

The background of the entire page is a photograph of a park. In the foreground, a calm body of water reflects the surrounding greenery and people. A man in a white t-shirt and orange shorts is sitting on a wooden bench, holding a baby. Other people are visible in the background, some sitting on benches and others walking. The trees are tall and leafy, with sunlight filtering through the leaves. The overall scene is peaceful and sustainable.

Forging
a sustainable
world.



EXTRACT 2024 UNIVERSAL REGISTRATION DOCUMENT
ENVIRONMENTAL PERFORMANCE

2. Environmental performance

2.1 Environmental ambition

In this context of climate emergency, the environment is a strategic priority for VINCI. The Group tackles it with the aim of playing an active role in the environmental transition of buildings, infrastructure and mobility. VINCI is aware of the responsibility it bears, due to the nature of its business activities, but also recognises its ability to contribute positively to this transition. That is why the Group has set its environmental ambition for 2030, with a twofold objective: significantly reduce the direct impact of its activities and help its customers and partners reduce their own environmental footprint.

VINCI has therefore committed to reduce its direct and indirect CO₂ emissions, with its targets to be met by 2030 validated as aligned with the well below 2°C scenario by the Science Based Targets initiative (SBTi). The Group also aims to contribute to global net zero by 2050, but has not yet certified a quantified target. In addition, VINCI has made deep commitments to scale up the circular economy and preserve natural environments. These three focuses of its strategy are interdependent. For example, VINCI's climate commitments address the pressure of climate change as a cause of biodiversity loss, and its actions to promote the circular economy help alleviate pressures on biodiversity by curbing waste and protecting natural resources. At the same time, the circular economy plays a role in lowering emissions. Therefore, although each pillar of the Group's environmental ambition has its own levers for action, any initiative undertaken on one pillar has positive repercussions on the other two.

VINCI is mobilising its teams and its potential for innovation to accelerate the transformation of its business lines and the creation of environmental value in the projects it leads for its customers, as well as in the services it provides for its infrastructure users and partners. The integrated design-build-operate approach helps reduce environmental impact at each stage in a project's life cycle. The development of partnerships with external stakeholders is focused on this same goal.

 Acting for the climate	 Optimising resources thanks to the circular economy	 Preserving natural environments
● Reduce direct greenhouse gas emissions (Scopes 1 and 2) by 40% from 2018 levels by 2030 ● Reduce indirect upstream and downstream emissions (Scope 3) by 20% from 2019 levels by 2030, by taking action across the value chain for the Group's businesses ● Adapt infrastructure and activities to improve their climate resilience 	● Promote the use of construction techniques and materials that economise on natural resources ● Improve waste sorting to implement waste recovery more widely ● Expand the offer of recycled materials to limit extraction of virgin materials	● Prevent environmental nuisances and incidents by systematically implementing an environmental management plan in all Group businesses ● Optimise water consumption, especially in areas of water stress ● Aim to achieve no net loss of biodiversity

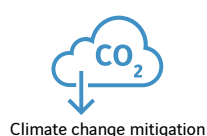
Overview of the main commitments by business line

	 Acting for the climate	 Optimising resources thanks to the circular economy	 Preserving natural environments
VINCI Autoroutes	• 50% reduction in Scope 1 and 2 greenhouse gas (GHG) emissions by 2030 (from 2018 levels) • 50% average reduction in GHG emissions for each category of activities at worksites by 2030 (from 2019 levels) • 20% reduction in the GHG emissions of purchases and commercial installations by 2030 (from 2019 levels) • 20% reduction in the GHG emissions of VINCI Autoroutes customers by 2030 (from 2019 levels)	• 100% of asphalt mix recovered by 2030, of which 45% reused at VINCI Autoroutes' own worksites • 100% of non-hazardous waste recovered, of which 80% material recovery from operations waste	• 10% reduction in water withdrawals by 2030 (from 2018 levels) • Land rehabilitation plan • Zero phytosanitary products in use by 2030
VINCI Airports and other concessions	• 66% reduction in Scope 1 and 2 GHG emissions by 2030 (from 2018 levels) • Net zero emissions (Scopes 1 and 2) for airports in the EU (including London Gatwick and Edinburgh) by 2030 and for the other airports by 2050	• Zero waste to landfill by 2030	• 50% reduction in water consumption per unit of traffic by 2030 • Zero phytosanitary products in use by 2025 • Implement ecological management measures more widely at sites in operation and monitor natural environments
VINCI Energies	• Alignment with the Group's reduction targets	• 80% of inert waste recycled by 2030	• Alignment with the Group's reduction targets
Cobra IS	Alignment with the Group's reduction targets		
VINCI Construction	• Alignment with the Group's reduction targets • 90% low-carbon concrete used in projects by 2030	• Double the production of recycled materials at quarries and processing facilities by 2030 compared with 2019 levels • 90% of waste recovered for the Major Projects Division by 2030	• Determine solutions to reduce water use at 100% of Major Projects worksites
VINCI Immobilier	• Alignment with the Group's reduction targets • 50% reduction in the carbon impact of property development operations by 2034 • 40% reduction in the carbon footprint of residents of serviced residences by 2030	• More than 50% of revenue generated through land recycling operations in France by 2030 (excluding Urvat) • "No net land take" in France by 2030 (excluding Urvat)	

2.1.1 EU Taxonomy of environmentally sustainable activities

Building on the European Commission's action plan on financing sustainable growth launched in 2018, Regulation (EU) 2020/852 of 18 June 2020, known as the Taxonomy Regulation, establishes a framework to facilitate sustainable investment with the aim of creating a "green list" of environmentally sustainable economic activities. To comply with this regulation, the Group is required to disclose, for the 2024 financial year, the proportion of its Taxonomy-eligible activities that are aligned, in terms of their revenue, capital expenditure (CapEx) and operating expenditure (OpEx), to the six environmental objectives: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems.

To qualify as sustainable, an activity must contribute substantially to one of the six environmental objectives mentioned above, "do no significant harm" to the other five objectives (DNSH principle) and meet minimum safeguards in the following areas: human rights (including labour and consumer rights), bribery and corruption, taxation and fair competition. The Taxonomy Regulation has been supplemented by four delegated acts which were approved between 2021 and 2023, specifying the technical screening criteria for the six objectives and the content, methodology and presentation of information to be disclosed.



For the first two objectives of the EU Taxonomy relating to climate change, a given activity is eligible for the EU Taxonomy if it is already low carbon (based on its “own performance”), if it contributes to reaching a net zero emissions target by 2050 (“transitional activity”), or if it enables other activities to reduce their CO₂ emissions (“enabling activity”). In order to be aligned to the climate change mitigation objective, an activity must be eligible, meet the technical screening criteria, comply with the minimum safeguards stipulated in the regulation and not cause significant harm to any of the other five objectives.

The Group’s assessment to determine the alignment of its activities was based on a detailed analysis, taking into account existing processes, reporting systems and conservative management assumptions. The significant elements of this methodology – assumptions and interpretations, methodological clarifications and limitations – are described in paragraph 5.3.4, “EU Taxonomy KPIs”, of the methodology note, page 275.

The Group could eventually revise this methodology and the corresponding figures in line with regulatory changes, interpretations and advances in its EU Taxonomy reporting process. To date, VINCI has not established a CapEx plan to increase the percentage of its Taxonomy-aligned revenue.

2.1.1.1 Eligibility and alignment of VINCI’s revenue

At 31 December 2024, 41% of VINCI’s revenue was eligible for and 22% was aligned to the six objectives of the EU Taxonomy.

EU Taxonomy activities (in € millions)	Objective ^(*)	Eligible revenue in 2024	Eligible revenue in 2024 (%)	Eligible revenue in 2023	Eligible revenue in 2023 (%)	Aligned revenue in 2024	Aligned revenue in 2024 (%)	Aligned revenue in 2023	Aligned revenue in 2023 (%)
4.9 Transmission and distribution of electricity	CCM	5,758	8%	5,592	8%	4,123	6%	4,216	6%
6.14 Infrastructure for rail transport	CCM	4,965	7%	4,896	7%	3,922	5%	4,016	6%
7.3 Installation, maintenance and repair of energy efficiency equipment	CCM	1,569	2%	1,622	2%	1,528	2%	1,610	2%
4.1 Electricity generation using solar photovoltaic technology	CCM	1,211	2%	955	1%	1,152	2%	886	1%
7.1 Construction of new buildings	CCM	6,304	9%	6,091	9%	789	1%	930	1%
7.2 Renovation of existing buildings	CCM	2,425	3%	2,209	3%	890	1%	620	1%
4.3 Electricity generation from wind power	CCM	574	1%	263	0%	568	1%	263	0%
4.28 Electricity generation from nuclear energy in existing installations	CCM	564	1%	510	1%	457	1%	345	1%
5.9 Material recovery from non-hazardous waste	CCM	834	1%	1,739	3%	309	0%	566	1%
4.29 Electricity generation from fossil gaseous fuels	CCM	307	0%	0	0%	307	0%	0	0%
7.5 Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	CCM	296	0%	292	0%	294	0%	199	0%
9.3. Professional services related to energy performance of buildings	CCM	200	0%	172	0%	200	0%	172	0%
14.2 Flood risk prevention and protection infrastructure	CCA	118	0%	152	0%	106	0%	0	0%
Other eligible activities	CCM	3,093	4%	3,199	5%	780	1%	590	1%
Taxonomy-eligible activities – Climate change objectives		28,218	39%	27,693	41%	15,426	22%	14,412	21%
3.4 Maintenance of roads and motorways	CE	511	1%	0	0%	84	0%		
3.5 Use of concrete in civil engineering	CE	293	0%	0	0%	0	0%		
2.2 Urban wastewater treatment	WTR	270	0%	0	0%	13	0%		
3.3 Demolition and wrecking of buildings and other structures	CE	140	0%	111	0%	0	0%		
1.1 Conservation, including restoration, of habitats, ecosystems and species	BIO	19	0%	12	0%	0	0%		
Other eligible activities		13	0%	77	0%	0	0%		
Taxonomy-eligible activities – Other objectives		1,246	2%	200	0%	97	0%		
Total eligible activities		29,464	41%	27,893	41%	15,523	22%	14,412	21%
Non-eligible activities		42,158	59%	40,945	59%				
Total VINCI consolidated revenue		71,623	100%	68,838	100%				

^(*) Objectives: climate change mitigation (CCM), climate change adaptation (CCA), water and marine resources (WTR), circular economy (CE), pollution prevention and control (PPC), and biodiversity and ecosystems (BIO).

Eligible activities

At 31 December 2024, the percentage of the Group’s Taxonomy-eligible revenue was stable relative to 2023, at 41%, despite changes for some activities. An in-depth analysis performed in 2024 identified three new contributing activities. These are activities 3.4 Maintenance of roads and roadways and 3.5 Use of concrete in civil engineering, both contributing to the circular economy objective, and 2.2 Urban wastewater treatment, contributing to the water and marine resources objective. Conversely, there was a decrease in eligible revenue from activity 5.9 Material recovery from non-hazardous waste, mainly due to increased revenue generated internally (intercompany transactions), which was eliminated for the purposes of Taxonomy reporting (see paragraph 5.3.4.1 “KPI definitions”, of the methodology note, page 275). Eligible and aligned revenue from activity 5.9 generated with Group companies nevertheless amounted to more than €800 million at 31 December 2024, or 1% of the Group’s consolidated revenue.

Aligned activities

The percentage of the Group's Taxonomy-aligned revenue rose slightly to 22% at 31 December 2024, from 21% a year earlier. The main contributing activities were as follows:

Climate change mitigation objective

- Activity 4.9, which mainly covers the construction and operation of electricity transmission and distribution lines and transformer stations by VINCI Energies and Cobra IS in Europe, and projects to connect VINCI Energies' renewable energy production facilities in New Zealand.
- Activity 6.14, which includes several major projects led by VINCI Construction, which may involve the participation of VINCI Energies, to build electrified rail infrastructure such as High Speed 2 (HS2) in the United Kingdom, Ontario Line South in Canada, the Lyon-Turin (TELT) rail tunnel project and the Grand Paris Express projects. This subset also includes the construction and electrification of rail networks in Spain and Israel by Cobra IS, tram line activities under way at VINCI Energies in Europe, the maintenance of the South Europe Atlantic high-speed rail line by VINCI Railways and most of the activities of VINCI Construction's subsidiary ETF, which mainly involve railway maintenance projects in France.
- Activities 7.3, 7.5 and 9.3, which come under VINCI Energies and Cobra IS, relating to the energy performance of buildings.
- Activities 4.1 and 4.3 of VINCI Energies and Cobra IS, which involve building, operating and maintaining electricity generation facilities powered by renewable energy sources, either solar (photovoltaic) or wind, mainly located in Europe and Brazil.
- Activities 7.1 and 7.2, relating to the building construction and renovation operations of VINCI Construction and VINCI Immobilier in France and works packages to connect buildings to the power grid subcontracted to VINCI Energies as part of new construction projects in Europe. VINCI Construction and VINCI Immobilier have analysed each project for eligibility and alignment. The most representative projects, such as Austerlitz, The Link and Rennes university hospital for construction, and Champs-Élysées 103 and 23 Maignon for renovation, are mainly located in France. At VINCI Immobilier, aligned revenue mainly includes the construction of office buildings and some iconic projects containing residential housing units, such as To-Lyon. Eligible Cobra IS projects covered by activities 7.1 and 7.2 are mainly located outside Europe, for the most part in Latin America, and did not qualify as aligned, as they were assessed taking a conservative approach.
- Activity 5.9, which covers VINCI Construction's materials recycling activities (asphalt plants, recycling platforms, and quarries).
- Activity 4.28 involving nuclear plant maintenance by VINCI Energies and VINCI Construction (Nuvia) in France, mainly with EDF.
- Activity 4.29, which mainly includes Cobra IS's construction or operation of infrastructure to produce electricity from fossil gaseous fuels, mainly in Belgium (Luminus project).

