomass, etc.
- Indirect energy emissions (Scope 2):** indirect emissions associated with the production of electricity, heat or steam purchased for the activities of the organisation.
- Other indirect emissions (Scope 3):** all emissions produced indirectly by the organisation's activities not included in Scope 2 and occurring throughout the entire value chain. Scope 3 emissions therefore can be upstream (all emissions that end on delivery of the building, equipment or infrastructure) or downstream (all emissions relating to the use, servicing, maintenance and end-of-life of the building, equipment or infrastructure), as shown opposite. For example: purchased raw materials, services or other products, business travel, upstream and downstream transportation of goods, management of waste generated by the organisation's activities, use and end of life treatment for products and services sold, property assets, plant and equipment, etc.

Alongside these essential though not necessarily intuitive conventional indicators, Eiffage has adopted a dual approach since 2017, allowing stakeholders to easily distinguish between:

- greenhouse gas emissions produced directly within the "internal perimeter", which are measured using a "grey" indicator;
- greenhouse gas emissions avoided in customer projects, compared with emissions linked to standard solutions. These emissions are avoided by applying the Group's know-how and expertise to the products and services it offers and are measured using a "blue" indicator.

The chart below shows the correspondence between Scopes 1, 2 and 3 emissions (upstream and downstream) and the indicators chosen by Eiffage in terms of internal scope emissions (grey indicator) and emissions avoided in customer projects due to low-carbon solutions (blue indicator).

The figures for Eiffage's greenhouse gas emissions for the year 2019 are published in terms of Scopes 1 and 2 for all divisions, and Scope 3 upstream emissions for the Construction, Energy Systems and Infrastructure divisions in France (see chapter 4, page 43).



## EXAMPLES OF ACTIONS TO REDUCE INTERNAL CARBON EMISSIONS

THEME	PRINCIPLE	EXAMPLES OF ACTION	EXAMPLES OF INDICATORS
 TRANSPORT	Employee travel	<ul style="list-style-type: none"> <li>✓ Streamline business travel by adopting video-conference practices</li> <li>✓ Promote carpooling solutions</li> </ul>	<ul style="list-style-type: none"> <li>▲ Internal fleet fuel consumption = kg CO<sub>2</sub> / vehicle and kg CO<sub>2</sub>/ km travelled</li> <li>▲ Internal fleet fuel consumption = kg CO<sub>2</sub> / vehicle and kg CO<sub>2</sub>/ km travelled</li> </ul>
	 Optimisation of energy consumption of vehicles	<ul style="list-style-type: none"> <li>✓ Strengthen tools for measuring and analysing consumption per vehicle category</li> <li>✓ Train all employees in eco-driving in 5 years</li> <li>✓ Eliminate CO<sub>2</sub>-intensive vehicles from the company vehicle grid</li> <li>✓ Promote the choice of electric company vehicles via a flexible offer combining year-round electric vehicles with access to family-capacity vehicles 5 weeks per year</li> </ul>	<ul style="list-style-type: none"> <li>▲ Vehicle fleet emissions in t<sub>eq</sub>CO<sub>2</sub> / vehicle</li> <li>▲ Vehicle fleet emissions in t<sub>eq</sub>CO<sub>2</sub> / km</li> <li>▲ Vehicle CO<sub>2</sub> emissions per million € of turnover</li> <li>▲ Vehicle CO<sub>2</sub> emissions per employee</li> </ul>
	Optimisation of energy consumption of machinery	<ul style="list-style-type: none"> <li>✓ Strengthen tools for measuring and analysing consumption per machine category</li> <li>✓ Compare the carbon emissions of rented equipment according to service providers</li> <li>✓ Strengthen tools for measuring and analysing NRD (non-road diesel) consumption</li> <li>✓ Experiment with alternatives to NRD</li> </ul>	<ul style="list-style-type: none"> <li>▲ Vehicle fleet emissions in t<sub>eq</sub>CO<sub>2</sub> / machine</li> <li>▲ Vehicle fleet emissions in t<sub>eq</sub>CO<sub>2</sub> / machine</li> <li>▲ Improvement in monthly consumption monitoring, carried out per transport category</li> <li>▲ Number of sites equipped with a B100 bio-fuel tanks for testing on truck fleet and quantity of B100 consumed</li> </ul>
 ENERGY CONSUMPTION	Reduction in carbon footprint of equipment and buildings	<ul style="list-style-type: none"> <li>✓ Strengthen tools for measuring and analysing electricity and heating consumption</li> <li>✓ Identify and replace energy-intensive equipment</li> <li>✓ Apply the Tertiary Decree to all buildings owned by the Group, regardless of surface area</li> </ul>	<ul style="list-style-type: none"> <li>▲ Consumption reduction kWh/€ of turnover</li> <li>▲ t<sub>eq</sub>CO<sub>2</sub> / m<sup>2</sup> of building</li> <li>▲ CO<sub>2</sub> emissions from buildings per million € of turnover</li> <li>▲ IPÉ (Energy Performance Indicator), cf. ISO 50001</li> </ul>
	Reduction in carbon footprint of construction site facilities		
		<ul style="list-style-type: none"> <li>✓ Optimise consumption of site installations by monitoring electricity consumption and dissociating uses such as crane consumption and other uses</li> <li>✓ Limit and condition the use of generators on site</li> </ul>	<ul style="list-style-type: none"> <li>▲ CO<sub>2</sub> emissions from site installations per million € of turnover</li> </ul>
 PRODUCTION	Carbon-monitoring steering	<ul style="list-style-type: none"> <li>✓ Complete carbon assessments for sites using professional-sector carbon tools and train employees to use these tools</li> </ul>	<ul style="list-style-type: none"> <li>▲ t<sub>eq</sub>CO<sub>2</sub> / k€ of works</li> </ul>
	Reduced pressure on resources	<ul style="list-style-type: none"> <li>✓ Increase the proportion of recovered and / or recycled waste at directly-owned sites</li> </ul>	<ul style="list-style-type: none"> <li>▲ Proportion of recovered or recycled waste (%)</li> </ul>
		<ul style="list-style-type: none"> <li>✓ Select service providers working on directly-owned sites, based on the environmental assessment (e.g. LCA) of their products, equipment and services</li> </ul>	<ul style="list-style-type: none"> <li>▲ No indicator</li> </ul>

## EXAMPLES OF EMISSIONS AVOIDANCE ACTIONS IN THE PRODUCTS AND SERVICES OFFERED

THEME	PRINCIPLE	EXAMPLES OF ACTION	EXAMPLES OF INDICATORS
 <b>LOW-CARBON EXPERTISE</b>	<b>Low-carbon offers and innovations for construction</b>	<ul style="list-style-type: none"> <li>✓ Introduce the identification of low-carbon projects versus standard projects</li> <li>✓ Consolidate expertise in the use of bio-sourced materials with a low-carbon footprint</li> <li>✓ Develop the traceability of bio-sourced materials</li> </ul>	<ul style="list-style-type: none"> <li>▲ Number of low-carbon projects launched by Eiffage Immobilier and Eiffage Development (BBCA label, E + C -, etc.)</li> <li>▲ % of tenders won with a certification objective (BBCA; E + C; bio-sourced building)</li> <li>▲ % of tenders won with a traceability guarantee (wood label, bio-sourced materials label, etc.)</li> </ul>
	<b>Low-carbon offers and innovations for energy</b>	<ul style="list-style-type: none"> <li>✓ Develop an industrialised energy renovation offer</li> <li>✓ Develop an offer based on green hydrogen for buildings, mobility and industry</li> <li>✓ Develop a CO<sub>2</sub> capture offer for industrial process emissions</li> <li>✓ Develop a global renewable energy and CO<sub>2</sub> supply offer for market gardening greenhouses</li> </ul>	<ul style="list-style-type: none"> <li>▲ Number of EWCs leveraged for the customer</li> <li>▲ Number of renovation bids won</li> <li>▲ % of bids won offering energy based on green hydrogen</li> <li>▲ Volume of CO<sub>2</sub> captured</li> <li>▲ Number of energy autonomy bids won</li> </ul>
	<b>Low-carbon offers and innovations for roads</b>	<ul style="list-style-type: none"> <li>✓ Increase the use of warm mixes and emulsion mixes that are less energy-intensive and less carbon-intensive</li> <li>✓ Develop ARM 2500® and ARC 700® in-situ reprocessing</li> <li>✓ Develop road surface recycling with our range of plant-based binders: Recytal®, Biophalt® and Bioklair® (which replaced Biokrom® in Spring 2021)</li> </ul>	<ul style="list-style-type: none"> <li>▲ Tonnage of warm and emulsion mixes / tonnage of classic hot mixes</li> <li>▲ Number of m<sup>2</sup> implemented</li> <li>▲ Tonnage of Recytal® emulsion mixes; tonnage of Biophalt® and Bioklair® binders</li> </ul>
	<b>Low-carbon offers and innovations for civil engineering, metal and rail</b>	<ul style="list-style-type: none"> <li>✓ Increase the use of warm mixes and emulsion mixes that are less energy-intensive and less carbon-intensive</li> <li>✓ Develop low-carbon rail expertise</li> </ul>	<ul style="list-style-type: none"> <li>▲ % of tenders won with optimisation of materials</li> <li>▲ Low-carbon rail certification (CEEQUAL; PAS 2080)</li> </ul>
	<b>Low-carbon service offers for motorway concessions</b>	<ul style="list-style-type: none"> <li>✓ Encourage carpooling by providing reserved parking spaces</li> <li>✓ Promote carpooling through reserved lanes</li> <li>✓ Promote low-emission and zero-emission vehicles by providing sufficient electric charging terminals and NGV (natural gas for vehicles) stations</li> </ul>	<ul style="list-style-type: none"> <li>▲ Number of carpooling parking spaces</li> <li>▲ Number of lanes opened</li> <li>▲ Fraud rate on reserved lanes</li> <li>▲ Rate of carpooling on sections with active reserved lanes</li> <li>▲ Number of areas equipped with at least one VHP or multi-standard terminal</li> <li>▲ Average distance between two equipped areas</li> </ul>

## EXAMPLES OF EMISSIONS AVOIDANCE ACTIONS IN THE PRODUCTS AND SERVICES OFFERED

THEME	PRINCIPLE	EXAMPLES OF ACTION	EXAMPLES OF INDICATORS
 METHODS AND TOOLS	Carbon avoidance calculation	✓ Make systematic use of digital tools that allow double € and CO <sub>2</sub> quotes, such as the Eiffage Route "CARL" tool and the Goyer G + C - tool; develop equivalent tools for the energy and construction business lines	▲ Existence of a €/CO <sub>2</sub> digital interface for each division
	Low-carbon purchasing	✓ Make systematic use of ECOSOURCE purchasing software, allowing multi-criteria environmental assessment including CO <sub>2</sub>	▲ Number of employees trained in ECOSOURCE software
	Low-carbon technical variants	✓ Propose low-carbon variants in Eiffage's responses to calls for tender  ✓ Identify low-carbon operations carried out (e.g. create a solutions book, EWC monitoring)	▲ Number and amount in k€ of low-carbon offers  ▲ EWCs leveraged for the customer (number of replies to offers, cumulative kWh, k€ financed)
	Low-carbon construction methods	✓ Systematically carry out PMD (product, materials, waste) assessments for large-scale deconstruction and rehabilitation projects, to optimise reuse and recycling  ✓ Optimise the management of cut and fill on the same site to avoid truck rotations for evacuation	▲ % of tenders won with a "selective deconstruction / reuse and recycling" component  ▲ % of tenders won with an "optimisation of cut and fill management" component
	Cooperation between stakeholders in the value chain	✓ Use logistics-pooling platforms on construction sites and organise the exchange of materials and services between sites  ✓ Cooperate with suppliers upstream of responses to calls for tender on carbon avoidance, e.g. Sekoya industrial club	▲ % of sites that benefit from low-carbon logistics  ▲ % of external low-carbon solutions implemented in responses to calls for tender
	Externally	✓ Support our customers in their efforts to reduce their carbon footprint  ✓ Challenge our external service providers (e.g. rental companies) and integrate low-carbon criteria into supplier assessment (Group Purchasing)	▲ Monitoring of the volume of purchases from suppliers assessed on low-carbon criteria for critical purchasing categories
 DISSEMINATE KNOW-HOW	Internally	✓ Train design offices, sales representatives and managers  ✓ Market the range of low-carbon solutions by promoting carbon avoidance	▲ % of people having followed the "low-carbon" e-learning course ▲ Proportion of tenders won with a "low-carbon" variant

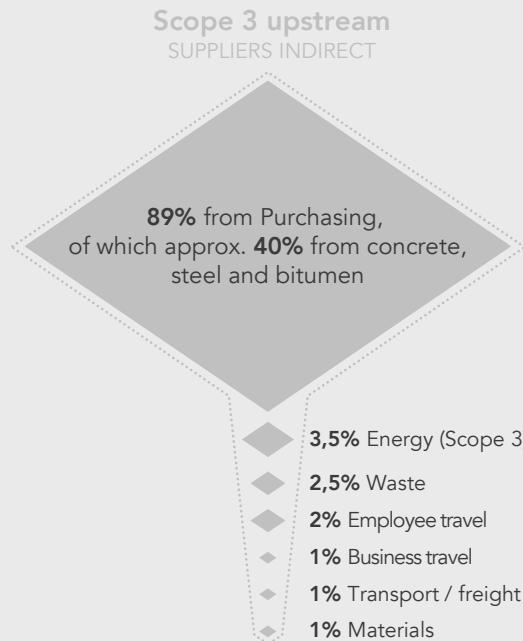
# Our suppliers, major allies in managing carbon

Today, 85% of the Group's CO<sub>2</sub> emissions come from Scope 3 upstream sources.

Within those Scope 3 upstream emissions, the proportion of purchased goods and services account for 89% of the total; 83% for Eiffage Energy Systems, 86% for Eiffage Infrastructure and up to 97% for Eiffage Construction.

## BREAKDOWN OF EIFFAGE'S SCOPE 3 UPSTREAM EMISSIONS

(FRANCE, 2019 – EXCLUDING CONCESSIONS)



Source : Eiffage-Quantis study carried out in 2020

## EIFFAGE PURCHASING DIRECTOR, JEAN-LUC BARAS, PUTS TWO QUESTIONS TO DAVID DESCAMPS, DIRECTOR OF LEGRAND FRANCE

**JEAN-LUC BARAS:** As an electrical equipment supplier, what are the consequences of climate commitments for your business, particularly in terms of production methods and site locations, as well as your technical solutions?

**DAVID DESCAMPS:** Legrand's commitment to limiting global warming to 1.5°C requires us to work on 3 priority areas to reduce our emissions:

- the energy-efficiency of our sites and production processes;
- an increase in the use of renewable energies, whether self-produced or purchased;
- a systematic eco-design approach, aimed at reducing the carbon impact of our products and packaging at all stages of their manufacture, in particular through the following actions: reducing the weight of materials and components, changing sources of supply, the use of recycled materials instead of new materials, maximum limitation of the energy consumption of our products and solutions during usage.

It's important to mention that some of our solutions dedicated to improving the energy efficiency of buildings, allow our customers to significantly reduce their carbon footprint (connected thermostats, smart electrical panels, solutions for data centres, etc.)

**JEAN-LUC BARAS:** As a partner supplier, what avenues are you exploring with Eiffage in terms of reducing your CO<sub>2</sub> footprint?

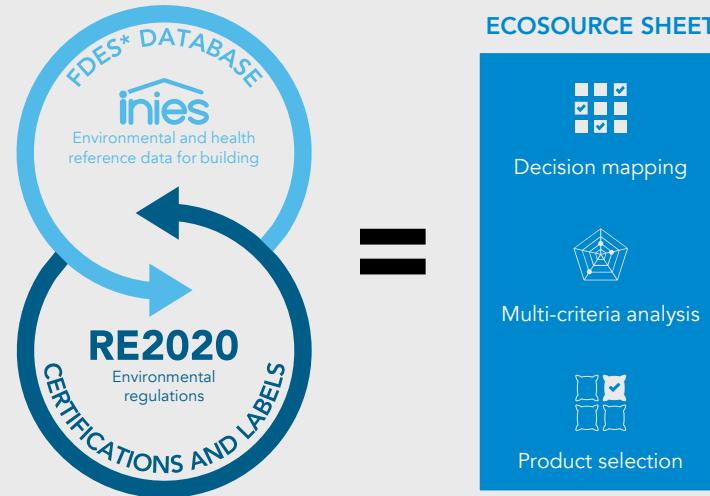
**DAVID DESCAMPS:** Legrand is a partner in the Sekoya Low-carbon Industrial Club with Eiffage. This industrial club for construction manufacturers makes it possible to share and identify low-carbon initiatives, test them and give them commercial outlets.

It's also about exchanging data on the carbon impact of products, mainly thanks to PEP (Product Environmental Profiles), to enable all stakeholders to measure and reduce the carbon impact of buildings.

We also work together to deliver projects where reduced carbon emissions is a key factor, such as developing a range of specific equipment with reduced carbon impact for demanding projects, or deploying specific support aimed at reducing emissions on certain strategic sites.

## Ecosource

Combine environmental technology and marketing



\* Fiche de déclaration environnementale et sanitaire

The Purchasing department, the Information Systems department and the Sustainable Development and Transverse Innovation department (DDDIT) are ongoing partners in the Group's responses to the carbon emissions challenge.

In 2020, a new tool called ECOSOURCE was developed to systematically carry out multi-criteria comparisons for products with a similar use.

The criteria analysed to establish the environmental profile of the materials and equipment used by Eiffage on its projects include: standardised carbon footprint in life cycle analysis (LCA), pressure on water resources, recyclability, product traceability, indoor air quality.

This change-management tool draws information from public environmental databases such as the INIES database. An initial version will go online as of June 2021, and will be available to all employees.

## INTEGRATING CARBON DATA INTO THE PURCHASING IT SYSTEM

Following the assessment of Scope 3 upstream emissions and in collaboration with its internal partners – DDDIT and IT departments – the Purchasing department has integrated carbon data into its IT system and developed a new interface, making it possible to:

- map the carbon footprint of purchasing categories;
- associate a carbon criticality scale;
- identify categories with the highest CO<sub>2</sub> emissions in terms of volume of expenditure (conversion of euros spent into CO<sub>2</sub>).

This new decision-support tool is becoming an essential lever for the operational deployment of the Group's low-carbon strategy. The interface offers a dynamic view of the scope chosen by the user: below is an example of the Group's scope.

## Lodace sourcing



Initially created in 2019 by Eiffage and Impulse Partners, the Sekoya Low-carbon Industrial Club brings together stakeholders in the construction sector that share the same goal of reducing carbon emissions in the industry. The founding principles of the Sekoya Industrial Club are detailed below:

### Urgent action is needed in our industrial sectors

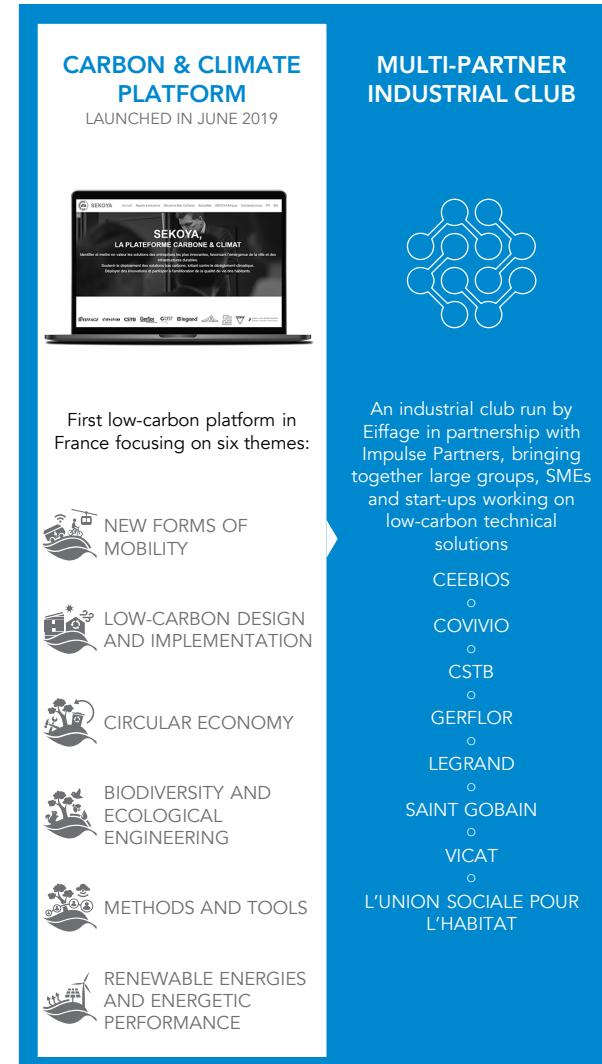
Despite the efforts of public policies, CO<sub>2</sub> emissions in France have been on the rise again since 2017, with a significant deterioration in the transport sector (predominance of individual motor vehicles) and the residential and tertiary sectors (energy renovation of existing stock too slow, subject to alternate episodes of extreme heat and extreme cold).

(...) A number of companies are already driving proposals in these new markets with low-carbon requirements, which are set to multiply and become standardised in the future.

Sekoya is a "low-carbon industrial club", bringing together companies that share these conclusions and the conviction that they can contribute to the emergence of a low-carbon economy. Sekoya stakeholders agree on:

- the interest of collaborating with complementary economic stakeholders that share the same genuine low-carbon economy objectives;
- the need to significantly accelerate the emergence and application of low-carbon solutions for sustainable cities and infrastructure;
- the need to be open to creativity and low-carbon innovations led by stakeholders such as start-ups, SMEs and other enterprises, in order to enrich and rapidly implement the stock of low-carbon solutions for sustainable cities and infrastructure.

### ILLUSTRATION OF SEKOYA ORGANISATION AND DEPLOYMENT



Developed by Eiffage in partnership with

**IMPULSE PARTNERS**  
Strategy | Innovation | Performance

### CALLS FOR SOLUTIONS CONTRIBUTING TO THE POOL OF LOW-CARBON SOLUTIONS

**1<sup>ST</sup> CALL FOR SOLUTIONS**  
SEPTEMBER 2019 - JANUARY 2020

57 candidate solutions  
10 finalist solutions  
5 laureate solutions

**2<sup>ND</sup> CALL FOR SOLUTIONS**  
MAY 2020 - SEPTEMBER 2020

56 candidate solutions  
10 finalist solutions  
6 laureate solutions

**CIRCOULEUR**  
Manufacture and sale of new professional acrylic paints composed of more than 70% recycled materials recovered from construction sites

**BACKACIA**  
Digital marketplace for the reuse of construction materials and equipment

**CELLOZ**  
Bio-sourced roofing panels made from recycled cellulose fibres and plant resins

**SOURCE URBNAINE**  
Recycling of rainwater in cities using water recovery equipment, made up of waterproof planters and a planted substrate

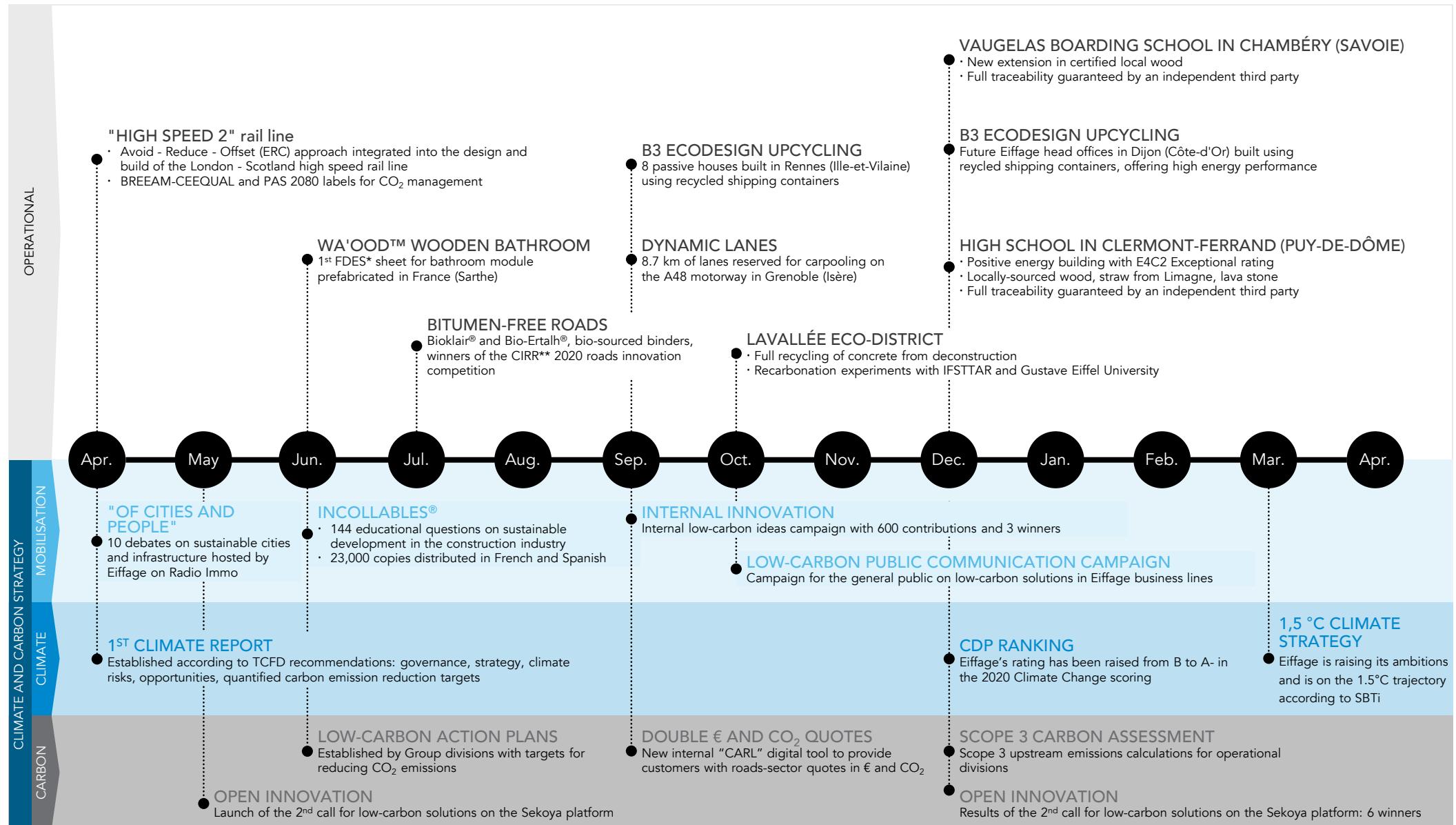
**SYLFEN**  
Integrated energy storage and cogeneration energy production solutions for buildings and eco-districts