Climate change adaptation objective

- Activity 14.2, covering several flood risk prevention and protection infrastructure projects by VINCI Construction, such as the Springbank Off-stream Reservoir (Canada) and the Cressbrook Dam (Australia).

Circular economy objective

- Activity 3.4, involving maintenance contracts managed by ImesAPI (Cobra IS) in Spain.

Water and marine resources objective

- Activity 2.2, especially the Matasnillo project (VINCI Construction) to design and build a 7,500-metre wastewater collection system in Panama.

These activities total 95% of VINCI's aligned revenue at 31 December 2024. This highlights the significant impact of the expertise of VINCI Energies, Cobra IS, VINCI Construction and VINCI Immobilier in the ecological transition. The remaining 5% of aligned revenue includes several activities of VINCI Autoroutes and VINCI Concessions (see the regulatory tables, pages 413 to 414), which does not however reflect the intense efforts made by companies across the Group's Concessions business to reduce their greenhouse gas emissions (see paragraph 2.2, "Acting for the climate (ESRS E1)", page 210).

Eligible but non-aligned activities

The analysis of the Group's alignment in 2024 did not identify any additional activities contributing significantly to the water, circular economy, pollution or biodiversity objectives. Activities corresponding to the circular economy objective (3.3, 3.4 and 3.5) contributed significantly to the Group's Taxonomy-eligibility at 30 September 2024, but alignment was low, due to the complexity of the technical screening and "do no significant harm" (DNSH) criteria.

The alignment of other eligible activities of VINCI Construction and Cobra IS could not be demonstrated due to the complexity of DNSH criteria and the difficulty of transposing some substantial contribution criteria outside Europe. As a result, Sogea Environnement's hydraulic activities (5.3 – CCM) and the Thames Tideway Tunnel in London, a system for intercepting and storing sewage waste and rainwater (2.2 – WTR) did not qualify as aligned.

Non-eligible activities

Non-eligible revenue mainly includes the activities of VINCI Autoroutes and VINCI Highways. Most airport operations also generate non-eligible revenue, as do VINCI Energies' activities relating to digital transformation and VINCI Construction's civil engineering operations (except those using concrete). At 31 December 2024, non-eligible activities involving oil and gas generated about 2% of VINCI's total revenue. The Group did not identify any activities involving coal.

Activities contributing to multiple objectives

When an activity was eligible for multiple objectives, its alignment potential was reviewed for all of them, and the activity was included only under the most relevant objective, to avoid being counted more than once. For example, the construction of new buildings, which meets the eligibility criteria of two objectives (climate change mitigation and circular economy), was classified as contributing to the change mitigation objective under 7.1.

The table below breaks down the eligibility and alignment of Group revenue by objective for an overall perspective. Construction revenue therefore appears twice: under 7.1 as contributing to the climate change mitigation objective and under 3.1 as contributing to the circular economy objective.

	Percentage of revenue / Total revenue	
	Aligned by objective	Eligible by objective
Climate change mitigation	22%	39%
Climate change adaptation	0%	0%
Sustainable use and protection of water and marine resources	0%	0%
Circular economy	0%	11%
Pollution prevention and control	0%	0%
Protection and restoration of biodiversity and ecosystems	0%	0%

The Group's Taxonomy-aligned eligible revenue is broken down by activity in the regulatory format on pages 420 to 422 (EU Taxonomy reporting tables supplementing this Report of the Board of Directors).

2.1.1.2 Eligibility and alignment of VINCI's CapEx

At 31 December 2024, 23% of VINCI's CapEx was eligible for and 12% was aligned to the six objectives of the EU Taxonomy. It should be noted that at 31 December 2024, nearly 50% of the Group's CapEx, i.e. €5,257 million, related to the acquisitions of Edinburgh airport (United Kingdom) and the Northwest Parkway section of the Denver ring road (Colorado, United States), in particular the value recognised for concession rights, which are by definition not eligible (see Note B.1 to the consolidated financial statements, "Changes in consolidation scope during the period", page 324). Without these two major acquisitions, consolidated adjusted CapEx totalled €6,152 million. By applying this denominator, VINCI's eligible and aligned CapEx came out to 43% and 22% respectively, in line with the Group's performance in 2023.

EU Taxonomy activities (in € millions)	Objective ^(*)	Eligible CapEx in 2024	Eligible CapEx in 2024 (%)	Eligible CapEx in 2023	Eligible CapEx in 2023 (%)	Aligned CapEx in 2024	Aligned CapEx in 2024 (%)	Aligned CapEx in 2023	Aligned CapEx in 2023 (%)
4.1 Electricity generation using solar photovoltaic technology	CCM	641	6%	411	9%	641	6%	411	9%
4.3 Electricity generation from wind power	CCM	181	2%	58	1%	178	2%	57	1%
6.14 Infrastructure for rail transport	CCM	207	2%	212	5%	161	1%	182	4%
5.9 Material recovery from non-hazardous waste	CCM	78	1%	69	1%	77	1%	66	1%
4.9 Transmission and distribution of electricity	CCM	97	1%	92	2%	72	1%	75	2%
7.3 Installation, maintenance and repair of energy efficiency equipment	CCM	60	1%	72	2%	43	0%	42	1%
7.7 Acquisition and ownership of buildings	CCM	284	2%	249	5%	30	0%	29	1%
6.5 Transport by motorbikes, passenger cars and light commercial vehicles	CCM	408	4%	354	8%	0	0%	79	2%
4.28 Electricity generation from nuclear energy in existing installations	CCM	44	0%	19	0%	32	0%	9	0%
14.2 Flood risk prevention and protection infrastructure	CCA	9	0%	8	0%	8	0%	0	0%
Other eligible activities	CCM	498	4%	432	9%	99	1%	55	1%
Taxonomy-eligible activities – Climate change objectives		2,506	22%	1,974	43%	1,340	12%	1,003	22%
3.4 Maintenance of roads and motorways	CE	105	0%	0	0%	10	0%	-	-
2.2 Urban wastewater treatment	WTR	16	0%	0	0%	2	0%	-	-
3.3 Demolition and wrecking of buildings and other structures	CE	4	0%	0	0%	0	0%	-	-
2.1 Water supply	WTR	3	0%	2	0%	0	0%	-	-
1.1 Conservation, including restoration, of habitats, ecosystems and species	BIO	1	0%	7	0%	0	0%	-	-
Other eligible activities		1	0%	6	0%	0	0%	-	-
Taxonomy-eligible activities – Other objectives		130	1%	15	0%	12	0%	-	-
Total eligible activities		2,636	23%	1,989	43%	1,352	12%	1,003	22%
Non-eligible activities		8,773	77%	2,638	57%				
Total VINCI consolidated CapEx		11,409	100%	4,628	100%				

(*) Objectives: climate change mitigation (CCM), climate change adaptation (CCA), water and marine resources (WTR), circular economy (CE), pollution prevention and control (PPC), and biodiversity and ecosystems (BIO)

Eligible activities

At 31 December 2024, 43% of the Group's CapEx was eligible, excluding the acquisitions of Edinburgh airport and the Northwest Parkway section of the Denver ring road (stable relative to 2023). The analysis of the water, circular economy, pollution and biodiversity objectives identified additional eligible activities but that do not contribute significantly to the Group's alignment percentage.

Aligned activities

At 31 December 2024, the percentage of the Group's Taxonomy-aligned CapEx excluding the acquisitions of Edinburgh airport and the Northwest Parkway section of the Denver ring road was stable compared with 2023, at 22%. The main contributing activities were as follows:

Climate change mitigation objective

- Activities 4.1 and 4.3: these investments mainly cover aligned activities of Cobra IS to build and operate electricity generation facilities powered by renewable energy sources, either solar or wind, such as the Mundo Novo Solar and Raios do Parnaíba projects in Brazil.
- Activity 6.14: this CapEx mainly relates to aligned VINCI Construction activities in railway infrastructure.
- Activity 5.9: this CapEx mainly corresponds to the percentage of fully recycled asphalt mix that VINCI Autoroutes uses on its road maintenance worksites and, to a lesser extent, to VINCI Construction's CapEx relating to its aligned aggregate recycling activities.

- Activity 4.9: this CapEx relates to the electricity transmission and distribution activities of VINCI Energies and Cobra IS.
 - Activity 7.3: this CapEx relates to aligned activities of VINCI Energies and the Concessions business involving the installation, maintenance and repair of energy efficient equipment in buildings.
 - Activity 7.7: this CapEx corresponds to long-term leases of buildings with an energy performance score of A (only in France).
 - Activity 4.28: this CapEx primarily involves nuclear plant maintenance by VINCI Energies and VINCI Construction in France.
- Circular economy objective*
- Activity 3.4: this CapEx corresponds to the maintenance of roads and roadways by Cobra IS in Spain.

These activities accounted for 92% of VINCI's aligned investments at 31 December 2024.

Non-aligned activities

Non-eligible CapEx includes more than €100 million relating to the purchase of electric vehicles, classified under activity 6.5. This activity is considered non-aligned as compliance with one of the DNSH criteria could not be demonstrated. The Group did not make any significant investments involving coal, and 2% of VINCI's total CapEx relates to activities involving oil or gas.

Activities contributing to multiple objectives

When an activity was eligible for multiple objectives, its alignment potential was reviewed for each of them, and the activity was included only under the most relevant objective. For example, the construction of new buildings was classified as contributing to the climate change mitigation objective under 7.1 but could have come under 3.1 as contributing to the circular economy objective or 7.1 as contributing to the climate change adaptation objective.

The table below breaks down the eligibility and alignment of Group CapEx by environmental objective for an overall perspective:

	Percentage of CapEx / Total CapEx	
	Aligned by objective	Eligible by objective
Climate change mitigation	12%	22%
Climate change adaptation	0%	0%
Sustainable use and protection of water and marine resources	0%	0%
Circular economy	0%	3%
Pollution prevention and control	0%	0%
Protection and restoration of biodiversity and ecosystems	0%	0%

The Group's Taxonomy-eligible and Taxonomy-aligned CapEx is broken down by activity in the regulatory format on pages 421 to 422 (EU Taxonomy reporting tables supplementing this Report of the Board of Directors).

2.1.1.3 Materiality of VINCI's OpEx

OpEx as defined in the Taxonomy Regulation amounted to €3,246 million at 31 December 2024, i.e. 5% of the Group's total OpEx, which is not representative of its business model. Accordingly, the Group opted to use the materiality exemption set out in paragraph 1.1.3.2 of Annex I of Commission Delegated Regulation (EU) 2020/852 of July 2021. The Group's OpEx denominator is presented in the regulatory format on page 423 (EU Taxonomy reporting tables supplementing this Report of the Board of Directors).

2.1.2 Driving the environmental transition

In order to deliver on its environmental ambition, VINCI needs both strategic vision and high engagement in environmental issues from all its employees. The rollout of training and awareness actions within all Group activities reflects efforts to share best practices and pass knowledge on to others at every level.

2.1.2.1 Employee engagement

2024 Environment Day and 2024 Environment Awards

VINCI's 2024 Environment Day provided the opportunity for each manager to sit down with their team members and discuss the initiatives taken within their business line to meet the targets of the environmental ambition. The day also provided an opportunity to spread information about the voting phase for the Environment Awards, a Group-wide contest opened in January 2024. This call for projects is a way to empower employees to play an active role in achieving the Group's environmental targets. It identifies and promotes local environmental initiatives, engaging employees in 17 geographical areas and garnering more than 10,000 votes. In keeping with its decentralised approach, VINCI set up a steering committee for the contest, made up of one coordinator and one moderator per region, and formed a network of 300 correspondents and 250 experts who coordinate the event in the 17 geographical areas. A total of 168 initiatives were recognised in the various regions, and 12 won awards in the final round for the 2024 edition. The winners include projects aiming to directly reduce the environmental impact of Group operations, as well as solutions for customers in the areas of climate change adaptation, reuse, innovative materials, land rehabilitation and water resource management. The Grand Prize was awarded to the Revilo® urban planning solution, which aims to bring a response to the challenges of creating cool islands in built-up areas.

In 2025, the Group will continue to roll out the winning initiatives from the Environment Awards on a larger scale, to maximise their environmental and economic impact, through the Scale Up! programme.