**BLUEDIGO**  
A marketplace for used and eco-friendly office furniture, to create workspaces with a positive impact

**CELSIUS ENERGY**  
A low-carbon cooling system that connects new and existing buildings to the energy in their basement

**SASMINIMUM**  
Recycled and recyclable slabs made locally from plastic recovered in France

## CLIMATE STRATEGY HIGHLIGHTS FROM APRIL 2020 TO APRIL 2021



\* Environmental and health declaration form \*\* French roads innovation committee



# LOW-CARBON ECONOMY OPPORTUNITIES

**Cheminant market garden greenhouses in Carquefou (Loire-Atlantique)**  
19,000 m<sup>2</sup> of greenhouses equipped with new generation LED lighting  
Eiffage Énergie Systèmes

# Low-carbon opportunities within our internal scope and in our commercial offer

Our response to the carbon challenge is twofold: managing our internal emissions is essential but not sufficient, while our external stakeholders legitimately expect us to deliver in terms of designing innovative and easily reproduced low-carbon solutions.

The carbon-avoidance element of our solutions characterises our expertise and ensures the Group's sustainability.

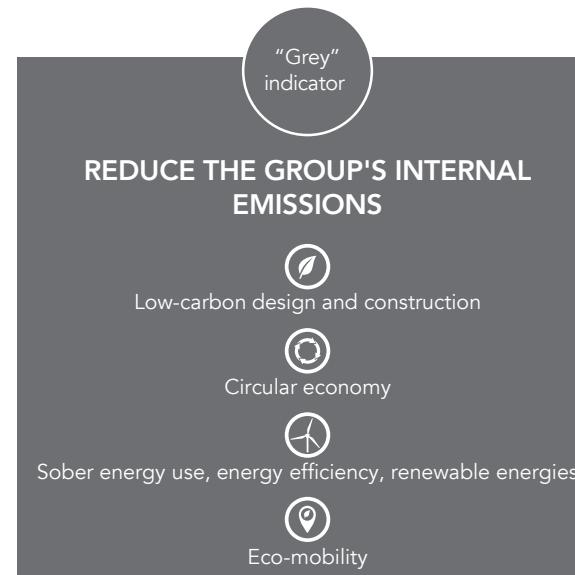
## OUR PRINCIPLES

- Explain and share our strategy both internally and with our external stakeholders
- Transparently report on its application, eventual barriers and opportunities

## CONDITIONS FOR SUCCESS

- Base carbon strategy on understandable and sustainable indicators
- Be exemplary in terms of internal carbon emissions under the "grey" indicator
- Design and provide technical solutions capable of avoiding carbon emissions for our customers, this avoidance falling under the "blue" indicator

## OVERALL VIEW OF EIFFAGE'S CLIMATE STRATEGY



As set out in the 2020 Climate Report and detailed on page 16 of this report, the climate strategy and its operational application in terms of carbon, has two main components:

- The production of internal CO<sub>2</sub> emissions corresponds to the "grey" indicator. Actions developed internally are covered from pages 26 to 29.
- The avoidance of carbon emissions through the Group's expertise and innovations within the Group's core business activities, corresponds to the "blue" indicator. Examples of carbon avoidance actions in our solutions are set out from pages 31 to 41.

The culture of carbon avoidance began at Eiffage in 2011, during construction of the Brittany-Pays de la Loire high-speed rail line, the Group's first project to benefit from an internal carbon arbitration fund, which favoured low-carbon solutions by absorbing their cost differential compared to standard carbon solutions.

The success of this approach led the Chairman and CEO to extend it to all of the Group's business activities in 2017, by creating the E-Face fund (Eiffage carbon energy arbitration fund) endowed with €2 million every year. E-Face promotes a culture of carbon-avoidance by supporting low-carbon alternatives in the Group's responses to calls for tender.

# Low-carbon design and construction

## DESCRIPTION OF THE INTERNAL CHALLENGE

Simultaneously involving setting an example and showcasing company expertise, the solutions that Eiffage recommends to its customers are applied within its own entities.

From the energy performance of real estate assets held by the Group, to eco-mobility solutions for employees, or the application of circular economy principles, the company acts as a melting pot where low-carbon initiatives are forged, in line with the technical and commercial solutions being offered to customers.

This part of the report describes specific examples of Group initiatives that are contributing to managing greenhouse gas emissions within its internal scope, and which therefore come under the grey indicator.

## DECARBONISING THE GROUP'S REAL ESTATE HOLDINGS

In line with the regulatory energy audits completed in 2020, the Group's Real Estate Department (DPIG) has established a roadmap aimed at targeting the main areas of opportunity for reducing greenhouse gas emissions, for all stages in the service life of buildings owned by Eiffage, from their design through to their operation.

A complete mapping of the Group's real estate holdings is currently underway. A global arbitration process based on several criteria, such as energy efficiency and access to public transport, will be carried out in conjunction with the various divisions and the Real Estate department. Its main objectives are as follows:

- For new developments:
  - All of the Group's new projects will target E3C2 certification, one of the most demanding levels of the E+C- label (positive energy and carbon reduction), in anticipation of the new 2020 environmental regulation (RE2020).
- For existing buildings:
  - Eiffage will apply the objectives of the Tertiary Decree for all sites, regardless of surface area. This decree establishes an obligation of outcome and sets a value to be achieved according to the methods chosen by the company, leaving room for manoeuvre to combine the best available solutions in terms of the global package or in terms of local production and energy management.
  - The Group's expertise will be mobilised, as for the Optimum solution developed by the Energy Systems division. This is a global solution combining energy audits, installations management, awareness-raising, asset valuation and support for the energy transition. A pilot operation will be deployed in 2021 at the Pierre Berger Campus in Vélizy-Villacoublay (Yvelines), which is the Group's head office.
  - Renovation operations will provide an opportunity to eliminate HFCs from air conditioning systems, a gas whose GWP (global warming potential) over one hundred years is on average 2,800 times that of CO<sub>2</sub>. EES-Clemessy carried out a programme to optimise the chilled-water production system to provide air-conditioning for its site in Mulhouse, replacing all the cooling units running on HFCs with machines running on HFOs. This reduces annual electricity consumption by 212,600 kWh, which equates to a 28% reduction per year, and a reduction in CO<sub>2</sub> emissions of around 11 tons per year.

# Circular economy

## DESCRIPTION OF THE INTERNAL CHALLENGE

The pressure on natural resources is a key challenge for the ecological transition. Of the ten million tons of waste from finishing works, a quarter comes from building, with a significant part from tertiary facilities.

If the Group intends to promote an offer that favours circular economy solutions, it needs to be exemplary in the management of its internal scope emissions and in its measures to reduce or avoid the production of new raw materials and the associated energy costs.

Eiffage has partnered with Impulse Partners to co-found Sekoya, a low-carbon industrial club. The Group is taking advantage of this internal strategy to test for itself the low-carbon solutions that have won the various calls for solutions launched on the Sekoya platform, for example Circouleur, a 100% recycled paint that is free from volatile organic compounds and has a low carbon footprint.

## HEAD OFFICES BUILT USING RECYCLED SHIPPING CONTAINERS

In early 2022, Eiffage Énergie Systèmes will group all its employees and activities at its exemplary regional offices in Dijon (Côte-d'Or), built using recycled shipping containers and targeting E3C2 performance certification under the new RE2020 regulation. Designed by B3 Ecodesign, a subsidiary of Eiffage Construction, this new office development will embody modularity, recycling, and reduced construction times. In order to achieve these ambitious objectives, several initiatives are being considered, including installation of photovoltaic panels and delivery of containers by rail.

## APPLYING THE RECYCLING PRINCIPLE TO OUR OFFICE SPACES

Office space is frequently subject to redevelopment to effectively meet the changing needs of operational and functional teams. Eiffage participated in a working group with all the stakeholders in the value chain to examine, both from an economic and an operational perspective, possible solutions to reduce waste generated by finishing works and so limit the environmental impact of buildings.

These considerations were put into practice for the construction of a building in Vélizy-Villacoublay (Yvelines), which will be occupied by several Eiffage teams starting in 2021. Comparative studies of better environmental cost solutions focused in particular on the choice of partition walls, paints, carpets and the various floor coverings.

The decision was taken to use Circouleur paints that are 100% recycled from construction paint waste, and Interface carpets made from 75% recycled polyamide fibre, laid without the need for adhesives or levelling, making it easier to remove and recycle. In order to provide improved reversibility in the event of redevelopment, easily interchangeable and removable partition walls will be installed, such as those manufactured by Bolmin using recyclable materials.

## THE FIRST CONSTRUCTION SITE FACILITIES MADE FROM RECYCLED MATERIALS

Can you build construction site facilities using 100% recycled materials? The answer is yes. For the first version being set up in Alfortville (Val-de-Marne) by Eiffage Construction, 100% of fittings are being met using recycled equipment and materials, including elements from the former École Centrale school in Châtenay-Malabry (Hauts-de-Seine), the Pentagon tower in Clamart (Hauts-de-Seine) and the Héneo site in Paris. Systematically rolling out this initiative at all sites requires an organisation that provides:

- optimised methodical removal of materials during disassembly and cleaning processes, in collaboration with subcontractors and recycling partners;
- the sorting, collection and disposal of worksite surplus materials (tiles, insulation, pallets, etc.) on completion of the works, starting in the first half of 2022.

# Sober energy use, energy efficiency, renewable energies

## DESCRIPTION OF THE INTERNAL CHALLENGE

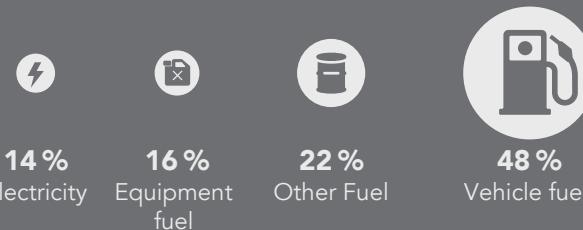
The reduction in energy expenditure at our various sites, including offices, equipment and manufacturing facilities, as well as construction site installations, remains an important lever for reducing the Group's internal emissions.

In 2018, the Group's total energy expenditure – all business lines and all energies combined in France – reached €230 million.

Several Group entities have highlighted in their low-carbon action plans, the importance of strengthening tools for measuring and analysing the energy consumption of buildings and site installations, but also of diagnosing and replacing energy-intensive equipment with high-performance alternatives.

## BREAKDOWN OF EIFFAGE'S ENERGY EXPENDITURE (€230M)

FRANCE, 2018 – ALL BUSINESS LINES AND ALL ENERGIES COMBINED



Source: regulatory energy audits 2019-2020

## TOWARDS 100% RENEWABLE ELECTRICITY

Eiffage has decided to commit all of its business lines to internal electricity consumption that is 100% based on renewable energy sources, according to the following schedule:

- end 2021: all of Smulders' electricity consumption will be fossil fuel-free as the Belgian, British and Polish industrial sites moved towards a renewable and local electricity mix in 2020. It should be noted that between 2014 and 2021, the metal construction subsidiary went from 5 kg CO<sub>2</sub> per person-hour to 2 kg CO<sub>2</sub> per person-hour, which is a significant achievement for a core business featuring metal-machining and welding, which requires high levels of electricity;
- end 2022: the electricity supply contracts negotiated by the Group's Purchasing department will provide for 100% electricity from renewable energies;
- end 2023: since 2017, 20% of the electricity mix consumed by the APRR and AREA, motorway concessions of the Group, has been from renewable energies, and the target is 100% by 2023.

## 100% SAFETY WITHOUT ENERGY INFLATION

APRR is making energy saving an opportunity to set an example, within a regulatory context which provides for a perfectly secure network 24 hours a day without exception. APRR is working on optimising lighting using LED technology and ventilation systems equipped with regulating devices. This approach will make it possible to reduce electricity consumption for the Maurice-Lemaire tunnel crossing the Vosges Mountains for example, by 23% in five years.

The project to fit low-energy LED lighting is being extended to four other tunnels in the APRR and AREA network, over the 2020-2024 period. Going beyond a desire to reduce energy consumption, the motorway company has integrated the objective of increased renewable energy production into its low-carbon action plan:

- with self-consumption for dispersed equipment (emergency call points, counting stations, etc.) and for recharging illuminated signalling equipment;
- with injection into the public network for two toll canopies (59,000 kWh per year).

# Eco-mobility

## DESCRIPTION OF THE INTERNAL CHALLENGE

Regulatory energy audits carried out between 2019 and 2020 by the Bureau Veritas certification company, showed that fuel for the company's vehicle fleet and the service vehicle fleet (excluding commercial vehicles and heavy goods vehicles), could account for up to 55% of total internal emissions.

Eiffage divisions have therefore included in their low-carbon action plans, certain measures aimed at reducing their use of fossil fuels by renewing their fleet of company vehicles, service vehicles and utility vehicles, which are obsolete, inefficient and a source of pollution.

As well as developing a fleet of hybrid and electric vehicles, and the installation of suitable charging terminals, soft mobility solutions are also being encouraged.

Among the solutions being promoted are electric vehicles, carpooling, the use of bikes to commute between home and work, etc.

## ELECTRICAL EQUIPMENT FOR CIVIL ENGINEERING WORKS

Eiffage Génie Civil is gradually reducing the carbon footprint of its equipment with its first purchasing of electrical equipment, which is still rare in the offers proposed by manufacturers specialising in plant machinery.

In 2020, specific purchases include an FE Electric truck – a first in France – and an ECR25 electric mini-excavator, two 100% electric vehicles that are assembled in France. This equipment is used on the Grand Paris Express project, providing a double advantage: the absence of greenhouse gas emissions during use and a reduction in noise pollution. These recent acquisitions complete a range of thirty vehicles powered by liquefied natural gas (LNG) or compressed natural gas (CNG), that emit 20% less greenhouse gases than diesel vehicles. In addition, the Group is continuing to explore all the possibilities available to it, particularly the setting up of partnerships to develop the use of hydrogen fuel cells in electric trucks.

## VEHICLE FLEETS: MAKING ZERO EMISSIONS THE NORM

In 2020, the Purchasing department carried out an analysis of company vehicle use, comparing annual mileage with the distance travelled between home and work for employees using company vehicles. Employees making short distances are now being offered an electric vehicle, with the possibility of having access to thermal vehicles for occasional personal use, particularly during periods of leave.

In terms of charging terminals, the Group has significantly increased its capacity, including for example the installation in April 2021 of 180 multi-compatible fast charging terminals at the Pierre Berger campus in Vélizy-Villacoublay (Yvelines), in addition to the 60 charging terminals currently available. Construction sites are also being included into these developments, with the launch of a temporary charging terminal deployed on site for electric company vehicles and the first electric plant equipment.

## FROM HOME TO WORK BY BIKE

EES-Clemessy, a subsidiary of Eiffage Énergie Systèmes (EES), has chosen to introduce practical measures to encourage cycling among its employees:

- Security: in September 2020, EES-Clemessy organised an anti-theft marking operation for bikes at its Mulhouse site (Haut-Rhin), using the BICYCODE® system recognised by the French government as being effective in the fight against bike theft and resale. The system involves engraving a unique and standardised number on the bike frame, which is then referenced in a national file accessible online.
- Raising awareness: EES-Clemessy took part in the 11<sup>th</sup> edition of the "Go to work by bike" challenge, organised by the Grand Est region in September 2020. In response to the current health crisis, the number of kilometres travelled is converted into donations for hospital nursing staff working during the pandemic.

# What energy scenario for 2050?

Establishing a research and development strategy as well as the main orientations of our technical and commercial offer, all within the context of the ecological and low-carbon transition, requires integrating the best-supported international energy forecasting.

To achieve this, Eiffage relies on its internal experts as well as recognised international studies, such as that produced by the International Renewable Energy Agency (IRENA).

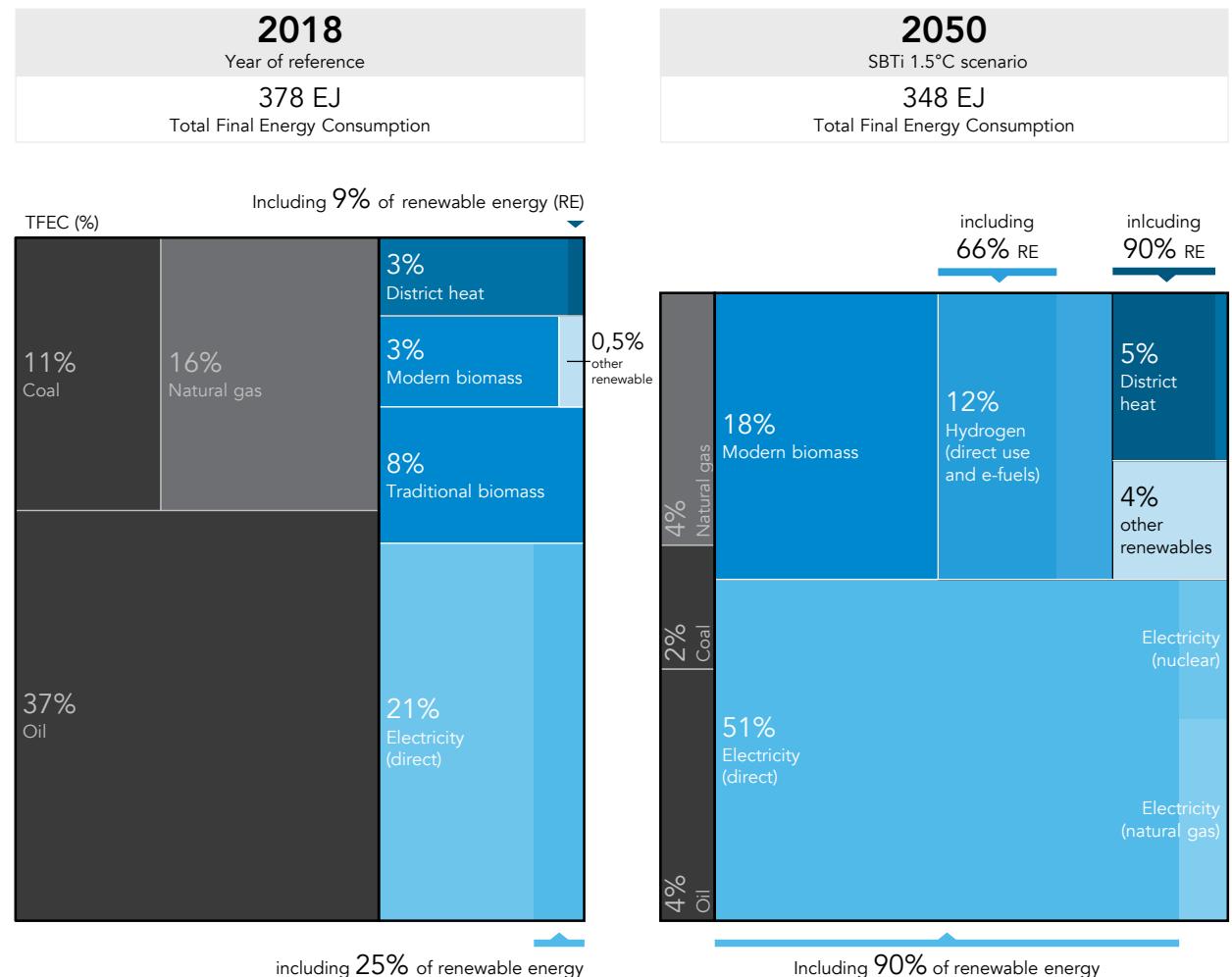
The latest publication from IRENA confirms the broad outlines of previous forecasts and estimates that by 2050:

- Energy demand should stabilise, thanks to improved energy efficiency.
- Electricity will be the main energy carrier, accounting for more than 50% of total final energy use, compared to 21% today. It will dominate in end-use sectors such as construction, industry and transport.
- Electric power systems, increasingly less carbon-intensive, will come mainly from renewable energy sources. IRENA estimates that more than 90% of electricity needs will be covered by renewable energies, compared to just 25% today.
- Certain technologies that are already proven will confirm their potential to replace fossil fuels, for example green hydrogen and sustainable biomass. CO<sub>2</sub> capture and storage will also be developed.

## DOMINANCE OF ELECTRICITY IN WORLD ENERGY CONSUMPTION BY 2050 ACCORDING TO IRENA

Electricity becomes the main energy carrier in energy consumption by 2050

Breakdown of total final energy consumption (TFEC) by energy carrier in 2018 and 2050 (EJ) in the 1.5°C Scenario (1.5-S)



# Low-carbon design and construction

## OUR PRINCIPLES

- Integrate the low-carbon construction objective throughout the value chain, by involving as systematically as possible urban planning, architecture, engineering, works, operations and building end of service life processes
- Develop expertise in the "carbon-free materials mix", according to the principle of the right material in the right place
- Ensure the traceability of low-carbon materials such as wood and bio-sourced materials, to guarantee management and processing methods as well as the contribution to local employment

## CONDITIONS FOR SUCCESS

- Vertically integrate industrial production tools
- Massively train our site workers in the use and application of traditional and new low-carbon materials
- Systematically integrate proximity criteria into the choice of materials
- Experiment and, if necessary, contribute to updating regulations

## BIO-SOURCED MATERIALS AND TRACEABILITY

**Operational opportunity:** make use of renewable low-carbon materials, while contributing to the development of local economic sectors

Since 2017, Eiffage has been committed to providing traceability of wood supplies for its most important operations. To achieve this, it has appointed traceability expert Product DNA, to:

- map the supply chains of its operations, from forest origin of the wood through the various stages of its transformation;
- collect proof of order, payment and delivery of the wood, using blockchain applications to guarantee the integrity of assessments;
- establish and guarantee "wood labels" for the customer, summarising all the information, from predicted wood requirements at the initial phase through to the final label on delivery of the building.

Several projects that benefit from this traceability process have already been delivered, for example the Vaugelas high school near Chambéry (Savoie), or are currently in the process of being finalised, for example the Hyperion tower in Bordeaux (Gironde). The label is also being deployed for lot E of the Athletes Village in Saint-Ouen (Seine-Saint-Denis), a contract won by a consortium made up of Nexitix and Eiffage. The Athletes Village will have a carbon footprint that is approximately 40% lower than a traditional project; at least 90% of the wood will be labelled, guaranteeing sustainable management of the resource; 100% of the wood used will be traced from the forest to the site.

Since 2020, Eiffage has been extending this traceability process to other materials, such as the straw insulation and volcanic stone used on construction of a new high school in Clermont-Ferrand (Puy-de-Dôme). In 2021, traceability of carbon materials such as aluminium and concrete will be tested.



Wood traceability carried out by Eiffage and Product DNA covers all phases of the project from design to delivery. From the provisional label (example on the left for the Hyperion tower), up to the final label (example on the right for the Vaugelas high school in Chambéry), the customer benefits from total transparency in terms of the origin of the wood and the species used, the sustainable management of the original forests, transformation locations, final volume, etc. The QR code provides access to all the details.

## EIFFAGE ROUTE, A PIONEER IN DOUBLE QUOTING IN EUROS AND CO<sub>2</sub>

**Operational opportunity:** systematically provide double quotes in euros and in CO<sub>2</sub>, to better inform customer decisions

In 2020, technical teams from Eiffage Route, working with the Eiffage IT department, developed a digital interface called "CARL" (for "carbon calculator") that makes it possible to issue double quotes in euros and in tons of carbon equivalent.

This digital interface is not in itself a software tool, but connects the price research software used by Eiffage Route with the roads sector professional carbon database (SEVE). Quotes drawn up in euros are converted into tons of CO<sub>2</sub> equivalent, highlighting low-carbon materials or solutions compared to more carbon-intensive solutions.

This makes it easier for teams to demonstrate to clients the advantages of low-carbon ecological solutions and the beneficial long-term impacts of these projects, beyond just the immediate cost.

At the end of 2020, more than 320 Eiffage Route employees had been trained in the "CARL" interface, in order to establish these euros / CO<sub>2</sub> quotes when responding to calls for tenders.

Goyer, the façade specialist, has also developed a carbon interface called G + C- in reference to the new RE2020 energy regulation. This tool allows it to express the carbon footprint of the various technical solutions offered to customers.