Communities

Created by the Group's Environment Department in 2018, Ecowork is a community of more than 500 employees from different divisions and business lines who want to implement environmental actions in their professional life. The Environment Department works with the organisation Makesense to coordinate the community's activity, which includes training courses, discussions, meetings and tools to increase engagement and raise awareness about environmental issues. Historically based in France, this community has expanded outside the country. A first cohort in Germany was launched in December 2024, and there are two groups in the United Kingdom.

The Group's Environment Department also manages internal networks that focus on the key topics of the environmental ambition: biodiversity, circular economy, carbon issues and life cycle assessment (LCA). These networks unite dozens of experts from all the Group's geographies and business lines to create a multi-disciplinary approach, share solutions and best practices, and make progress on common issues.

Responsible use of digital technology

At the end of 2022, the Group launched a programme on the responsible use of digital technology. The objective is to find ways to reduce the social and environmental impacts of digital technology and its use. The programme is led by the Group's IT Department with the support of the Environment Department and the Human Resources Department. It aims to gain momentum for a movement already at work within the Group to advance on four goals: promote a circular economy model by extending the life cycles of digital equipment; reduce the energy consumption of the Group's data centres and those of its partners; encourage digital sustainability by raising awareness, while informing and sharing best practices to reduce environmental impacts from the use of digital technology; and develop inclusive and socially responsible digital practices to provide all employees with access to digital content.

2.1.2.2 Training and awareness

New training and awareness modules continued to be rolled out in 2024, with sessions created on specific environmental issues or targeted businesses.

Raising employees' awareness of environmental challenges

At the end of 2024, nearly 59,000 employees, or about 21% of the Group's workforce, had completed the e-learning module developed in June 2020 to raise awareness about environmental issues, explain VINCI's environmental ambition and create a common language. Other modules are available for all employees on topics such as the climate resilience of structures, responsible purchasing practices and the responsible use of digital technology. In December 2023, VINCI's Environment Department launched the online training programme #LearnForEnvironment. This campaign aims to raise awareness of environmental sustainability Group-wide and train VINCI employees on the related issues. Two courses were developed: the first in four parts to explain the basics about climate change, resources, the circular economy and biodiversity, and the second in seven parts to dig deeper into these subjects, gaining an understanding of the key role of companies and the social and societal issues surrounding climate change. At the end of 2024, almost 4,000 people from 63 countries had taken an average of two courses. These courses will be expanded in 2025 to include content on adapting to climate change, water crises and planetary boundaries.

Training employees on the Group's environmental issues

Training on environmental issues is also incorporated into existing courses (works, studies, operations, etc.). Dedicated environment modules are systematically included in training programmes for managers and executives, led by VINCI Academy or by business line academies. The "Environnement by VINCI" training course for senior environmental managers and operational staff, developed jointly with the Environment Department, VINCI Academy and Sciences Po Paris and rolled out for the first time in 2023, continued in 2024.

VINCI's business lines developed specific training materials for their operational staff in 2024:

- VINCI Immobilier, in partnership with Leonard, launched an action learning initiative on climate change adaptation to identify and integrate concrete solutions into day-to-day projects.
- VINCI Construction created the Equo Vivo course on ecological engineering and biodiversity, training 109 employees with the support of an external service provider.
- VINCI Energies held a six-webinar series on solutions developed for the One Earth Challenge, with the direct participation of project managers. In all, 15 solutions were presented to 800 participants.
- VINCI Autoroutes provided a comprehensive training programme covering environmental topics (waste management, sewage waste and rainwater, noise, etc.). In-house instructors deliver this content to staff across the entire motorway network.

In 2024, these actions taken together represented a total of 111,525 hours.

Environmental training and awareness, with change

	Number of hours of training		Change
	2024	2023	2024/2023
VINCI Autoroutes	2,764	9,574	-71%
VINCI Airports	10,756	5,652	+90%
Other concessions	1,472	1,474	0%
VINCI Energies	24,416	22,798	+7%
Cobra IS	28,702	22,500	+28%
VINCI Construction	43,150	47,148	-8%
VINCI Immobilier and holding cos.	265	1,036	-74%
Group	111,525	110,182	+1%

2.1.2.3 Eco-labelling and certification

VINCI aims to bring its suppliers, subcontractors, partners and customers on board to reduce their environmental impact by integrating eco-design to a greater extent in projects and through new service offerings. The number of certified projects is growing year by year, enabling the Group to widely demonstrate its expertise in the area of environmental performance. In 2024, the volume of business represented by certified projects amounted to €8 billion for more than 1,100 projects delivered or in the process of being delivered by VINCI Construction, VINCI Immobilier and VINCI Energies.

In 2024, VINCI Immobilier reached the highest level of maturity for its NF Habitat-certified management system, with 100% of its residential property development activity having achieved NF Habitat certification and at least 25% of residential programmes awarded NF Habitat HQE™ certification. Other than NF Habitat HQE™, most of the certifications and labels awarded to VINCI in 2024 were BREEAM®, LEED®, BEPOS-Effnergie® or E+C-. Key projects under way in 2024 include the Edenn office complex of more than 30,000 sq. metres in Nanterre, which is targeting the most stringent environmental standards, such as NF HQE™, BREEAM®, OsmoZ, E+C-, BBKA and BiodiverCity®, and showcases VINCI Immobilier's expertise in using mixed construction techniques. The design-build project for the new 80-bed Lavelanet hospital with radiology rooms and physician's offices, is aiming for E+C- (Energy 3 and Carbon 1) certification.

Several projects also received awards in 2024 for their environmental management. The project to build the City Rail Link tunnel in Auckland (New Zealand) earned the highest rating from the Infrastructure Sustainability Council. As part of the HS2 railway programme in the United Kingdom, the Old Oak Common station project was recognised by the Green Apple Awards, which promote environmental best practices around the world.

Several internal labels have also been developed at the initiative of VINCI Construction companies. These labels are awarded to candidate worksites based on an internal audit to ensure that the Group's environmental commitments are effectively taken into account, to challenge teams and to provide a guarantee for customers. The Attitude Environnement label created by VINCI Construction's Building France and Civil Engineering France divisions in 2012 contains a new set of standards comprising 44 environmental requirements, and was awarded to 226 worksites in 2024, amounting to revenue of about €2 billion. The Excellence Environnement label created by VINCI Construction's Road France Division in 2016 was awarded to 51 worksites in 2024, including the project to redevelop Place du Général Goiran in Nice into an urban cool island. Lastly, the Green is Great label, new in 2024, was awarded to 10 worksites.

2.2 Acting for the climate (ESRS E1)

2.2.1 Identification of material impacts, risks and opportunities

VINCI plays a central role in the energy and environmental transition, through its businesses in road, air and rail transport infrastructure construction and operation, urban development, water treatment, as well as the construction and maintenance of buildings and low-carbon energy supply infrastructure. It is essential for the Group to fully understand and anticipate the risks and opportunities brought by climate change, in order to ensure the sustainability of its businesses and maintain its leadership. While working to reduce the climate impact of its operations, VINCI also develops innovative solutions to tackle the challenges of the environmental transition and benefit its customers.

2.2.1.1 Climate change mitigation

As the transport infrastructure and construction sectors in which VINCI operates account for more than 30% of annual greenhouse gas emissions (according to Working Group III's contribution to the IPCC's Sixth Assessment Report, "Mitigation of Climate Change" in 2022), it follows that the Group's impact on climate change is material. Using several scenarios, such as the IPCC's SSP1-2.6 and Ademe's "Génération frugale", VINCI has identified the material impacts, risks and opportunities of climate change mitigation and, in particular, has determined which of its activities could be significantly impacted if more stringent carbon regulations were implemented. An in-depth study was also conducted internally on specific risks for the transport infrastructure, construction and energy sectors to 2050. All of the Group's emissions, covering all businesses and scopes, were taken into consideration in analysing the related impacts. These emissions are presented in detail in paragraph 2.2.3.2, "GHG emissions", page 203.

An examination of the political, legal, technological, market and reputation risks listed by the Task Force on Climate-related Financial Disclosures (TCFD) revealed that VINCI could be exposed to two material transition risks (see table below).

It also appears that building renovation, which already accounts for a large share of VINCI's activities (3% of VINCI's revenue in 2024), could benefit from government incentives. In addition to leading renovation projects, VINCI has also implemented innovative solutions to support thermal building renovation.

Material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Increase in CO₂ emissions			
Negative impact: contribution to the increase in CO₂ emissions Contribution to the extinction of ecosystems and the depletion of resources	All	Downstream Long term	Local communities and residents Nature and biodiversity Media
Market uncertainties related to the transition			
Transition risk: loss of revenue Loss of revenue in markets that contribute significantly to greenhouse gas emissions and could shrink as a result of more stringent regulations (construction of new buildings, motorway traffic, air travel, etc.)	All	Own activities Medium term	Employees, subcontractors, temporary staff Subcontractors Customers Public authorities Local communities and residents Investors and lenders
Transition risk: additional costs Increase in costs (OpEx) resulting from the implementation of carbon pricing tools (carbon tax, carbon border adjustment mechanism, etc.)	All	Upstream Medium term	Investors and lenders Customers Suppliers Subcontractors Public authorities
Accelerating energy renovation			
Opportunity: energy renovation acceleration Increase in revenue from the growth of the energy renovation market and other low-carbon services	VINCI Construction VINCI Energies Cobra IS	Own activities Short term	Employees, subcontractors, temporary staff Subcontractors Public authorities Customers Local communities and residents Investors

2.2.1.2 Energy

VINCI has identified energy-related risks based on discussions with its purchasing and energy experts and forward-looking scenarios including hypothetical energy price hikes (IEA, the IPCC's SSP1-2.6, Ademe's "Génération frugale"), as well as societal transition pathways to low-carbon energy (based on scenarios from the IPCC, France's public operator RTE, IEA, and others). The 2022 energy crisis pushed up energy costs and challenged the Group's buyers and financial teams. As a result, VINCI intensified its efforts to consume less energy and optimise the energy performance of its buildings and infrastructure, contributing to the achievement of its greenhouse gas emissions reduction targets (see under "Actions to reduce emissions from own operations" in paragraph 2.2.2.1, "Climate change mitigation and energy", page 209).

At the same time, the Group successfully seized strategic opportunities in the energy transition, through an integrated offer of financing, construction, connection and maintenance of renewable energy production facilities, such as solar photovoltaic power plants, wind power projects and hydroelectric dams. VINCI also plays a key role in the development of infrastructure needed for low-carbon electrification, such as electricity transmission and distribution networks, substations that connect wind and solar farms to the grid, and electric battery plants (see EU Taxonomy activities 4.9 and 7.3 in paragraph 2.1.1.1, "Eligibility and alignment of VINCI's revenue", page 198). Lastly, VINCI supports its customers in the construction and maintenance of nuclear energy production infrastructure and is working to develop infrastructure for use of low-carbon hydrogen at its airports and on its motorways, but also through various partnerships and investments.

Material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Energy consumption			
Negative impact: contribution to the acceleration of climate change Contribution to the acceleration of (irreversible) climate change due to the combustion of fossil fuels by site machinery and trucks, company and utility vehicles, industrial activities, and buildings	All	Downstream Medium term	Customers Public authorities Local communities and residents Nature and biodiversity
Risk: increase in energy costs Impact on margins of energy cost increases (due to scarcity, taxes, etc.)	All	Upstream Short term	Investors and lenders Concession grantors Public authorities Local communities and residents Customers Suppliers Subcontractors
Opportunity: supporting the transition to a low-carbon economy Supporting the transition to a low-carbon economy (sustainable mobility; financing, construction, connection and maintenance of renewable energy production facilities such as solar photovoltaic power plants and wind power projects; development of low-carbon hydrogen production infrastructure)	VINCI Concessions VINCI Autoroutes VINCI Energies Cobra IS	Downstream Long term	Users of infrastructure and services Customers Public authorities Local communities and residents Investors and lenders

2.2.1.3 Climate change adaptation

Climate change is a reality causing more frequent and more intense extreme weather events each year. The IPCC's Sixth Assessment Report shows that human activities are causing climate change and stresses the need for available adaptation and mitigation solutions. Since 2020, the Group has analysed the resilience of its activities and assets in the short, medium and long term. Although extreme weather events (floods, hurricanes, etc.) can occur in the short term, they are most likely to generate material impacts and risks in the long term, due to the risk that their frequency and intensity will grow. To evaluate the resilience of its activities and assets throughout its value chain, VINCI used SSP5-8.5, the IPCC's very high GHG emissions scenario, incorporating the most pessimistic change for extreme weather events and the highest risk level. Concessions activities, which are long-term, emerged as more vulnerable than construction activities, which involve shorter time frames and worksites that are very local in scope.