Inspired by this success, the Eiffage Construction and Eiffage Energy Systems divisions are using the "CARL" system as the basis of a euros / CO<sub>2</sub> interface adapted to their business lines.

## INNOVATIONS IN PLANT-BASED CHEMISTRY

**Operational opportunity:** gradually reduce the use of bitumen thanks to substitute products made in France with bio-sourced certification

The use of bitumen (a product derived from the distillation of oil) at Eiffage reached approximately 320,000 tons in 2019. Consequently:

- bitumen represents 5.3% of total Scope 3 upstream emissions for the entire Eiffage Group;
- the Group's business lines are sensitive to price variability for oil-based bitumen, directly related to crude oil barrel prices that can cost upwards of €400 and even exceed €600 per ton.

In line with a proactive approach to reducing consumption, beyond the energy savings linked to asphalt, Eiffage Route has been working for several years on recycling road surfaces and aggregates, drastically reducing the rotations of trucks loaded with new aggregates from quarries. By developing its bio-sourced range as a total or partial substitute for bitumen, for example pitch made from derivatives of the French forestry industry, the road subsidiary has an additional lever for significantly reducing carbon emissions that it can offer to customers.

Recytal®, Biophalt® and Bioklair® (which replaced BioKrom® in Spring 2021), are all road processing products patented by Eiffage Route that use plant-based derivatives:

- associated with production temperatures that are approximately 20% lower than traditional bitumen, these plant-based mixes have a lower carbon impact;
- associated with a road-recycling technique, they are also part of a circular economy approach (see page 35).

The diversity of these products means the Eiffage Route plant-based range can meet all the needs of contracting authorities: renovation work on any type of road network from motorways to departmental roads, coatings for facilities dedicated to soft mobility, redevelopment of towns and villages, etc.

Another example of plant-based chemical innovation is "Algoroute", a major collaborative research and development project that focuses on harnessing microalgae as an additive or substitute for oil-based bitumen. Supported by the National Research Agency (ANR), this project involves Eiffage Route, Ifsttar acting as coordinator (Gustave Eiffel University), the SME Algosource Technologies, CNRS, the University of Nantes and Claude Bernard Lyon 1 University. "Algoroute" aims to develop a "plant-based bitumen" derived from the hydrothermal liquefaction of microalgae.

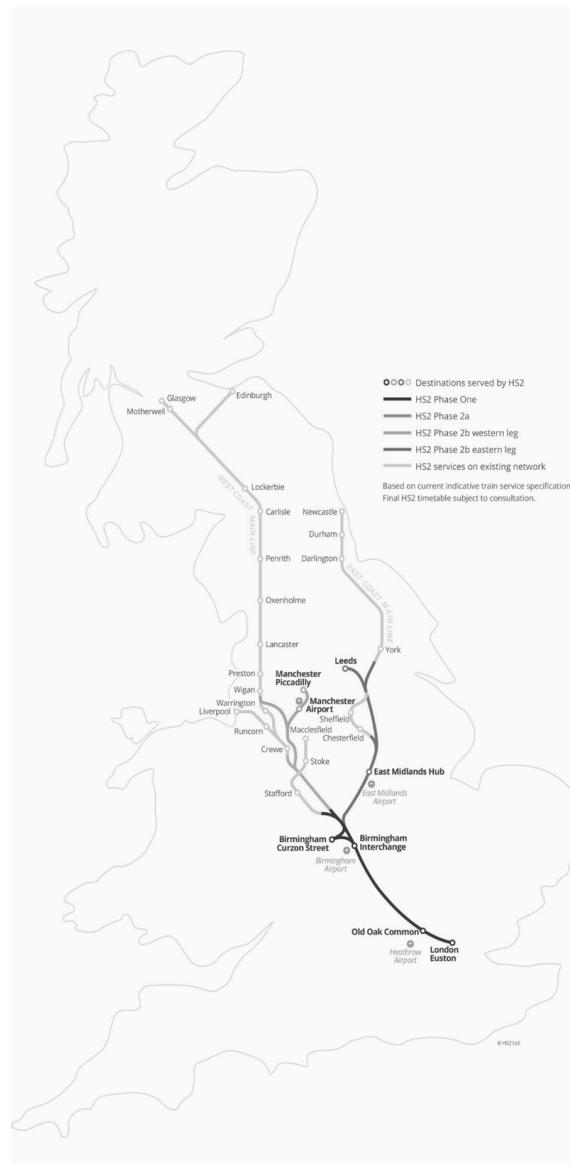
## CONCESSIONS INVEST IN RENEWABLE ENERGIES

**Operational opportunity:** develop the production of renewable energies on abandoned land belonging to the Group; enter into Corporate Power Purchase Agreements (CPPA)

Within a context of future uncertainty regarding prices on the energy markets and the possibility of a carbon tax, Eiffage Concessions is developing its renewable energy production activity. In partnership with EDF Renouvelables, three projects are being developed on "unused motorways" that will generate 18 MWp. These projects are all winners of the Energy Regulatory Commission (CRE) calls for tenders, and will begin in autumn 2021 with expected completion in 2022.

This increase in production capacity is in addition to the micro hydroelectric power stations acquired by Eiffage Concessions in December 2019, in the southwest of France. Energy production capacity, reaching around 17 GWh in 2020, will have powered nearly 3,500 homes and more than 15,000 people and allowed savings of approximately 1,500 tons of CO<sub>2</sub>.

Eiffage Concessions is moving forward with the process of structuring its energy supply, particularly through the use of CPPAs, which entails legal and financial capabilities that are similar to concession arrangements, the traditional core business of Eiffage Concessions. CPPAs offer an attractive mechanism for several reasons. They provide energy buyers with a long-term vision of their energy costs, better control of financial risk, not to mention the guarantee of renewable origin to justify low-carbon consumption.



Map of the UK High Speed 2 rail project.  
Lots C2 and C3 being carried out by EKFB, cover an 80 km section between London and Birmingham.

## CIVIL-ENGINEERING EXPERT IN LOW-CARBON RAILWAYS

**Operational opportunity:** confirm Eiffage's international expertise in the low-carbon design and build of railway lines

High Speed 2 ("HS2") railway line, the future high-speed rail line between London and Scotland, has set ambitious environmental targets:

- the project is aiming for excellent level BREEAM and CEEQUAL certification, for mitigation of the impact of infrastructure assets on the environment;
- it provides for a 50% reduction in carbon emissions, compared to the original UK project, and is aiming for PAS 2080 standard certification, which provides a common carbon management framework for all the infrastructure sectors.

EKFB, a joint venture associating Eiffage, KIER, Ferrovial and BAM Nuttall, is responsible for the design (in partnership with ASC) and construction work to build an 80 km section, including 15 viaducts, 6.9 km of "green tunnels", 22 km of road detours, 81 bridges and nearly 30 million cubic metres of earthworks.

Eiffage is mobilising its French low-carbon expertise, which has already been proven on major rail infrastructure projects such as the Brittany-Pays de la Loire high speed rail line.

EKFB will be using BSI ultra high-performance and low-carbon fibre concrete developed by Eiffage Génie Civil for example, and will install prefabricated double arches in the "green tunnels", allowing for a more efficient distribution of the load system as well as reducing the depth of the concrete walls, resulting in reduced carbon impact.

# Circular economy

## OUR PRINCIPLES

- Develop the integration of recycled or renewable materials into our activities
- Extend the service life of structures and materials, by facilitating their capacity for evolution and reuse
- Promote the transition of manufacturing processes and work towards zero non-recovered waste
- Make progress with professional, scientific and associative stakeholders

## CONDITIONS FOR SUCCESS

- Deploy a sustainable resource management policy
- Deepen and accelerate our ecological innovation approach
- Carry out systematic PMD assessments (products, materials, waste) prior to all major deconstruction and rehabilitation operations, in conjunction with recycling stakeholders
- Measure, manage and monitor the performance of our solutions and our practices

## MODULAR CONSTRUCTION: ECOLOGICAL, EFFICIENT, FAST

**Operational opportunity:** build modular and upgradeable housing using shipping containers, targeting high levels of energy performance and reduced construction times

In 2019, Eiffage Construction acquired B3 Ecodesign, which specialises in architectural design and construction using shipping containers at the end of their service life.

This upcycling approach offers several advantages:

- it combines low-carbon solutions, a circular economy approach and a reduction in costs and construction times;
- it provides solutions for all types of real estate: residential, tertiary, shops and public facilities.

In September 2020, a residential complex was delivered in Acigné (Ille-et-Vilaine). In just seven months, B3 Ecodesign built eight houses each measuring over 100 square metres. Passivhaus labelling certifies its energy performance: heating requirements are less than 13 kWh of energy per m<sup>2</sup> per year, and total annual consumption of primary energy is less than 40 kWh per m<sup>2</sup>.

With a reduced environmental impact, the modules make it possible to adapt the size of housing, by associating, dissociating and recreating individual and collective spaces. Factory production processes ensure zero defects, therefore limiting journeys to and from the site by construction trucks.

These high-performances solutions can be used for social development projects such as, for example, the emergency accommodation centre for 62 people in Périgueux (Dordogne) that took just nine months to deliver.



Architect's impression of Eiffage Énergie Systèmes' head offices in Dijon (Côte-d'Or), designed by B3 Ecodesign

	<b>Biophalt®</b>  Patent FR 2915204 (23/04/07)	<b>Recytal®</b>  Patent FR 3028862 (24/11/14)
TECHNICAL DESCRIPTION	<p>Warm asphalt mix</p> <ul style="list-style-type: none"> <li>• replaces conventional hot mixes</li> <li>• incorporates a high rate of asphalt aggregates produced using a plant-based binder derived from co-products of the French forestry industry</li> <li>• suitable for new roads or renovation projects, including for heavy motorway traffic</li> </ul>	<p>Plant-based emulsion</p> <ul style="list-style-type: none"> <li>• derived from co-products of the French forestry industry</li> <li>• replaces binders made from oil-based bitumen</li> </ul>
LABELS AND AWARDS	<p>2020 Karibati "Bio-sourced product" label</p> <p>2019 Winner of the CIRR roads innovation competition</p>	<p>2019 Karibati "Bio-sourced product" label</p> <p>2017 Winner of the CIRR roads innovation competition</p>
KEY FIGURES IN 2020	<p>Nearly 6,000 tons produced in one year</p> <p>+42% tons compared to 2019</p>	<p>Almost 175,000 m<sup>2</sup> deployed in one year</p> <p>+15 % of m<sup>2</sup> compared to 2019</p>

## TODAY'S ROADS ARE TOMORROW'S QUARRIES

Operational opportunity: fully recycle the mineral resources used in road surfacing without the need for new bitumen

In order to manage the scarcity of available raw materials, Eiffage Route has been investing for several years in the research and development of alternative solutions based on the circular economy.

The challenge lies in being able to transform the entire existing road surface into a source of raw materials by recycling aggregates from the old surfaces. This recycling technique can also be combined with a plant-based binder such as Recytal® for example (see page 32).

In terms of recycling targets, the roads subsidiary is constantly striving to improve. The share of recycled aggregates increased from 7.9% in 2010 to 21.7% in 2020.



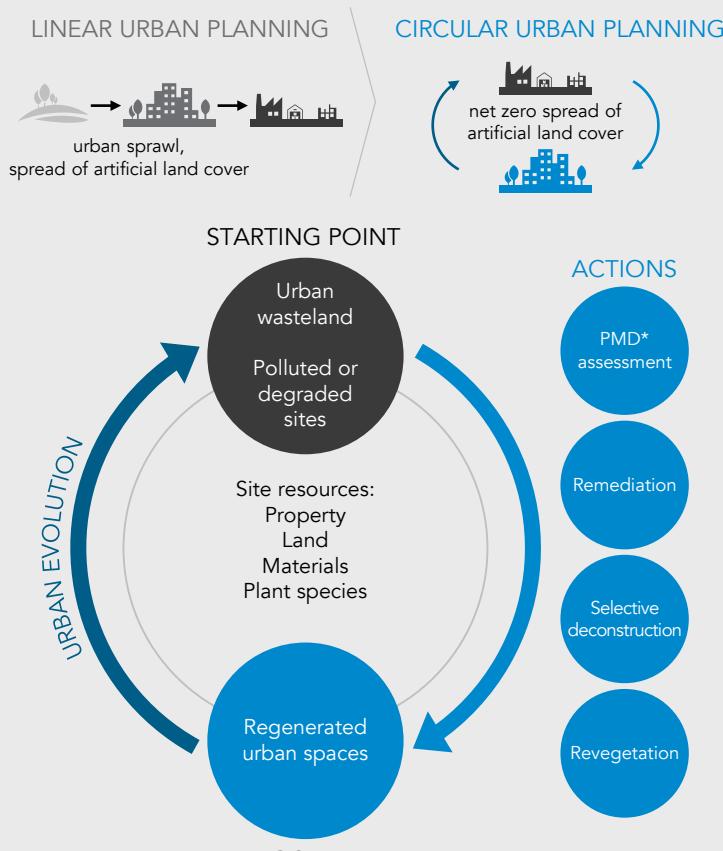
Renovation works for the D96 departmental road (Seine-et-Marne), including full recycling of road surfaces in situ, and the use of the Recytal® certified bio-sourced binder.

## SPREAD OF ARTIFICIAL LAND COVER



Source: Ministry of Ecological Transition

## REVERSIBILITY IN URBAN AREAS



\* Product, materials, waste

## A FLOURISHING REVERSIBILITY BUSINESS

**Operational opportunity:** protect land through the remediation and recovery of degraded environments; restore developed areas in order to limit the spread of artificial land cover

At a time when the preservation of land and the natural environments it supports has become crucial in the fight against the erosion of biodiversity, directly linked to the objective of curbing the spread of artificial land cover, a circular and reversible urban development model is gradually emerging.

The value chain for activities linked to the "reversibility of environments" is being consolidated within the Group, since it directly contributes to the ecological transition and the fight against climate change:

- by preserving land, a source of numerous benefits for human societies, including carbon storage, water retention and filtration;
- by limiting the expansion of urban development and consequently, reducing the distance between residential areas and facilities, and therefore the associated greenhouse gas emissions;
- by transforming land fallen into disuse into urban developments, for example industrial, railway or military wastelands.

As a developer, Eiffage Aménagement develops and manages major operations of this type, for example in Asnières-sur-Seine (former Peugeot factory), in Châtenay-Malabry (former École Centrale), the Cité de la Gastronomie et du Vin in Dijon (former hospital site) or the La Janais site in Rennes (former Peugeot industrial wasteland). These urban renewal projects create new business and synergies between the Group's subsidiaries, including Eiffage Démolition, Gauthey for soil remediation, Roland or Forézienne d'Entreprises for earthworks and Eiffage Route for land servicing, roads and networks.

Eiffage believes that these activities, known as reversibility activities, are due to expand, since they contribute to the fight against uncontrolled urban sprawl and offer interesting solutions by increasing housing density, creating new central areas to limit transport, organising short distribution channels for food with the development of agroecology, or by promoting the resilience of ecosystems based on ecological engineering.

In addition to these operations, Eiffage Construction's rehabilitation, renovation and elevation activities are being harnessed to limit the footprint of real estate projects.

As an all-round contractor for the sustainable and low-carbon city, having control over this value chain allows Eiffage to provide strategic added value for regional authorities for their urban development projects, in addition to implementing the regulatory avoidance, reduction and compensation measures.

# Sober energy use, energy efficiency, renewable energies

## OUR PRINCIPLES

- Contribute to the low-carbon energy mix at national and local level, by promoting the renewable energy potential specific to each region
- Offer energy proposals in line with National Low-carbon Strategy (SNBC) guidelines relating to sober energy use, energy efficiency and decarbonisation

## CONDITIONS FOR SUCCESS

- Develop an industrialised energy renovation offer, combining the expertise of the Group's various business lines (construction, development, energy systems, civil engineering, etc.)
- Consolidate our integrator expertise linked to the carbon-cycle in energy, in the industrial, building and mobility sectors
- Develop expertise in the recovery of waste heat and CO<sub>2</sub> in industrial environments and recover this in the form of energy or through reinjection into storage materials

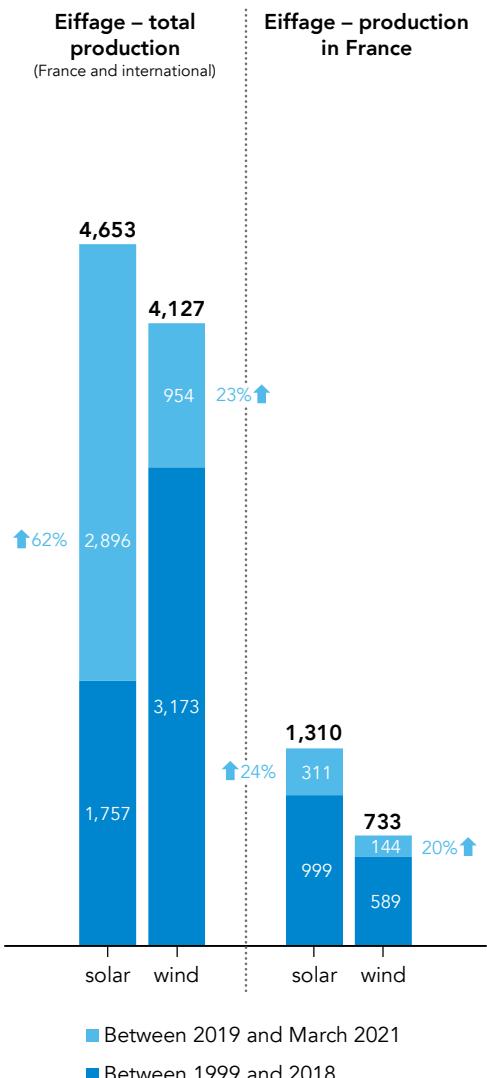
## EIFFAGE PROGRESS IN THE CONSTRUCTION AND/OR OPERATION AND/OR MAINTENANCE OF RENEWABLE ENERGY PRODUCTION PLANTS\*

The year 2020 was marked by an increase of almost 7% in the proportion of renewable energy sources in global electricity production, unlike other energy sources that are proving less resilient to the current context (International Energy Agency – IEA 2020). Driven by reductions in cost and favourable public policies, the IEA anticipates that renewable energies will become the world's leading source of electricity production by 2025, outstripping natural gas in 2023, and coal in 2024.

Within this favourable environment and aware of this paradigm shift, Eiffage is mobilising its expertise in the construction, operation and maintenance of renewable energies infrastructure.

A pioneer in this field, the Group has been accelerating its activities for the past two years. For example, total solar production generated between 2019 and March 2021 represented more than 60% of the Group's activity in this area.

Of particular note in the chart opposite: figures have evolved compared to the 2020 Climate Report, due to the integration of Eiffage Energía projects in France, including solar and wind projects. Other data also added this year concerns the Toul-Rosières project (France), to which RMT, a subsidiary of Eiffage Énergie Systèmes, contributed 31.5 MWp.



\* Contracts completed or still in progress

## DECARBONISING THE ENERGY MIX AND PROGRESSING IN RENEWABLE ENERGIES

**Operational opportunity:** increase Eiffage's market share in the construction of renewable energy production plants

### Offshore wind

Smulders, the Belgian subsidiary of Eiffage Métal, specialises in the engineering and manufacture of foundations for offshore wind turbines, as well as in engineering, production and installation of energy substations for offshore wind farms.

Smulders has already:

- produced 150 offshore wind turbine foundations, 2,000 transition pieces and 30 substations;
- won as part of a consortium in November 2020, the contract for the manufacture and supply of monopole foundations and transition pieces for the first two phases of the "Dogger Bank" offshore wind farm project in the North Sea, which will be the largest offshore wind farm in the world with a capacity of 3.6 GW;
- built in 2019-2020, in partnership with the Belgian company DEME, the Moray East wind farm located off the north-east coast of Scotland, which supplies electricity from renewable sources to more than 950,000 homes.

### Onshore wind

Eiffage Sénégal (civil engineering and earthworks), Eiffage Energía (cabling) and Eiffage Énergie Systèmes (electrical substations) in partnership with Vestas, built the largest wind farm in West Africa in Taïba Ndiaye, delivered in December 2020.

Located northwest of Dakar, this 46 wind-turbine farm with a total capacity of 158.7 MW, stretches over 37 km. This is the first wind farm of this capacity in Senegal and in West Africa. This project represents a turning point for the country in terms of renewable energies and will provide electricity for more than two million Senegalese.



Smulders construction site in Hoboken (Belgium)

View of the wind turbine foundations for the Moray East offshore wind farm (Scotland)

## Solar farms

An expert in renewable energies, and solar farms in particular, Eiffage Énergie Systèmes provides turnkey solutions, including delivery of the photovoltaic panels, construction and optimisation of the solar power plant, and maintenance services.

A leader in this field, its Spanish subsidiary Eiffage Energía worked in 2020 to commission the Núñez de Balboa photovoltaic plant, the largest in Europe.

The plant, built in less than a year near the Portuguese border, has the following characteristics:

- a power supply of 500 MWp generated by nearly 1.5 million photovoltaic panels, 115 inverters and two substations;
- production of 832 GWh of electricity per year, equivalent to the needs of 250,000 residents;
- the avoidance of 215,000 tons of CO<sub>2</sub> per year compared to a conventional fossil-fuel generation solution.

## THE FUTURE OF AGRICULTURE

**Operational opportunity:** promote the cultivation of local fruit and vegetables grown in independent market gardening facilities, using renewable energies

Today, the programmed end of gas cogeneration in France, as well as progress in monitoring and automation, are leading to the emergence of renewable energy solutions for market garden greenhouses, including heat and cold production, CO<sub>2</sub> supply for photosynthesis, and electricity for LED grow lights.

Eiffage Énergie Systèmes' current operational activities in terms of renewable energies for agricultural greenhouses, are as follows:

- existing installations:
  - maintenance of existing cogeneration installations assisted by aggregators to ensure operations 12 hours per day, enabling the production of CO<sub>2</sub> from cogeneration for the purposes of plant photosynthesis;
  - gasification and/or pyrogasification, the only process today that simultaneously produces heat and CO<sub>2</sub>;
- for heating and cooling:
  - classic biomass for large-capacity greenhouses;
  - solar thermal energy to warm and dehumidify greenhouses;
  - shallow geothermal energy to heat and cool greenhouses, at the same time favouring reconstitution of groundwater thermal capacity;
- for the production of self-consumed electricity, in particular for LED grow lights: conventional photovoltaic panels and organic photovoltaic panels for greenhouse blackout screens.

The short-term outlook for this market segment is as follows:

- production of heat and/or electricity using hydrogen or hydrogen/CH<sub>4</sub> solutions;
- CO<sub>2</sub> capture from industrial process output to replace customer purchase of CO<sub>2</sub> produced especially for plant photosynthesis;
- deployment of hypervision tools for renewable energy production.

# Eco-mobility

## OUR PRINCIPLES

- Reduce carbon emissions while ensuring mobility for everyone
- Support the development of low-carbon soft mobility in urban and suburban areas
- Contribute to the "net zero artificial land cover" objective, by increasing the attractiveness of public transport

## CONDITIONS FOR SUCCESS

- Rethink mobility as a system and as a service, by combining the Group's expertise in its roads, energy systems and development business lines
- Integrate mobility needs into projects from the very beginning of urban planning
- Systematically offer solutions based on regeneration/reuse of materials, without the need for petrochemical-based materials
- Promote public transport through strong incentives, such as reserved and secure lanes, preferential rates, etc.

## A GROWING MARKET FOR TRANSITIONAL CYCLE PATHS

**Operational opportunity:** respond to the enthusiasm for cycle paths in towns and suburbs with solutions that combine ecology and safety

2020 was a year marked by the global pandemic and the need for social distancing. Local authorities showed a strong interest in "transitional cycle and pedestrian paths" and have accelerated their development of active mobility.

For example, out of 148 local authorities questioned as part of a study carried out by the Club des Villes et Territoires Cyclables, 83% said they were planning one or more transitional development projects in favour of active mobility, i.e. walking and/or cycling.

These temporary cycle paths, ("coronapistes") have proven a success: the target set at the start of the first lockdown to develop 1,000 km of paths was 70% completed in less than a year.

Eiffage Route is ideally placed to benefit from this growing interest, thanks to its various low-carbon innovations:

- Bitumen-free mixes

Eiffage Route has developed Biophalt®, a high-performance plant-based mix incorporating at least 30% recycled materials, as well as a bio-sourced binder made from derivatives from the French forestry industry. In Lyon (Rhône) for example, between Décines and Meyzieu, the cycle path that runs alongside the T3 tramway was partially made using Biophalt®.

- Safe energy-free phosphorescent road markings

Eiffage Route and the SME OliKrom® located in Bordeaux, entered into a strategic partnership in 2018 to develop new generation cycle paths that make cycling more attractive by improving the efficiency of road markings, particularly for night visibility in the absence of public street lighting.

An initial project was successfully experimented in 2018 in Pessac (Gironde), where a cycle path was equipped with ground signage using LuminoKrom® phosphorescent paint. A similar project was completed in December 2020, between May-sur-Orne and Fontenay-le-Marmion (Calvados).

These patented innovations are directed towards the growing soft eco-mobility and urban and suburban cycling markets.

## BRINGING CARPOOLING INTO THE PRESENT

**Operational opportunity:** promote public transport and carpooling on motorways

Eco-mobility rhymes with innovation. In September 2020, AREA, motorway concession of the Group, opened an 8.5 km lane reserved for carpooling on the A48 motorway near Grenoble (Isère) – a first in France, made possible thanks to the December 2019 transport law.