The Group therefore focused on concession assets in its vulnerability assessments. In 2024, VINCI Concessions expanded the range of its climate change vulnerability analysis, which now encompasses more than 85% of its network. In addition, all new projects developed by VINCI Concessions include a preliminary vulnerability assessment using ResiLens, a tool that is also based on the IPCC's SSP5-8.5 scenario. The ResiLens climate risk evaluation tool was developed by Resalliance, VINCI's engineering and design office that specialises in adapting projects, cities, regions, infrastructure and their uses to climate change. VINCI Autoroutes conducted a criticality analysis of its national network in 2020. This study assesses changes in weather parameters in the long term (2035) and very long term (2085) and their impact on motorway infrastructure. It is based on two climate scenarios, RCP 8.5 (business as usual) and RCP 4.5 (ambitious policy to reduce greenhouse gas emissions). VINCI Autoroutes also participated in testing Ademe's ACT Adaptation method, which measures companies' ability to adapt to climate change.

VINCI's worksites and activities are more specifically exposed to the following climate risks:

- acute events: heat waves, fire, cyclones, drought, floods, landslides, shrinkage and swelling of clay soils;
- chronic events: variations in temperature, changes in wind direction, submergence, rising sea levels.

In the short term, the Group has identified opportunities related to work undertaken to adapt to climate change. VINCI provides regions with concrete solutions in the construction and financing of infrastructure adaptation projects (sea walls, drainage systems for heavy rainfall, reservoirs for river discharge, reconfiguring of stream and river channels, urban cool islands, water desalination plants, etc.) and the eco-design of adapted buildings. Projects aimed at preventing flooding totalled more than €100 million in revenue for VINCI Construction companies in 2024, including the Springbank Off-stream Reservoir project in Canada, which began in 2022 (see paragraph 2.2.2.2, "Climate change adaptation", page 214).

Material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Intensification of extreme weather events			
Negative impact: harm to employee health and safety Serious injury to employees due to extreme weather events at VINCI infrastructure or construction sites	All	Own activities Long term	Employees, subcontractors, temporary staff Media
Risk: degradation of the Group's assets and sites Losses related to the partial deterioration or total destruction of civil works or facilities (asset depreciation and an increase of OpEx or a decrease in revenue) due to extreme weather events or acute physical risks	VINCI Concessions VINCI Autoroutes	Own activities Long term	Employees, subcontractors, temporary staff Customers Sub-concession holders Local communities and residents Investors and lenders Public authorities
Opportunity: adaptation solutions and repairs Increase in revenue related to new opportunities for adaptation and maintenance work and solutions to make buildings, infrastructure and regions more resilient to climate change (sea walls, tunnels, bridges, desalination plants, building insulation, foundation reinforcement, urban heat island mitigation, soil unsealing, etc.)	VINCI Construction VINCI Energies Cobra IS	Own activities Short term	Employees, subcontractors, temporary staff Subcontractors Public authorities Customers Local communities and residents Investors

2.2.2 Climate strategy (policy, objectives and action plan)

Acting for the climate requires a transformation of the Group's activities by optimising its energy consumption and promoting widespread use of renewables to reduce its dependence on fossil fuels. This also means rethinking the way its projects are conceived and designed so as to develop more resilient, low-carbon and energy-efficient buildings and infrastructure. In addition, new solutions need to be created that will transform mobility, housing and lifestyles to help its customers and end users reduce their carbon footprint.

A detailed description of VINCI's environmental ambition is accessible to all its stakeholders on the Group's website. It addresses the impacts, risks and opportunities (IROs) presented in paragraph 2.2.1, "Identification of material impacts, risks and opportunities", page XXX. VINCI's deployment of its climate strategy, whether with regard to mitigation or adaptation, is not limited by resource availability.

2.2.2.1 Climate change mitigation and energy

Transition plan

Since 2007, VINCI has maintained a proactive approach to reducing and monitoring its greenhouse gas (GHG) emissions, in line with the "Accelerate the environmental transition" commitment from its Manifesto. This approach, which applies to all greenhouse gases covered by the Kyoto Protocol (see paragraph 5.3.3, "Greenhouse gas emissions reduction plan and performance", of the methodology note, page 274), is fully aligned with the Group's growth strategy, which involves investing in the energy sector, especially renewables (see "The Group's business model" in the institutional section of this Universal Registration Document, pages XXX and XXX, and section 1, "General information", of this Sustainability report, pages XXX to XXX). With the vote to adopt VINCI's environmental strategy at the Shareholders' General Meeting of 8 April 2021, the Group further strengthened its engagement. The Board of Directors will review the climate transition plan and progress made annually, at the same time it validates the Group's Sustainability report. The effective implementation of the transition plan hinges on the engagement of VINCI's Executive Committee, on which the Group's business lines and Environment Department are all represented.

VINCI's strategy to reduce 100% of its greenhouse gas emissions aligns with the Paris Agreement goal to limit global warming to well below 2°C by the end of the century. The Group aims to:

- reduce its direct emissions (Scopes 1 and 2) by 40% by 2030 (from 2018 levels);
- reduce indirect upstream and downstream emissions (Scope 3) by 20% by 2030 (from 2019 levels). This reduction covers all of the emissions categories, upstream and downstream, classified by the GHG Protocol and goes beyond the recommendations of the Science Based Targets initiative (SBTi) by also including emissions from motorway traffic (see paragraph 5.3.3.3, "Scope 3 greenhouse gas emissions", of the methodology note, page 274).

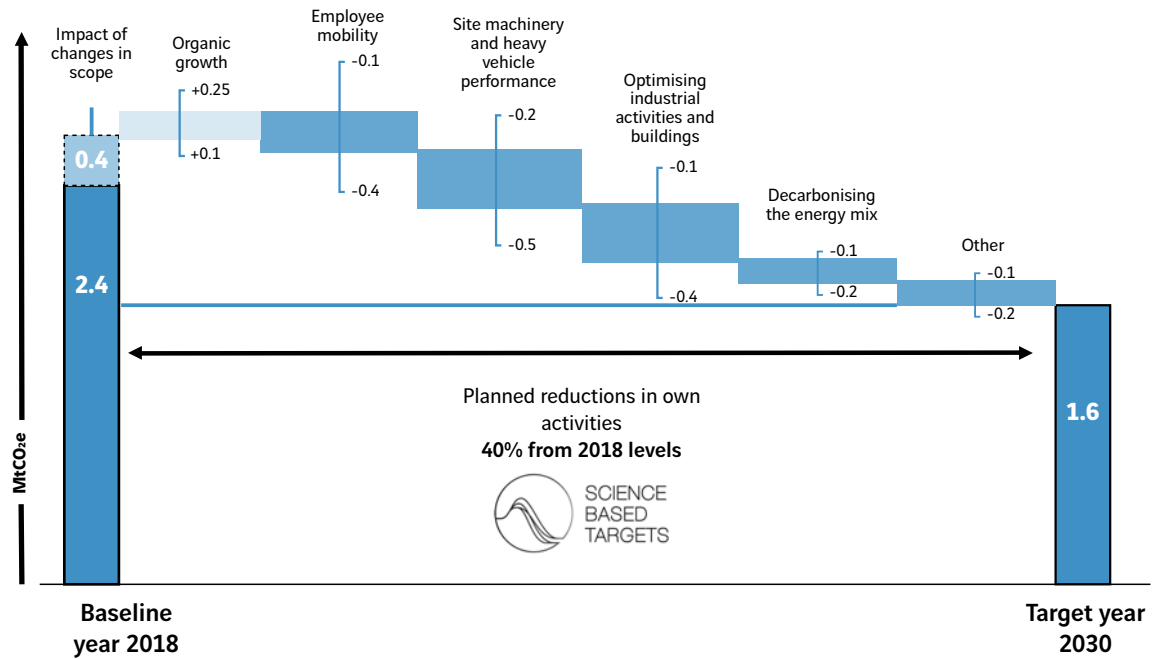
These commitments were certified in February 2022 by the SBTi and align the Group's emissions reduction with the well below 2°C scenario, while guaranteeing its methodological framework. The two baseline years are the most recent periods for which the available data is sufficiently reliable to serve as the basis for target-setting. VINCI's targets correspond to a level of ambition that was approved by the SBTi at the time the Group's commitment was made. As alignment with a 1.5°C scenario is not an obligation and the Paris Agreement does not apply at the level of an individual business organisation, VINCI chose to set ambitious but realistic objectives. In accordance with SBTi guidance, its targets will be revised at least every five years. Moreover, the nature of the Group's activities does not exclude VINCI from Paris-aligned benchmarks.

Each of VINCI's business lines has incorporated the Group's emissions reduction targets into their environmental policies, while adjusting them to address their specific situations. As a minimum, the business lines are aligned with the Group's target of a 40% reduction in emissions for Scopes 1 and 2. Some have chosen to go even further. VINCI Autoroutes aims to reduce its Scope 1 and 2 emissions by 50% over the same period. VINCI Concessions met its previous target of a 50% reduction in 2023 and has therefore raised its target to a 66% reduction in Scope 1 and 2 emissions by 2030, compared with 2018 levels.

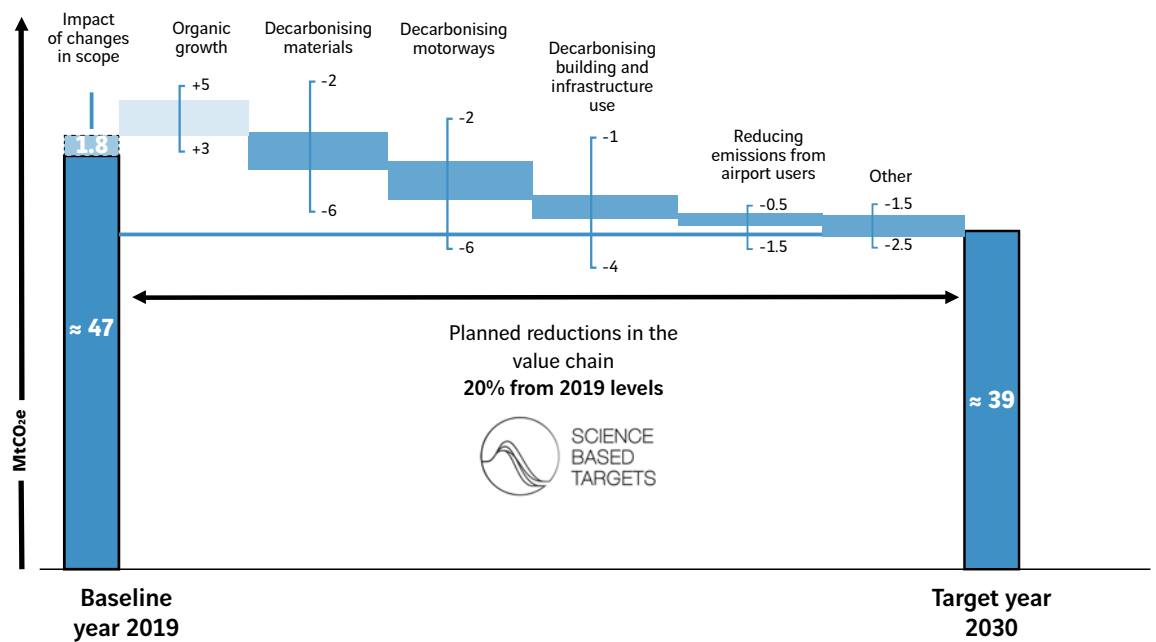
In addition to these absolute targets for 2030, VINCI aims to contribute to global net zero by 2050. However, the Group has not yet set a quantified and certified target for this deadline.

The Group has identified key areas for reducing direct emissions (Scopes 1 and 2) and indirect emissions (Scope 3). In these areas, its own initiatives combine with those of external stakeholders involved in the decarbonisation of its value chain. VINCI strives to accelerate these external efforts and strengthen its role as a driver of the low-carbon transition. Scope 3 emissions reduction will remain largely dependent on external factors, such as the electrification of mobility infrastructure and the decarbonisation of building materials and energy equipment. The Group does not foresee any significant risks, impacts or opportunities resulting from the implementation of the climate transition plan that would affect ecosystem preservation or social issues.

Greenhouse gas emissions reduction levers – Scopes 1 and 2



Greenhouse gas emissions reduction levers – Scope 3



VINCI's approach to its Scope 1, 2 and 3 GHG reduction commitments is focused on achieving impactful results. Although the Group has defined clear targets and time horizons for some key actions and activities, its strategy is a flexible one that allows for adjustments to be made based on operational realities. Its portfolio of initiatives combines effective reduction measures with substitution solutions. The mix aims to maximise total impact while taking into consideration local circumstances and opportunities that are specific to each region.

Scope	Reduction lever	Actions	Benchmark report or sector pathway to 2030
Own operations	Scope 1	Employee mobility – Replace internal combustion engine-powered vehicles with hybrid or electric vehicles – Develop training in eco-driving and carpooling platforms	
Own operations	Scope 1	Site machinery and heavy vehicle performance – Improve energy consumption monitoring – Modernise site machinery as well as operating vehicle and truck fleets – Expand the use of biofuels	
Own operations	Scopes 1 and 2	Optimising energy for industrial activities and buildings – Convert binder plants using oil or coal to lower-carbon energies – Cover aggregate storage – Improve energy consumption monitoring – Energy efficiency of infrastructure	
Own operations	Scope 2	Decarbonising the energy mix – Develop renewable energy production facilities at the Group's sites – Purchase electricity from renewable sources	
Value chain	Scope 3	Decarbonising materials – Drive the widespread use of low-carbon concrete and recycled steel – Practise responsible purchasing	Emissions reduction of at least 20% by cement manufacturers in France ^(*)
Value chain	Scope 3	Decarbonising motorways – Install charge points for light and heavy vehicles at service areas, rest areas and rest stops – Participate in innovation for systems that enable dynamic charging, such as electric road systems (ERS) – Develop carpool parking facilities along the motorway network – Develop infrastructure for access to shared mobility and public transport on motorways	Electrification of 40% of the light vehicle fleet in France ^(**) Electrification of more than 20% of the heavy vehicle fleet in France ^(***)
Value chain	Scope 3	Decarbonising building and infrastructure use – Eco-design buildings and infrastructure – Roll out energy efficiency solutions	Decrease total life-cycle emissions from buildings (RE2020) by 30%
Value chain	Scope 3	Reducing emissions from airport users – Electrify airport ground equipment and auxiliary power units – Adjust airport landing fees based on aircraft CO₂ emissions – Supply sustainable aviation biofuels	

Sources:

^(*) The French National Council for Industry's road map for decarbonising the cement industry (May 2021): "Décarbonation de l'industrie : feuille de route de la filière ciment" (in French only).

^(**) Enedis-RTE report on the electricity needs for long-distance mobility on motorways (July 2021): "Les besoins électriques de la mobilité longue distance sur autoroute" (in French only).

^(***) Multi-company report on the electrification of long-distance heavy goods vehicle mobility (March 2024): "Électrification de la mobilité lourde longue distance" (in French only).

Financial assessment of the transition plan

In 2019, an in-depth analysis was carried out on the measures required to achieve the Group's Scope 1 and 2 reduction targets for its various activities. This exercise mobilised all of the operational entities, which were able to identify the levers for progress and the related investments needed. Detailed action plans, including financial aspects, have been adopted by all the business lines. For example, VINCI Autoroutes' Environmental Ambition plan includes a €61 million budget to cover the transition to LED lighting, building renovation, the installation of EV charge points for employees and coverage of salt piles. The Group has estimated the amount of CapEx required to achieve its climate transition plan to 2030 at several hundred million euros. In 2024, more than €70 million of these investments were Taxonomy-aligned CapEx, mainly associated with activities 7.3 Installation, maintenance and repair of energy efficiency equipment and 7.7 Acquisition and ownership of buildings. Over €100 million of CapEx related to the purchase of electric vehicles is Taxonomy-eligible but not Taxonomy-aligned (activity 6.5). In addition to the investments made to implement the transition plan, the €1.4 billion in Taxonomy-aligned CapEx at end-2024 (see paragraph 2.1.1.3, "Eligibility and alignment of VINCI's CapEx", page 200) attests to the positive impact of the Group's activities, in particular on customer worksites for renewable energy production infrastructure, electricity transmission and distribution or rail infrastructure. This CapEx is mainly funded by the own resources of the Group's business lines. The reduction actions set out in the climate transition plan do not require significant commitments with respect to operating expenses at VINCI level.

VINCI Construction is continuing to roll out its carbon emissions management tool, NExT, to formulate specific action plans for each company, estimating both the financial advantages and emissions reductions. In 2024, this tool covered 70% of the business line's GHG emissions and was used in the annual review of strategic business plans to approve investments.

Meanwhile, VINCI Airports is carefully monitoring the decarbonisation of its infrastructure. Targets are revised annually during the budget process, in particular thanks to the Smart Data Hub systems in place at the airports, which they use to design and implement their own decarbonisation plans. The hub is connected to several smart meters in the network and receives real-time consumption data, enabling real-time monitoring of consumption and prompt notifications of any irregularity. Smart meters were installed in 2024 at Las Américas airport near Santo Domingo in the Dominican Republic and Belgrade airport in Serbia.

In 2024, 31 airports had a long-term business plan to include several environmental criteria, such as climate resilience, changes in CO₂ equivalent emissions (Scopes 1, 2 and 3), and sustainable investments.

VINCI Energies annually invites each company to present its shared three-to-five year strategic plan. At this time, the environmental strategy and decarbonisation plan, along with ongoing or planned initiatives, are closely examined.

Locked-in emissions

VINCI has estimated its locked-in emissions, their impact on its transition plan, and the achievement of its reduction targets. Locked-in emissions are measured by estimating future GHG emissions resulting from the use of assets (such as infrastructure and production facilities) or long-life products over their life span. The Group has identified two types of material assets, namely, motorway infrastructure and airports, with a high net carrying amount in the Group's financial statements (see the consolidated financial statements, page 316) that lock in emissions. These are key assets that are in use or firmly planned (those that the company is very likely to deploy in the next five years) and that lock in a significant amount of GHG emissions during their operational life. With its motorway decarbonisation plan and Net Zero 2050 pathway for airports (described under "Actions to reduce emissions in the value chain", in paragraph 2.2.2.1, "Climate change mitigation and energy", page 209). VINCI is ensuring that these assets do not impede the achievement of its reduction targets. The achievement of the net zero target set by VINCI Airports is certified separately for each airport by Airport Carbon Accreditation (ACA), the global carbon management certification programme for airports. VINCI has analysed the potential transition risks associated with its locked-in emissions and did not identify any material impacts at Group level.

The Group's GHG emissions are monitored in paragraphs 2.2.3.2, "GHG emissions", page 216, and 2.2.3.3, "Progress against emissions reduction targets – Scopes 1 and 2", pages 217 to 218.

Actions to reduce emissions from own operations

In 2024, the Group continued to implement action plans to reduce its direct emissions in four priority areas:

- VINCI employee mobility;
- site machinery and heavy vehicle performance;
- optimising energy for industrial activities and buildings;
- decarbonising the energy mix.

VINCI employee mobility

Proportion of the vehicle fleet for activities in France converted to low-emission vehicles

2022: 8%

2024: 21%

2030: 50%

With a worldwide fleet of over 80,000 passenger and utility vehicles, fuel consumption relating to the use of vehicles by VINCI employees is a significant source of GHG emissions for the Group. Reducing these emissions requires studying relevant, locally available travel solutions, as well as transitioning the vehicle fleet and travel policy. The actions taken range from optimising journeys and kilometres travelled to the use of low-emission vehicles, awareness initiatives and training in eco-driving practices.

More and more light and utility vehicle fleets are being replaced with electric or other alternative energy vehicles. In 2024, 44% of new vehicle orders in France were for low-emission vehicles. At 31 December 2024, VINCI's fleet in France comprised more than 20% all-electric and plug-in hybrid vehicles. By 2030, the Group plans to have converted more than 50% of its fleet to electric vehicles.

VINCI takes action to encourage its employees to use non-motorised forms of transport. Cobra IS has a car-sharing programme in Mexico and Colombia for vehicles used by employees to travel between their homes, sites and temporary accommodation. VINCI Construction has trained over 60% of its employees in eco-driving and is teaching operators about reducing idle times worldwide through Energic challenges and 15-minute environment sessions. At VINCI Energies, 1,960 employees were trained in eco-driving in 2024 and 4,900 EV charge points were deployed internally across its fixed sites to facilitate electric mobility.

Site machinery and heavy vehicle performance

The consumption of energy relating to the use of site machinery and heavy vehicles is a major source of Scope 1 and 2 emissions for VINCI, representing over 30% of total emissions. To reduce the corresponding emissions, VINCI entities are working with their suppliers to take action in three key areas: monitoring consumption in real time, providing training for operators and modernising their fleets. To monitor its consumption, VINCI Construction continues to roll out e-Track, which captures data for machines, trucks and utility vehicles fitted with telematics systems, with a view to optimising their use and therefore their energy consumption. This tool was operational for close to 70% of the VINCI Construction fleet in 2024. Sogea-Satrom (Europe Africa Division) has begun to monitor consumption for each of its vehicles. An alert is triggered if consumption significantly exceeds a defined ratio.

VINCI is also investing in modernising its fleet of machines and trucks. Although the large-scale electrification of construction vehicles remains limited, due to a lack of technical solutions, testing is ongoing. Océlian, a VINCI Construction subsidiary, has collaborated with Naviwatt to fully electrify the *Bélénos*, a catamaran equipped with a conveyor belt that plies the Seine to remove rubbish. In July 2024, VINCI Autoroutes (ASF) inaugurated its first retrofitted van patrolling the ASF network. Its partnership with a retrofit specialist is in keeping with the new agreement signed between the French government and automotive industry players, which identifies retrofitting as a key step in reaching national decarbonisation goals. Biofuels are being used more widely and accounted for 3% of the Group's total energy consumption in 2024 (see paragraph 2.2.3, "Performance monitoring", page 215).

Optimising energy for industrial activities and buildings

Reduction of energy consumption by asphalt plants, in kWh/tonne of asphalt produced

2018: 82

2024: 82

2030: 70

Due to the industrial nature of their business, VINCI Construction entities account for more than 20% of the Group's total energy consumption. Since 2016, the Road France Division of VINCI Construction has developed and implemented its environment strategy, with ambitious energy efficiency targets for each business segment. In 2024, VINCI Construction's industrial facilities continued to reduce their energy consumption in France, where consumption of asphalt plants stood at 75 kWh/tonne of asphalt produced. Respectively, 56% and 44% of plants had covered storage facilities for asphalt pavement and sand, 56% of plants had switched to electric-powered binder equipment systems, and more than 60% had gone from coal or oil burners to natural gas burners. In parallel, the Edrive digital tool was rolled out at more than 60% of VINCI Construction's industrial facilities, enabling sites to monitor reductions in energy consumption and CO₂ emissions in real time.

All of the Group's entities are committed to reducing energy consumption levels for their buildings. In line with the energy sufficiency plan adopted by VINCI in 2022, new initiatives were taken in 2024. VINCI Construction launched an energy performance assessment of all of its buildings in France, with the aim of extending energy improvement measures to a larger number of sites. In addition, targeted investments were made to convert the Group's biggest emitters to less carbon-intensive energy sources. VINCI Concessions is gradually replacing its gas- and oil-fired boilers with heat pumps and installing solar farms to expand self-consumption. Likewise, in Australia, VINCI Construction is installing solar hybrid generators for its Western Distributor Smart Motorway (WDSM) project. VINCI's business lines are also taking local energy efficiency initiatives, such as the implementation of strict rules for heating and air conditioning by VINCI Airports and VINCI Energies. These initiatives are monitored at VINCI Airports using smart metering systems and supplemented with the continuation of LED relighting. The replacement rate was 72% at end-2024.

Decarbonising the energy mix

In addition to reducing their energy consumption, several entities have taken steps to decarbonise the energy they use. The Group is prioritising the installation of renewable energy systems for self-consumption, power purchase agreements (PPAs), renewable energy supply contracts and, as a last resort, purchases of guarantee of origin certificates. Some Group entities are also expanding the use of biofuels, especially in construction.

Self-consumption of renewable energy is growing at VINCI Autoroutes. Solar canopies have been in service at the Vedène site since February 2024 that can produce the equivalent of 12% of the site's energy consumption. Following the first installation, more canopies will soon be deployed at additional sites in the VINCI network. In 2024, VINCI Concessions also continued to increase solar power generation to decarbonise its electricity consumption. Several solar farms were built or are under construction, for an installed capacity of more than 80 MWp at end-2024.

Actions to reduce emissions in the value chain

In 2024, the Group continued to implement action plans to reduce its indirect emissions in priority areas:

- decarbonising materials;
- decarbonising building and infrastructure use;
- decarbonising motorways;
- reducing emissions from airport users.

Decarbonising materials

Low-carbon concrete and recycled steel

Use of low-carbon concrete at VINCI Construction

2023: 20%

2024: 29%

2030: 90%

In 2020, VINCI Construction, which accounts for around 90% of Group emissions relating to concrete purchases, adopted a target for 90% of the concrete used to comply with a low-carbon standard by 2030, covering all the quantities for which this type of solution is technically and economically viable (see "Overview of the main commitments by business line", page 197). VINCI Construction is accelerating the rollout of its low-carbon, very-low-carbon and ultra-low-carbon Exegy® solutions, which reduce CO₂ emissions by up to 70% while delivering the same or better resistance and durability compared to conventional concrete. In 2024, 29% (20% in 2023) of the total concrete used by VINCI Construction, and 60% of that used in France (Building France and Civil Engineering France divisions), was low-carbon concrete. This trend is growing stronger both in France and abroad, particularly in Poland, Latin America and Asia. The use of these solutions is made possible as more partnerships are formed with ready-mix concrete producers, providing all worksites with easy access to low-carbon concrete. Also contributing to this is the increasing use of e-béton on projects. This tool for digitalising the concrete process and improving carbon traceability was designed as part of the intrapreneurship programme offered through Leonard, VINCI's innovation and foresight platform.

Several emblematic VINCI worksites in 2024 illustrated the progress made, such as the Nantes university hospital complex, where 90% of the concrete used was low-carbon. The Toulouse metro (VINCI Construction) was built with a cutting-edge Exegy® Very Low Carbon formula containing metakaolin.