Located on the Lyon-Grenoble motorway, the lane is only accessible to cars carrying at least two people, vehicles with very low emissions and taxis.

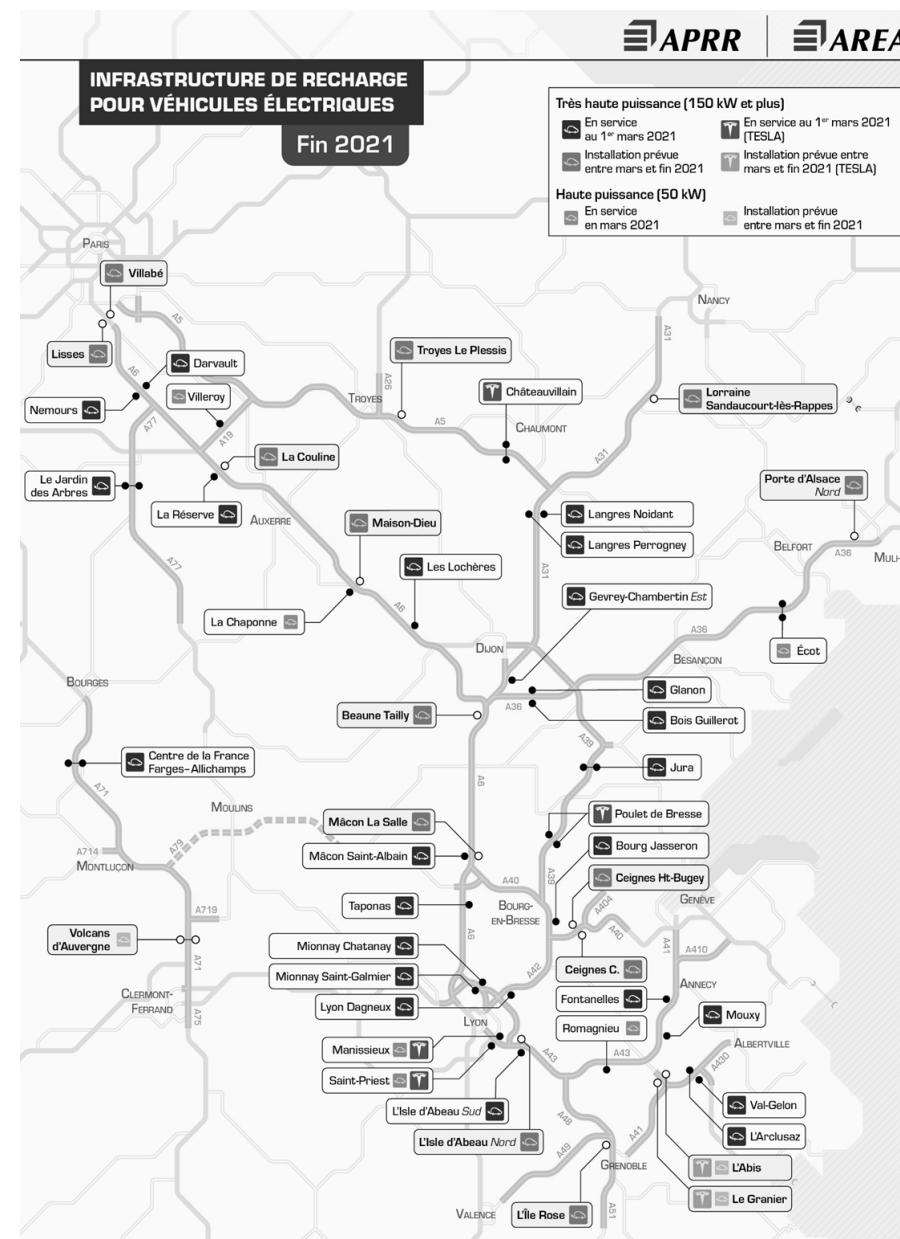
Objective: reduce greenhouse gas emissions and atmospheric pollution linked to single occupancy vehicles, a practice that is widespread in France, where 75% of 17 million people drive to work alone.

In order to analyse vehicle occupancy rates in real time, AREA relies on the expertise of Pryntec, a specialist in image-processing technology.

A similar project was carried out by Eiffage Énergie Systèmes on the M6/M7 approach roads to the Fourvière tunnel in Lyon. Since the end of November 2020, one lane has been reserved on either side for vehicles carrying more than one passenger.

The Eiffage Énergie Systèmes / Pryntec consortium was awarded the entire contract, namely the supply, installation, connection and commissioning of monitoring equipment, as well as the various sensors and variable electronic messaging panels used to inform drivers.

## DEPLOYING A NETWORK OF VERY HIGH-POWER ELECTRICAL CHARGING TERMINALS



APRR and AREA customers benefit from the best-equipped motorway network in France in terms of very high-power charging terminals, capable of delivering up to 350 kW of power per terminal.

Powered using 100% carbon-free energy, this is the first network of its kind on the scale of a motorway concessions company, ensuring quality service for everyone.

By the end of 2021, 42% of motorway service stations in the APRR-AREA network will be equipped with high-power or very high-power charging terminals.



# CARBON REDUCTION MEASURES AND OBJECTIVES

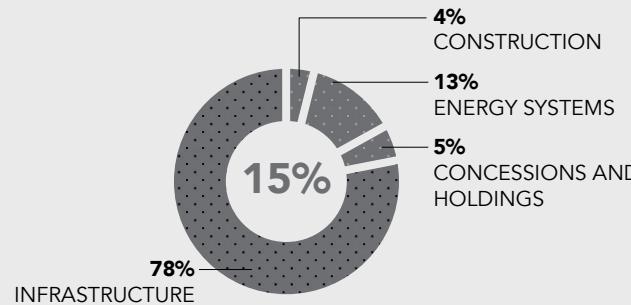
**Restoration work on the glass dome at the Hôtel de la Marine in Paris**  
280 m<sup>2</sup> of metal framework, pre-stressed cables and micro-perforated  
stainless steel sheet cladding  
Eiffage Métal

# CO<sub>2</sub> emissions in France

- In 2020, Eiffage renewed its analysis of CO<sub>2</sub> emissions for Scopes 1, 2 and for Scope 3 emissions upstream of its activities in France, with the assistance of Quantis, a firm specialised in climate and carbon strategies for companies in a range of economic sectors.
- All the figures presented in this report were produced by this new study. They refer to the year 2019 (not including impact from the Covid-19 pandemic).

## SCOPES 1 AND 2\* EMISSIONS (FRANCE, 2019)

**495,000 t<sub>eq</sub>CO<sub>2</sub>**



\* Including emissions from the Bocahut plant (northern France)

## WHAT ARE SCOPE 3 "UPSTREAM" EMISSIONS?

Scope 3 emissions are all emissions produced indirectly by the organisation's activities not included in Scope 2 and occurring throughout the entire value chain (see page 16).

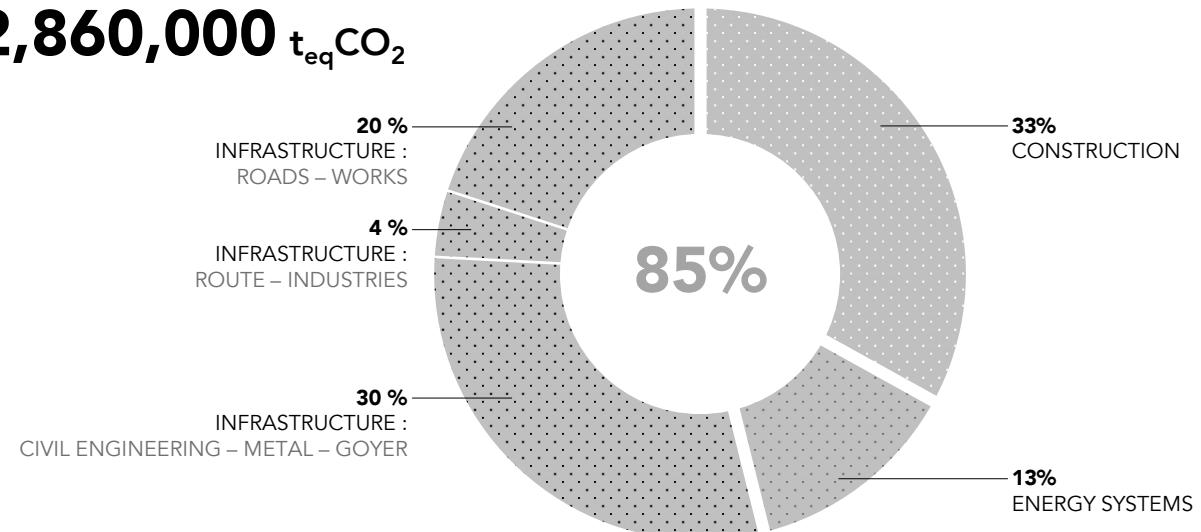
The calculation of Scope 3 upstream emissions for a construction company includes all the CO<sub>2</sub> emissions occurring in the value chain upstream: purchased materials and equipment, purchased subcontracting services, transport and freight upstream of activities, leasing of machinery and real estate, employee travel, waste generated by operations, etc. The calculation of Scope 3 upstream emissions ends with delivery of the building, equipment or infrastructure.

The Eiffage-Quantis study carried out in 2020 shows that Scope 3 upstream emissions for Eiffage (for France and not including Concessions), represent 85% of total CO<sub>2</sub> upstream emissions for Scopes 1, 2 and 3.

Purchased goods and services (steel, concrete, subcontracting, etc.) represent a major portion of this total, accounting for 89% of Scope 3 upstream emissions. Although each of Eiffage's divisions has a specific impact profile in relation to its business activities, it logically follows that Scope 3 upstream emissions for each of these are, for a large part, accounted for by purchased goods and services: 83% for Eiffage Énergie Systèmes, 86% for Eiffage Infrastructure and 97% for Eiffage Construction.

## SCOPE 3 UPSTREAM EMISSIONS (FRANCE, 2019 – EXCLUDING CONCESSIONS)

**2,860,000 t<sub>eq</sub>CO<sub>2</sub>**



\* Source : Eiffage-Quantis study carried out in 2020

# Reducing Scopes 1 and 2 emissions

Following the Eiffage-Quantis study, the divisions and support departments, and in particular the DDDIT, the Purchasing and Equipment departments, evaluated several scenarios to reduce emissions by acting on the various carbon-intensive areas.

Following this work, the scenario adopted targets:

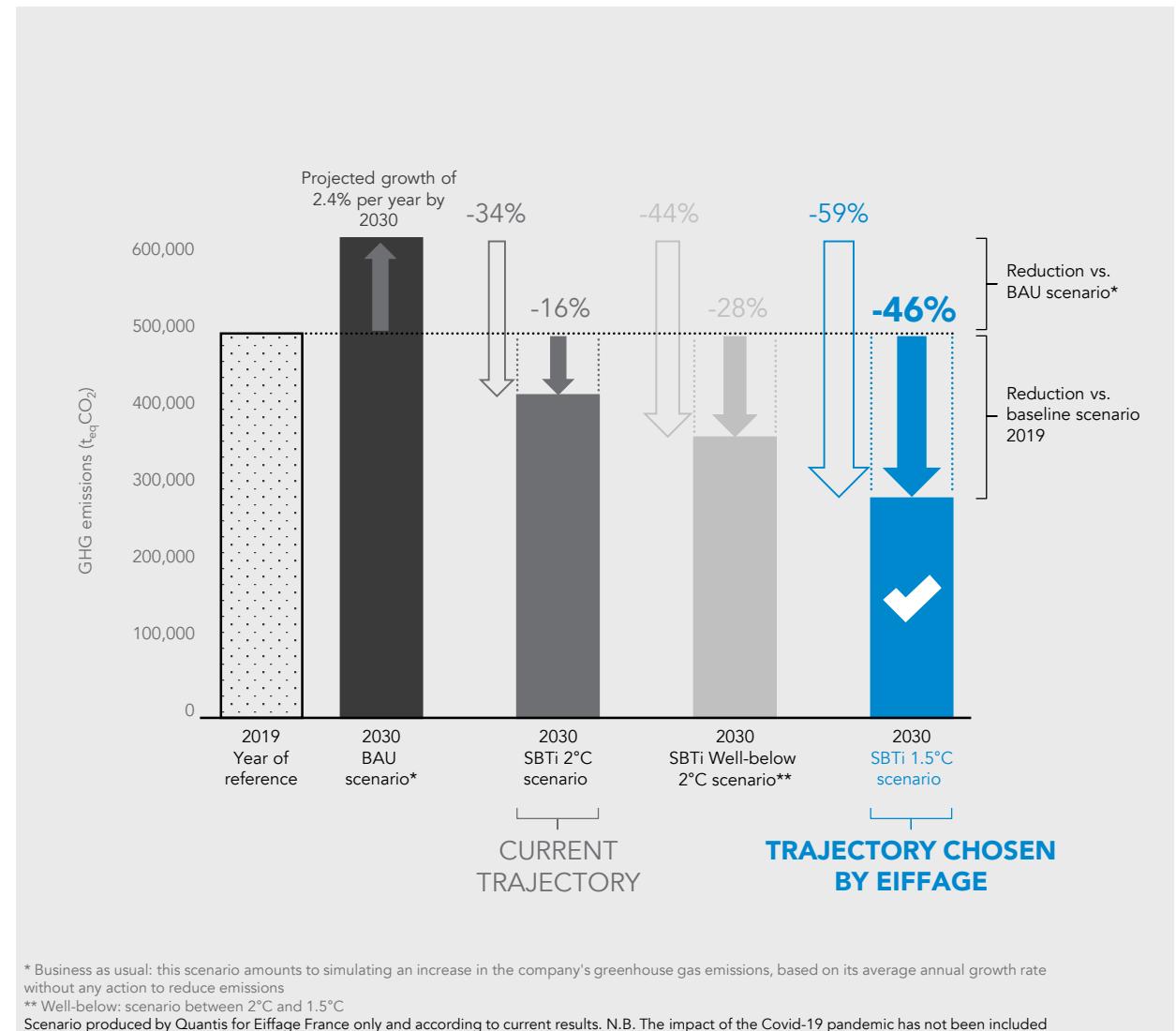
- a major reduction in CO<sub>2</sub> emissions linked to the Eiffage Route lime plant in Bocahut (Nord). This plant currently represents 21.8% of the Group's Scopes 1 and 2 emissions;
- the substitution of fossil-fuel energy by electricity from renewable sources (which will by default lead to an increase in electricity consumption);
- the drastic reduction in CO<sub>2</sub> emissions from vehicle fleets.

The chart opposite compares the different Scopes 1 and 2 emissions reduction targets for Eiffage, depending on the trajectory chosen.

Replacing the 2°C trajectory by a 1.5°C trajectory by 2030, implies a 46% reduction in Scopes 1 and 2 greenhouse gas emissions, based on 2019 emissions data and according to SBTi criteria.

The trajectory and associated reduction targets apply to all Eiffage business lines. As the objectives have been integrated into the divisions' strategy plans for the period 2021-2025, they will be steered on an annual basis until the first major milestone in 2025.

## REDUCTION TARGETS FOR SCOPES 1 AND 2 EMISSIONS IN RELATION TO THE CHOSEN TRAJECTORY



The carbon intensity of turnover, excluding tax, in relation to emissions from Scopes 1 and 2 would drop from t 37 CO<sub>2</sub> eq. per million euros in 2019 to t 20 CO<sub>2</sub> eq. per million euros in 2030.

# Reducing Scope 3 upstream emissions

The Eiffage-Quantis study estimates the share of Scope 3 upstream emissions at 85% for the Eiffage Construction, Energy Systems and Infrastructure divisions in France, taking 2019 as the year of reference.

This major share obviously necessitates the setting of ambitious objectives, a reduction of 30% by 2030. This target can only be achieved with the close cooperation of Eiffage's suppliers of recurring goods and services, hence the importance of the low-carbon action plan managed jointly with the Purchasing department (see chapter 2, pages 20 to 22).

## Committing to the Science-Based Targets initiative (SBTi)

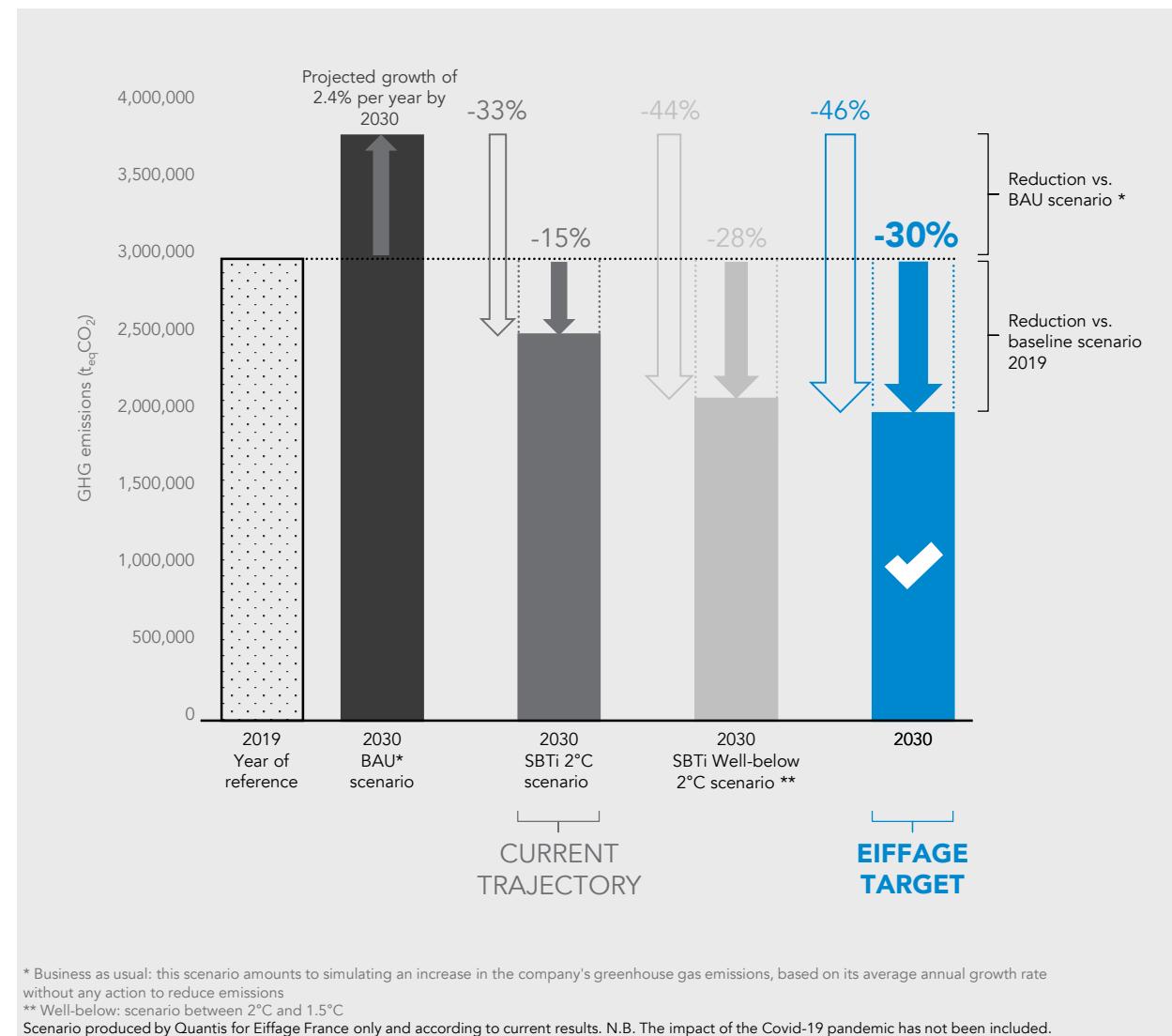
In order to support Eiffage's action to reduce and avoid CO<sub>2</sub> emissions through an integrating dynamic recognised internationally, in March 2021 the Chairman and CEO validated Eiffage's commitment to the "The Science-Based Targets initiative" (SBTi).

The SBTi is the result of collaboration between the CDP, the United Nations Global Compact, the World Resources Institute (WRI) and the World Wildlife Fund (WWF).

The SBTi certifies the alignment of a company's emission reduction targets with the level of decarbonisation necessary to help limit global warming along the chosen trajectory.

## REDUCTION TARGETS FOR SCOPE 3 UPSTREAM EMISSIONS

Commitment to -30% in absolute terms compared to the 2019 reference year scenario



# Steering performance

Following an internal audit in summer 2020 on the reliability of non-financial data collection processes, a cross-function steering committee was created, led by the Financial Director. Its objective is to design an interface capable of regularly extracting around ten key indicators using existing software and tools, such as financial or purchasing software.

The work will focus on the following indicators:

- **Scopes 1 and 2:**

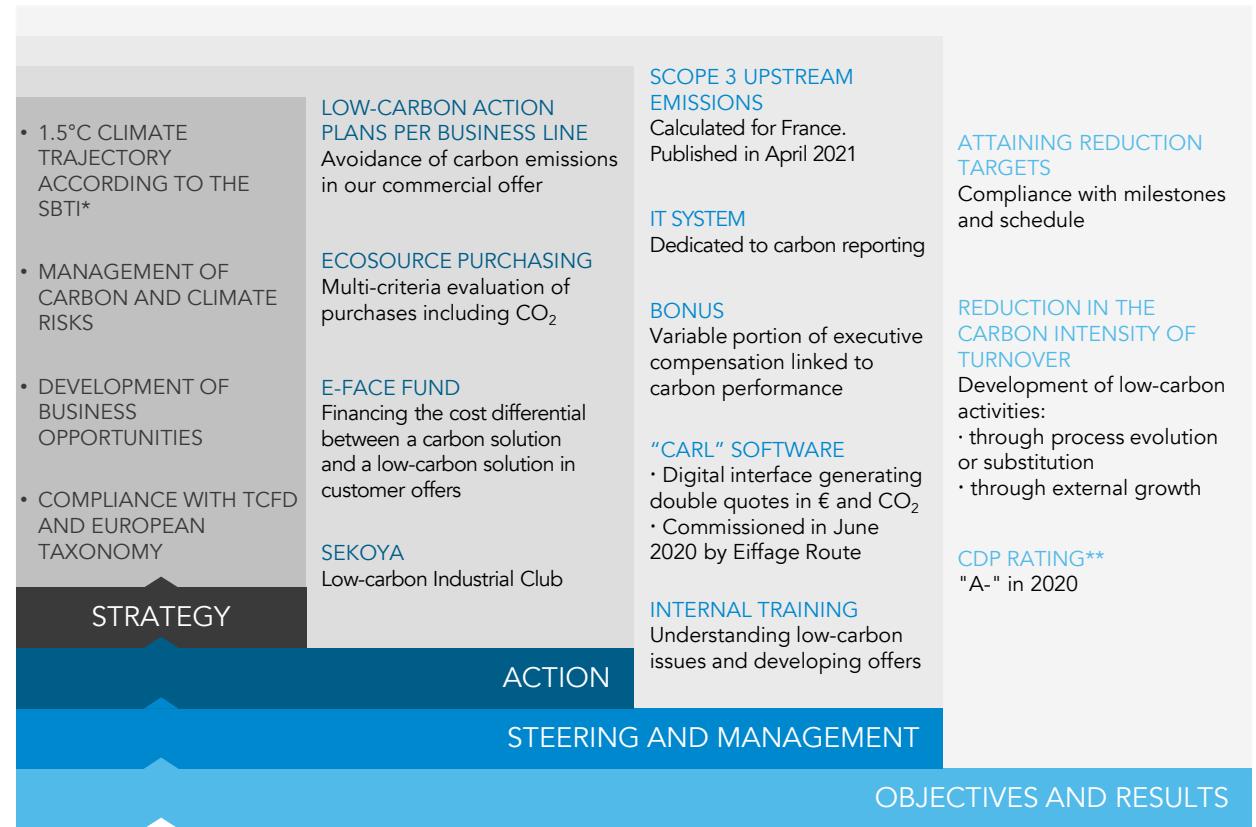
- the energy consumption of all the Group's buildings, industrial facilities and construction sites
- the electricity consumption of all the Group's buildings, industrial facilities and construction sites
- the fuel consumption of vehicle and equipment fleets
- greenhouse gas emissions linked to the three previous indicators

- **Scope 3 upstream emissions:**

- the volume of purchased concrete, steel and bitumen
- greenhouse gas emissions linked to the previous indicator

- **Water consumption**

## SUMMARY OF EIFFAGE'S CLIMATE STRATEGY AND IMPLICATIONS IN TERMS OF OBJECTIVES AND MANAGEMENT



\* Science-Based Targets initiative \*\* Carbon Disclosure Project

### EIFFAGE GOES FROM "B" TO "A-" IN THE CDP 2020 CLIMATE CHANGE SCORE

As a result of the commitment and efforts of all of the group's business lines, Eiffage has achieved major improvement in the score awarded each year by the CDP, under its "climate change" component. The governance of our climate strategy, the identification of climate-related risks and the identification of business opportunities in favour of reducing greenhouse gas emissions, were particularly appreciated.

This report supplements the information intended for the CDP in 2021, with the choice of a 1.5°C trajectory for the reduction of scopes 1 and 2 emissions, and the publication of Scope 3 upstream emissions and the associated reduction target.

Six Routes train station in La Courneuve (Seine-Saint-Denis)  
Société de Grand Paris  
Chartier Dalix architect firm

# Gare de La Courneuve «Six Routes»

La Courneuve «Six Routes»



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