VINCI Construction is also working with its suppliers and customers to use recycled steel on a large scale in its buildings and structures, such as the transformation of the Musée National des Arts et Traditions Populaires in Paris to become the Maison LVMH – Arts, Talents, Patrimoine, a new cultural institution (Building France Division). Recycled steel accounted for 30% of steel consumed by the Group in 2024 (see paragraph 2.3.3, "Performance monitoring", page 224).

The Road France Division of VINCI Construction is also working to limit the impacts linked to the transport of these materials through actions in several areas: optimising the distances travelled, ensuring the widespread adoption of covered trucks, investment in internal B100 refuelling systems, setting up two-way freight flows more systematically between production sites, and transforming materials and works procedures. An initiative is also under way with transport providers to promote the use of more efficient, less polluting means of transport.

Responsible purchasing

The Group is working to reduce emissions associated with its purchases, by setting up selection criteria and responsible purchasing processes. These actions are presented in detail in paragraph 3.2.2.1. "Human rights and health and safety issues for purchasing and subcontracting", page 256. Some VINCI Construction divisions are collaborating with their main suppliers on reporting the carbon impact of their concrete and steel purchases, while VINCI Energies is working with its key suppliers to define responsible purchasing criteria.

Decarbonising building and infrastructure use

Eco-design

Eco-design involves the re-engineering of construction processes to limit the quantities of materials required or to use materials with lower emissions or recycled components. At VINCI Construction's Major Projects Division, the Environment in Design (EiD) approach takes account of environmental issues right from the initial design phase (see paragraph 2.3.2.1, "Promoting the use of construction techniques and materials that economise on natural resources", page 219). In 2024, the EiD approach was applied for several projects. For the Crédit Agricole bank in Montauban, a locally manufactured, cradle-to-cradle certified and 100% infinitely recyclable insulating material was used.

The Group offers a wide range of sustainable products and materials to its customers. Before these solutions can be made available, impact studies must be carried out to obtain tangible evidence of their environmental benefits. For example, VINCI Construction is continuing its life cycle assessments of several of its products, including high-percentage recycled roads and Power Road® technology.

To inform its eco-design choices and select the products that are best suited to customer needs, the Group also uses various tools to quantify greenhouse gas emissions. The e-CO₂NCERNED carbon assessment tool was developed for use across the Group, but several other tools are also available to operational staff and their customers. VINCI Construction's E+C- (positive-energy and low-carbon) calculator aims to assess a project's compatibility against this label's criteria. VINCI Energies has developed ECO₂VE to guide the creation of low-carbon alternatives.

In keeping with these actions, VINCI Immobilier has officially discontinued the installation of gas-fired heating and hot water systems in its development projects and will now systematically include a low-carbon concrete alternative when bidding on contracts. To contribute to the decarbonisation of energy and development of renewable energy, VINCI Immobilier made it mandatory for all new residential property developments to carry out a preliminary assessment of the programme's solar power potential.

VINCI Airports has also incorporated environmental and social clauses into its projects in the design or construction phase and requires that an environmental label be obtained (e.g. BREEAM®, LEED®, NF HQE™, etc.).

Rollout of energy efficiency solutions

For many years, VINCI has contributed to the decarbonisation of buildings and infrastructure through VINCI Construction France and VINCI Immobilier, which are both active in implementing the French RE2020 environmental regulation. The regulation aims to reduce the environmental impact of buildings, taking into account their energy consumption and carbon footprint throughout their life cycle, from construction to demolition, spanning 50 years. In this context, VINCI Construction's Functional Structures delegations systematically include life cycle assessment (LCA) in calls for tenders for projects covered by RE2020.

Improving the environmental performance of buildings also means implementing solutions to optimise energy usage. In 2024, the VINCI Group's revenue from the installation, maintenance and repair of equipment to increase energy efficiency was €1.6 billion (see paragraph 2.1.1.1, "Eligibility and alignment of VINCI's revenue", page 198). For example, VINCI Energies developed P2C software to optimise building maintenance and improve energy efficiency. The Wave platform has been rolled out at all of VINCI Energies' sites in France and many of its customers' properties, enabling the centralised and simultaneous management of multiple sources of energy consumption. The artificial intelligence of WiseBMS can predict indoor temperature changes based on outside conditions, by analysing a building's thermal behaviour. Up to 40% of energy can be saved on heating and air conditioning, with no trade-off of user comfort.

In their role as integrators, VINCI Energies and Cobra IS are helping to drive the deployment of technologies to support their customers in moving forward with their energy transition. In France, business units under VINCI Energies' Citeos brand managed 110 comprehensive performance contracts in 2024. As an example, under the 12-year contract awarded by the town council of Moulins in central France, savings of 74% are expected by the third year, notably by replacing public lighting and all traffic lights with supervision at intersections. In 2024, Sice, a Cobra IS subsidiary, led an energy services company (ESCO) project involving energy performance contracts that will enable energy savings of over 80% compared to current consumption levels, representing 1,063,399 kWh saved per year. In addition, ImesAPI, another Cobra IS subsidiary, installed 1,800 LED bulbs in Madrid and won a contract to renovate Barcelona's public lighting.

Decarbonising motorways

Share of VINCI Autoroutes service areas equipped with EV charge points

2022: 69%

2024: 100%

2030: 100%

In 2021, VINCI Autoroutes and the consultancy Altermind developed a model of realistic solutions for decarbonising motorways in France, which was the subject of the report "Décarboner l'autoroute : une urgence écologique" (Decarbonising motorways: an ecological emergency). They estimated the required investment for the transformation plan at €6 billion for 1,000 km and emphasised the need for all mobility stakeholders to work together to achieve it. In 2023, François Gemenne, Professor at HEC Paris and the University of Liège and a lead author for the IPCC, Patrice Geoffron, Professor of Economics at Université Paris Dauphine, and Géraud Guibert, Chairman of La Fabrique Écologique, launched the Alliance pour la Décarbonation de la Route (Alliance for Road Decarbonisation) to bring together a range of actors focused on the need to decarbonise road transport, including academic researchers, local authorities, non-profits and businesses, to design and implement effective solutions in this area. For the next ten years, VINCI Autoroutes will focus its efforts on the following priorities:

- promoting shared mobility, requiring a coherent response to drivers' needs for carpool parking facilities, multimodal transport hubs and reserved lanes;
- providing electric vehicle charging stations to support France's transition toward a 100% electric fleet of light and heavy vehicles;
- producing renewable energy by installing solar farms and canopies to meet the charging needs of light vehicles travelling on the network by 2030 (see "Supporting the transition to a low-carbon economy", page 211).

In 2024, VINCI Autoroutes had more than 2,100 EV charge points in its network, of which 75% are ultra-fast chargers. Mobile EV charging stations have been tested to supplement charging station capacity to handle any high traffic peaks. The first Dyneff hydrogen station opened on the A61 motorway, as part of the Corridor H2 project led by France's Occitanie region.

VINCI Autoroutes is also committed to developing carpooling and public transport on motorways. A programme is under way to develop carpool parking facilities at motorway entrances and exits: 59 car parks were in service at the end of 2024.

Currently, there is no consensus on any technological options to decarbonise freight transport and therefore heavy vehicles. However, the development of electric heavy vehicles is gathering pace. To contribute to this aim, VINCI Autoroutes created the subsidiary Voltix to roll out charging stations for electric heavy vehicles along major roads and in logistics hubs. The goal is to build a leader in the electrification of road freight transport. VINCI Autoroutes is also leading the "Charge As You Drive" consortium made up of VINCI Construction, Gustave Eiffel University, Hutchinson, two technology suppliers and Cerema. Since end-2024, the consortium has been testing two wireless charging solutions for electric heavy vehicles in real conditions on the A10 motorway. The first solution uses electromagnetic induction technology and the second conductive charging with a central rail.

Reducing emissions from airport users

In 2024, VINCI Airports invested more than €30 million in CapEx to implement the emissions reduction plan at its airports.

To reduce the impacts relating to air traffic, which is the primary source of indirect emissions for VINCI Airports, a system to adjust landing fees based on aircraft CO₂ emissions was introduced at some airports in 2020, to accelerate fleet renewal. Already up and running in all of France's regional airports, as well as Lyon-Saint Exupéry and London Gatwick airports, the system was being developed in 2024 in the ANA airports in Portugal and in Manaus airport in Brazil, for implementation in 2025. Similar schemes will be developed in 2025 for Belgrade airport in Serbia, Edinburgh airport in the United Kingdom, Budapest airport in Hungary, and the six airports in the Dominican Republic. The goal is to apply the system at all airports in the network.

VINCI Airports is leading several innovative projects to reduce emissions generated by the use of auxiliary power units (APUs) by installing equipment on the apron to supply electricity (400 Hz) and preconditioned air (PCA). APUs run on kerosene and release CO₂ and other combustion gases. Supplying electrical power to parked aircraft allows pilots to limit their use of APUs and reduce the associated emissions. These initiatives, which involve the airports in Nantes and in Lyon and several airports in Portugal, among others, reduce the CO₂ emissions of aircraft on the ground. In addition, they were co-funded with a European grant awarded through the Alternative Fuel Infrastructure Facility (AFIF) call for decarbonisation projects.

VINCI Airports also encourages airlines to use sustainable aviation fuels (SAFs), which have already been tested at several airports, including the ANA airports in Portugal and London Gatwick airport. At Saint-Nazaire Montoir airport, a partnership was signed with TotalEnergies to provide biofuel made with used cooking oils. Airbus will use this biofuel, which enables a 27% reduction in overall emissions, to refuel its cargo planes and the internal shuttles that run between its production plant in Saint-Nazaire and its assembly lines in Toulouse. The use of SAFs is encouraged at Lyon-Saint Exupéry airport, which also offers free storage.

Other initiatives are also being taken to reduce aircraft emissions. For example, the "Monitoring Aircraft Carbon Footprint" initiative developed by ANA (Portugal) measures carbon emissions during taxiing in real time. Cobra Serpista is carrying out the project to electrify 80% of Iberia's airport equipment (mainly baggage conveyor belts) in Spain, thereby working towards the airline's commitment to achieve net zero for its operations by 2025. The project also supports the circular economy, by reusing around 800 tonnes of components.

VINCI Airports is the number-one international contributor to the Airport Carbon Accreditation (ACA) programme of Airports Council International (ACI), with 53 accredited airports, including four at the topmost level, ACA Level 5 (in France and Portugal). ACA is the only global carbon management certification programme for airports that has been endorsed by international institutions.

Supporting the transition to a low-carbon economy

Low-carbon energy production infrastructure

Renewable energy generation capacity in operation or under construction by Cobra IS

2023: 2 GWp

2024: 3.5 GWp

2030: ≥ 12 GWp

VINCI's acquisition of Cobra IS in December 2021 has developed the Group's expertise in the renewable energy market, in both solar and wind power. At the end of 2024, Cobra IS had a renewable energy production portfolio totalling 3.5 GW, including assets in operation and/or under construction. The company has set the ambitious target to achieve at least 12 GW by 2030. Cobra IS is highly active in Brazil, where 80% of its generation capacity is installed. It also has solar farms under construction in Spain and the United States. Part of Cobra IS's business is the sale of electricity from renewable sources, mainly through the company Eleia, which sells 200 GWh of green energy in Spain every year.

Cobra IS also builds solar power plants for third parties. In Spain, 16 such projects are under way for Galp. Once completed, the facilities will produce around 2.5 TWh of renewable energy per year, representing the annual consumption of 575,000 homes. Cymi is completing the construction and commissioning of a solar photovoltaic plant that will supply renewable energy to Adolfo Suárez Madrid-Barajas airport, with a total installed capacity of 9.2 MW. Once completed, the plant will cover 16% of the annual consumption of terminals T1, T2 and T3.

VINCI Construction companies are directly involved in building wind farms and storage systems, while more than 50 VINCI Energies companies specialise in delivering solar photovoltaic solutions. At the end of 2024, Omexom (VINCI Energies) participated in installing more than 4 GW of solar power generation capacity.

To put the Group's land to good use, VINCI Autoroutes installs solar panels on otherwise unused areas along motorways or at any other site, through the Solarvia brand it launched in 2021. The energy produced is directly reinjected into the power grid. In 2024, Solarvia used

its expertise in the various solar technologies, ranging from ground-mounted panels to floating farms and solar canopies, to develop more than 420 MWp of solar projects throughout France. VINCI Concessions aims to install 1.2 GWp of renewable energy across its network. SunMind, a VINCI Concessions subsidiary specialising in the development of solar photovoltaic plants and energy storage, has a development portfolio of about 1.4 GWp of solar capacity and 1 GWh of battery energy storage systems (BESS). It operates in France, Portugal, the United Kingdom, the Dominican Republic and Northern Europe. In 2024, SunMind installed 18.5 MWp of solar capacity and generated 5.3 GWh of energy.

Developing low-carbon mobility

In the area of electric mobility, Easy Charge, the joint venture formed between VINCI Autoroutes and VINCI Energies, showed strong business growth in 2024. As a charging station operator, the company manages 6,500 charge points in France with the Fonds de Modernisation Écologique des Transports. As an infrastructure designer, builder and maintenance provider, Easy Charge built the first ultra-fast charging station for Zunder in France, with 12 charge points. It also maintains Ionity's 120 charging stations in France and oversees the eborn network covering more than 2,600 fast charge points.

VINCI Concessions continues to install new charge points, with more than 1,000 chargers deployed throughout the network, of which almost 800 at VINCI Airports, for users, employees and other stakeholders. The VINCI Concessions subsidiary Eliso was awarded three contracts from the Deutschlandnetz Regional programme to install and operate 106 charging stations (828 charge points with a power rating of 400 kW) in the Berlin, Hamburg and Leipzig areas. To date, Germany's federal government has validated the compliance of 58% of these projects (62 stations and 436 charge points) with contractual obligations, and 24 charge points had been installed at the end of 2024.

VINCI Energies continues to deploy its Too Electric solution to develop, supply, install and maintain charging infrastructure while providing guidance for its customers. At the end of 2024, it covered 11,000 EV charge points. Since the beginning of 2024, the Citeos network has installed more than 1,000 super chargers and managed nearly 12,000 EV charge points as at end-2024. In Australia, VINCI Energies Industrial Services carried out preparatory work in 2023 to install fast and slow charging sites for the Brisbane metro project, which will use fully electric vehicles. Major construction work will begin in 2025. It will involve doubling and realigning rails and modernising parking facilities and signalling systems. Several viaducts will be built or renovated. In 2024, the Etra subsidiary of Cobra IS renewed its contract with EMT, Madrid's city bus operator, to commission 150 charge points for buses.

Energy renovation

Energy renovation for existing buildings is a key enabler for decarbonising the construction industry and is a fast-growing market. In 2024, VINCI's renovation activities generated €2.4 billion of revenue, up from €2.2 billion in 2023. VINCI Construction continues to roll out its Rehaskeen® system for thermal building renovation using prefabricated insulation panels. In 2024, these panels were installed on Cité Rose housing units in Ramonville-Saint-Agne near Toulouse and on two residential building facades in Sens.

Developing the use of hydrogen

VINCI delivers a wide range of solutions to meet needs associated with the various uses of hydrogen. To begin with, the Group is an active player in hydrogen production infrastructure design. The Hyfinity business unit (VINCI Construction) specialises in low-carbon hydrogen engineering, procurement and construction (EPC) projects. VINCI Construction is also a shareholder of Genvia, which develops high-performance electrolyzers to produce low-carbon hydrogen. Actemium (VINCI Energies) is supporting the company in its plans to industrialise these electrolyzers. Meanwhile, France Ingénierie Process-FIP (VINCI Energies) has teamed up with the HysetCo project to build Europe's largest hydrogen production and distribution station. In addition, VINCI Energies will build 26 new hydrogen stations for Hype in the Greater Paris area. Cobra IS received €150 million from the Spanish government in 2024 for a project to develop a complete green hydrogen supply chain in Spain, encompassing hydrogen production, storage, transportation and distribution.

VINCI is also participating in transforming infrastructure for hydrogen use, such as creating refuelling stations for hydrogen-powered aircraft or heavy vehicles.

To prepare for the eventual commercial use of hydrogen-powered aircraft, VINCI Airports began a partnership with Airbus and Air Liquide in 2021 to develop the use of hydrogen at airports. In 2024, VINCI Airports launched an aviation hydrogen handling and refuelling project, led by Airbus and supported by many stakeholders. VINCI Airports is preparing to demonstrate liquid hydrogen aircraft ground operations, for example at Lyon Saint-Exupéry airport in France. Meanwhile, this airport is also working to develop a hydrogen ecosystem, as part of the IMAGHyNE project, which has obtained support from the European Commission through the Clean Hydrogen Partnership. In the summer of 2023, VINCI Autoroutes (ASF) commissioned the first Dyneff station in France, designed by the French hydrogen production equipment specialist McPhy, at the Toulouse Sud service area. It produces hydrogen locally, through the electrolysis of water, using electricity from renewable sources. This green hydrogen can power any fuel cell electric vehicle. Through its Cardhin project, Cobra IS is developing a dynamic inductive charging system that uses hydrogen and can recharge heavy vehicles in motion.

Lastly, VINCI is a leading advocate of hydrogen energy, wearing multiple hats as an investor, a strategic partner and an active member of clubs dedicated to this technology of the future. VINCI Concessions has invested €100 million in the Clean Hydrogen Infrastructure Fund, of which it is a co-founder. The private investment fund is the world's largest dedicated to hydrogen. It has invested in eight projects providing the various infrastructure and technology needed to scale up the hydrogen economy: Hy2Gen, H2 Mobility, Enagás Renewable, Everfuel, Elyse Energy, InterContinental Energy, H2 Green Steel and HysetCo. In 2024, VINCI Energies also set up a Hydrogen Club in Germany to facilitate discussion among its various divisions on the global hydrogen market, new hydrogen technologies, best practices for safety, and the development of hydrogen energy-related products and services.

Electrification projects

VINCI Energies and Cobra IS support projects to electrify infrastructure. In 2024, Group revenue from the transportation and distribution of electricity was €5.8 billion (versus €5.6 billion in 2023). In 2025, Cobra IS plans to finalise the public-private partnership for the construction and operation of several 500 kV and 330 kV transmission lines and associated substations and connections to renewable energy parks in one of Australia's first renewable energy zones (REZs), in the Orana region of New South Wales. Cobra IS is also participating in the construction and operation of electricity transmission lines in Buriti, Brazil, by building 297 km of 500 kV lines and expanding two existing substations.

In September 2024, in the port of Gothenburg, in Sweden, VINCI Energies inaugurated the first pilot project involving an onshore power supply (OPS) installed in an explosive atmosphere. Previously used only for passenger boats, an OPS can now also serve cargo ships transporting fuel. The OPS technology provides quayside vessels with electrical shore power, allowing them to shut down their diesel engines. These systems are an effective way of ensuring safety in an explosive atmosphere. The technology also enables tanker trucks to safely connect to an electrical power supply.

Carbon offsetting projects

The Net Zero Initiative framework, developed by the consulting firm Carbone 4, specifies three ways companies can contribute to global net zero: reducing their own emissions, reducing their customers' emissions and contributing to the development of carbon sinks. In anticipation of requests, some VINCI companies have gotten involved in the creation of carbon sinks that customers can use as a complement to measures they take to reduce emissions.

As a result, carbon credits are used to offset and/or sequester VINCI Airports' residual emissions as part of its Airport Carbon Accreditation (ACA) programme and zero net emissions target for 2050. This requires a 90% reduction in Scope 1 and 2 emissions and a net zero commitment for Scope 3 emissions by 2050. Some specific VINCI Energies projects also involved the use of offsetting mechanisms in 2024. Most of these credits come from reforestation projects as well as contributions to hydropower and energy efficiency projects.

At the end of 2024, the carbon credits generated and used by VINCI companies were as follows:

	Owned before 2024			Added in 2024			Cancelled/used in 2024			Total owned at 2024 year-end				
	Total in ktCO ₂ e	of which % certified to recognised quality standards ^(*)	of which % related to projects in EU	Total in ktCO ₂ e	of which % certified to recognised quality standards ^(*)	of which % related to projects in EU	Total in ktCO ₂ e	of which % certified to recognised quality standards ^(*)	of which % related to projects in EU	Total in ktCO ₂ e	of which % certified to recognised quality standards ^(*)	of which % related to projects in EU	of which use planned before 2030	of which use planned after 2030
Forest restoration	7.3	100%	100%	14.8	100%	22%	11.6	100%	0%	10.6	100%	100%	3.4	7.2
Other projects				7.2	100%	0%	7.2	100%	0%					
Removals Direct operations	7.3	100%	100%	22.0	100%	0%	18.8	100%	0%	10.6	100%	69%	3.4	7.2
Forest restoration	2.1	100%	100%	0.2	100%	0%	0.2	100%	0%	2.1	100%	100%		2.1
Other projects				17.1	6%	0%	17.1	6%	0%					
Removals Value chain	2.1	100%	100%	17.3	6%	0%	17.2	6%	0%	2.1	100%	100%	0	2.1

(*) Gold Standard, Verra, MDP, REDD+, Label Bas Carbone.

The credits aimed at reducing the residual emissions of VINCI Airports, purchased before 2024, were mainly through investments by the Lyon airports in two reforestation projects in 2021 and 2022 certified by Label Bas Carbone (Cantinière and Pyramide). Toulon Hyères airport also launched a Label Bas Carbone project to restore part of the forest of Le Lavandou, 20 km away, which was damaged by a fire in 2017. The goal is to sequester 48 tonnes of CO₂ equivalent emissions and support the preservation of nature in the region, working with Région Sud, the French National Forest Office (ONF), the Méditerranée-Portes-des-Maures group of municipalities, and the seaside village of Le Lavandou. In addition, VINCI Airports invested in an agricultural transition project certified by Label Bas Carbone in 2024 for the sequestration and reduction of its future residual emissions.

Outside France, in 2024 several entities participated in reforestation projects to offset or sequester their residual emissions. For example, the ANA airports in Portugal invested in a hydropower project in India.

Several other projects, aimed at reducing the emissions of VINCI Airports users, have been initiated to protect a total of 150 hectares in France in partnership with Néosylva. At the end of 2024, 45 hectares of forest land was restored in Brittany, the Pays de la Loire and the Auvergne-Rhône-Alpes region, and two projects were launched with Alliance Forêt Bois, covering 17.2 hectares in Nouvelle-Aquitaine, to sequester the carbon emissions of MESEA (VINCI Railways). Air travel customers are also given the option to contribute to projects certified by Label Bas Carbone, such as tree-planting in the village of Tauves in the Auvergne, when they book a plane ticket or airport parking.

VINCI's decarbonisation strategy to 2030 does not rely on offsetting mechanisms to achieve its reduction targets.

2.2.2.2 Climate change adaptation

Adaptation policy and objectives

Climate change has direct consequences for the Group's businesses and its employees, such as worksite staff (see paragraph 3.1.3.2, "Health and safety: by everyone, for everyone", page 245). The growing intensity of extreme weather events is affecting all Group businesses. Extreme weather can threaten business continuity at infrastructure concessions. In other activities, it also exposes workers to risks, especially during the works phase, and affects the structures being built by the Group. At the same time, extreme weather risks also create opportunities for climate change adaptation work, such as building sea walls and dams and repairing power lines.

The Group is implementing an adaptation policy to increase its resilience to climate change. Its three main goals are as follows:

- adapt the Group’s infrastructure under concession to contend with extreme weather events;
- strengthen the resilience of structures built for customers;
- develop adaptation solutions for Group customers.

The adaptation policy relies on several essential measures to meet these goals:

- performing vulnerability analyses and implementing adaptation plans for concession assets;
- taking action to increase the resilience of structures;
- developing expertise in improving a region’s resilience.

Adaptation actions

Actions to adapt infrastructure under concession

VINCI Concessions and VINCI Autoroutes continue to perform vulnerability analyses on their sites under concession. The findings are used to develop and implement tailored adaptation plans, with the input of the relevant technical teams. At VINCI Airports, this analysis is factored into the airports’ long-term business plans, along with Scope 1, 2 and 3 CO₂ equivalent emissions and the investments needed to successfully implement the decarbonisation strategy (AirPact). This approach will be applied by the entire VINCI Concessions network in 2025. Since the creation of ResiLens, VINCI Concessions’ new development projects systematically undergo a preliminary vulnerability analysis before being subjected to a more in-depth examination if necessary.

VINCI Autoroutes focuses its investments on identified priorities in its network, such as incorporating resilience into the design phase of structures and building adaptations to enable infrastructure to be quickly restored (in particular, underwater locks). In Portugal, ANA conducted an assessment of the vulnerabilities and climate risks affecting Faro airport and then worked with its various stakeholders to develop an action plan to address them. At the same time, it established a plan to track progress made in implementing the action plan and monitor Faro airport’s vulnerability to extreme weather events.

Taxonomy-eligible CapEx committed in 2024 to adapt concessions to climate change was €4 million at the end of the year.

Actions to strengthen the resilience of structures built by the Group

Foresight studies

To better anticipate the risks associated with climate change, VINCI uses the climate resilience and climate change adaptation foresight studies carried out by a Leonard working group that has been active since 2018. The members of the working group represent VINCI’s various activities and are supported by Resalliance, VINCI’s engineering and design office focused on climate resilience that works on adapting projects, cities, regions, infrastructure and their uses to climate change. Since 2008, the VINCI-ParisTech lab recherche environnement (created by a partnership between Mines Paris - PSL, École Nationale des Ponts et Chaussées, and AgroParisTech) has supported some 85 PhD and post-doctoral projects that have contributed scientific knowledge on the adaptation of buildings and infrastructure. This research includes models of the urban micro-climate on surfaces and in the air, with or without green surfaces, and forecasting building temperatures to 2050 and 2100 depending on the type of building: 19th-century Haussmann style, 1960s low-cost housing, recent low-energy apartment blocks, positive-energy buildings. More recently, VINCI’s projects, which provide a testing ground for researchers, have contributed to producing scientific knowledge in areas such as urban heat island effects and life cycle assessment (LCA).

The Resalliance office regularly assesses climate change impacts on specific projects, ranging from property developments to infrastructure management to regional initiatives. Demand for this type of impact assessment rose significantly in 2024. Resalliance and Sixense (VINCI Construction) also operate a number of useful software programmes to determine potential corrosion in reinforced concrete structures, measure the urban heat island effect, predict and visualise flooding in cities and urban areas prone to flooding, and assess the cost of climate change for infrastructure.

Employee awareness

An e-learning module was launched to familiarise employees with the concept of resilience and help them understand the associated challenges for the Group’s activities and its customers’ businesses. To date, 144 employees have completed this module. In addition, 90 people were trained on how to use the ResiLens tool in 2024.

In April 2024, Leonard, VINCI’s innovation and foresight platform, held the seventh Building Beyond festival, on the theme of adapting to climate change. The event spanned three days, each concentrating on a different aspect of adaptation: solidarity within regions, transforming urban design professions, and fighting social inequalities.

Awareness initiatives focusing especially on protecting the health and safety of Group employees while adapting to changing climate risks are described in paragraph 3.1.1.2, “Identification of impacts, risks and opportunities”, page 236.

Climate change adaptation projects

For short-term adaptation, as part of the Group’s construction activities, VINCI companies regularly repair and restore infrastructure and power lines. For example, VINCI Energies entities in France helped restore electricity distribution and telecommunications network lines in Brittany after the windstorms Ciarán and Domingos swept through the region in 2023. In 2024, revenue from the Group’s adaptation projects was €118 million (see paragraph 2.1.1.1, “Eligibility and alignment of VINCI’s revenue”, page 198).

For medium-term adaptation, the Group incorporates eco-design into all its projects to anticipate necessary changes to cities and their energy, communication, transport, water and sewer infrastructure. VINCI makes new and existing structures more resistant to extreme weather events, ensures their long-term resilience and provides innovative construction solutions.

VINCI companies are developing a range of expertise in technical improvements, from strengthening sea walls to limit rising sea levels (more than 50 cm by 2100, as projected by the IPCC) to building flood risk prevention areas, installing lift pumps to drain water, and applying permeable asphalt to absorb water (Drainovia) during heavy rainfall. To cope with high temperatures, construction materials used in equipment are designed to withstand temperatures of 50°C. SMA, Lumi+, Ecolvia Déco and Puma all offer light-coloured asphalt to reduce heat from roads.

VINCI Construction takes part in a growing number of climate adaptation projects (combating urban heat islands, landscaping parks and gardens, soil unsealing, etc.), for example with their new Revilo® integrated offering (see paragraph 2.1.2.1, “Employee engagement”, page 201). In 2024, VINCI Construction carried out several projects to improve the resilience of regions. In the United Kingdom, an area in Plymouth’s Central Park was re-landscaped, using a sustainable drainage system to provide a nature-based solution to flooding and create a space for wildlife (flora and fauna) and people. The project team also installed an innovative Rootlok retaining wall system made

of bags of compost, sand and seeds that grow into vegetation. The design has a life span of 120 years.

For all its new residential property projects, VINCI Immobilier incorporates summer comfort criteria, in anticipation of future temperature increases. The targets go beyond the performance requirements of the French environmental regulation RE2020 (with maximum thresholds at least 20% and 50% lower than regulatory limits, depending on the region). As of the project design stage, bioclimatic principles are applied to incorporate the solutions best adapted to the building's climate. In 2024, VINCI Energies elevated an electrical substation in Australia that had twice been threatened by floods. The project was part of a flood resilience programme to move exposed assets to a level above the 100-year flood index.

Ensuring access to drinking water for the local population is a major concern for climate change adaptation. Tedagua (Cobra IS) inaugurated the Nemmeli desalination plant in India in 2024. It has the capacity to supply drinking water to more than one million people.

2.2.3 Performance monitoring

2.2.3.1 Energy mix

Energy consumption

Energy consumption is a central focus in the environmental action plans defined by VINCI companies, which aim both to reduce the amount of energy they use and use low-carbon energy whenever possible.

Energy mix

(GWh)	31/12/2024	31/12/2023	2024/2023 change
Coal	129	123	+5%
Petrol	692	604	+15%
Diesel	5,553	6,173	-10%
Natural gas	1,560	1,506	+4%
Electricity from fossil sources	699	998	-30%
Heat, steam, refrigeration from fossil sources	5	4	+26%
Other fossil energy	503	493	+2%
LPG	295	240	+23%
Used oil	144	145	-1%
Heavy fuel oil	64	108	-40%
Total fossil energy consumed	9,141	9,901	-8%
% consumption of fossil energy	88%	93%	
Total electricity of nuclear origin	276	n.s.^(*)	
% consumption of nuclear energy	3%		
Biofuels	275	161	+71%
Electricity from renewable sources	640	599	+7%
Heat, steam, refrigeration from renewable sources	12	11	+7%
Total renewable energy consumed	927	771	+20%
% consumption of renewable energy	9%	7%	
Total energy consumption	10,344	10,672	-3%
Consolidated net income (from VINCI's consolidated financial statements – in € millions)	4,863	4,702	+3%
Energy intensity (per million euros of net income from high climate impact activities)	2.1	2.3	-6%

(*) In 2023, electricity from fossil sources included electricity of nuclear origin.

The Group's total energy consumption fell by more than 3% from 2023. This decrease mainly came from a 10% reduction in diesel consumption, partially offset by the increased consumption of petrol (15%), LPG (23%) and biofuels (71%). However the energy mix remains relatively stable. Fuel, especially diesel fuel, is the energy source that the Group uses the most, primarily to power site machines and its fleet of vehicles. The consumption of high-carbon fuels, such as heavy fuel oil and coal, accounts for about 2% of the Group's total energy consumption. In 2024, biofuels accounted for the 3% of the energy mix, up from 2% in 2023. The biofuels used by the Group are detailed in paragraph 5.3.1, "Energy indicators", of the methodology note, page 274.

VINCI's activities are all considered to be of high climate impact. Net income from high climate impact activities (€4,863 million) is the net income attributable to Group operations presented in the consolidated financial statements on page 316.

Total energy consumption by business line, with change

(GWh)	Total fossil energy consumed	Total electricity of nuclear origin	Total renewable energy consumed	Total energy consumption in 2024	Consumption by business line (%)	Total energy consumption in 2023	2024/2023 change
Concessions	336	10	496	842	8%	890	-5%
VINCI Autoroutes	66	0	107	173	2%	192	-10%
VINCI Airports	245	2	379	627	6%	653	-4%
Other concessions	25	8	9	42	0%	45	-7%
VINCI Energies	1,238	32	137	1,407	14%	1,422	-1%
Cobra IS	763	8	5	777	8%	702	+11%
VINCI Construction	6,783	214	286	7,283	70%	7,625	-4%
VINCI Immobilier	21	12	3	36	0%	34	+5%
Total	9,141	276	927	10,344	100%	10,672	-3%

VINCI Construction accounts for 70% of the Group's total energy consumption, mostly due to its industrial activities. The reduction in total energy consumption seen in 2024 is thus attributable to declines in activity in energy-intensive sectors (lime and asphalt production mainly in France and elsewhere in Europe) as well as energy sufficiency and efficiency initiatives put in place by VINCI companies.

Use of renewable energy

In addition to the initiatives taken by VINCI companies to reduce their energy consumption, the use of electricity from renewable sources and biofuels has risen sharply since 2018. In 2024, 640 GWh of renewable electricity was used, representing an increase of more than 7% compared with 2023. Renewable electricity accounted for 40% of total electricity used, compared with 37% in 2023, and came from several sources: purchases of guarantee of origin certificates, renewable energy supply contracts, off-site and on-site power purchase agreements, and sites' own energy production and self-consumption. VINCI Concessions was responsible for 78% of the Group's self-consumption of electricity produced on site. Biofuel consumption totalled 275 GWh, of which 57% was used by VINCI Construction.

Energy production

Energy produced by VINCI companies and not used by the Group was 7 TWh in 2024. This figure breaks down into 1 TWh of renewable energy (solar, wind, etc.), accounting for 16% of the Group's total production (see activities described under "Supporting the transition to a low-carbon economy" in paragraph 2.2.2.1, "Climate change mitigation and energy", page 211), and 6 TWh of non-renewable energy, accounting for about 84% of the Group's total production.

2.2.3.2 GHG emissions

The methodology used to determine the greenhouse gas (GHG) emissions of VINCI's businesses is based on the Group's energy consumption data presented above as well as the emissions factors presented in paragraph 5.3.3.1, "Scope 1 and Scope 2 greenhouse gas emissions", of the methodology note, page 274. Scope 1 includes direct emissions from the use of biofuels, fossil fuels (fixed sites, worksites and company vehicles), as well as non-energy emissions (VINCI Construction's lime plants). Scope 2 includes indirect emissions produced to make energy (mainly electricity) purchased and used at fixed sites and for projects. Scope 2 emissions are calculated using two methods: location-based and market-based, which are described in paragraph 5.3.3.1, "Scope 1 and Scope 2 greenhouse gas emissions", of the methodology note, page 274). The difference between the emissions values recognised using these two methods is due to the fact that market-based emissions take into account contracts for the purchase of electricity from renewable sources, such as off-site power purchase agreements and guarantee of origin certificates, signed for a total of 589 GWh in 2024. These contracts represented a reduction of 103,000 tonnes of CO₂ equivalent, or 39% of location-based Scope 2 emissions in 2024.

GHG emissions

<i>(in thousands of tonnes of CO₂e)</i>	Baseline year ^(*)	31/12/2024	31/12/2023	2024/2023 change	2030	Baseline year ^(*) /2024 change
Scope 1	2,452	2,007	2,178	-8%	1,471	-18%
% Scope 1 emissions from regulated emissions trading systems	n/a	6%	6%		n/a	-
Market-based Scope 2	308	162	187	-13%	185	-47%
Location-based Scope 2	n/a	265	263	+1%	-	-
Total market-based Scope 1 and Scope 2	2,761	2,169	2,364	-8%	1,656	-21%
Total location-based Scope 1 and Scope 2	n/a	2,272	2,441	-7%	-	n/a
1. Purchased goods and services	18,382	16,142	13,725	+18%	-	-
2. Capital goods	391	395	417	-5%	-	-
3. Fuel- and energy-related activities not included in Scope 1 or Scope 2	511	435	429	+1%	-	-
4. Upstream transport and distribution	757	748	711	+5%	-	-
5. Waste generated in operations	140	136	141	-4%	-	-
6. Business travel	115	144	129	+12%	-	-
7. Employee commuting, excluding company vehicles	181	218	216	1%	-	-
8. Upstream leased assets	11	90	71	+27%	-	-
Subtotal upstream Scope 3	20,488	18,309	15,839	+16%	14,877	-
11. Use of sold products	28,049	29,549	27,384	+8%	-	-
12. End-of-life treatment of sold products	54	58	50	+16%	-	-
15. Capital goods	205	243	243	-	-	-
Subtotal downstream Scope 3	28,308	29,731	27,676	+7%	24,158	-
Total Scope 3	48,796	48,039	43,515	+10%	39,035	-2%
Total GHG emissions – Market-based	51,557	50,208	45,880	+9%	40,693	-
Total GHG emissions – Location-based	n/a	50,311	45,956	+9%	-	-
Consolidated revenue <i>(in € millions)</i>	48,053	71,623	68,838	+4%	-	-
Carbon intensity in thousand tonnes of market-based CO₂ equivalent per €m of revenue	1.01	0.70	0.74	-	-	-
Carbon intensity in thousand tonnes of location-based CO₂ equivalent per €m of revenue	n/a	0.70	0.74	-	-	-

^(*) The baseline year presents emissions from 2018 for Scopes 1 and 2 (market-based) and emissions from 2019 for Scope 3 adjusted for the impact of changes in scope (see paragraph 5.2, "Changes in scope", of the methodology note, page 274). The baseline figure for consolidated revenue is that of 2019.

VINCI's carbon intensity in 2024 was 0.70 thousand tonnes of CO₂ equivalent per million euros of revenue, down from 0.74 thousand tonnes of CO₂ equivalent per million euros of revenue in 2023. The revenue used to calculate the carbon intensity ratio is presented in the consolidated financial statements on page 316. The methodology used to calculate the carbon intensity ratio is presented in paragraph 5.3.2, "Carbon intensity", of the methodology note, page 274. Two industrial sites in the VINCI Group are subject to the EU-ETS emissions cap and bought 1,375 tonnes of CO₂ equivalent in 2024.

Biogenic emissions are not included in total Scope 1, 2 and 3 emissions. They were estimated at around 90,000 tonnes of biogenic CO₂ for Scope 1 and 20,000 tonnes of biogenic CO₂ for Scope 2 in 2024, or about 5% of the Group's Scope 1 and 2 emissions (see paragraph 5.3.3.1, "Scope 1 and Scope 2 greenhouse gas emissions", of the methodology note, page 274).

VINCI does not use internal carbon pricing, a tool that the Group considers to be too restrictive, since it deals only with carbon emissions while overlooking wider impacts on natural environments and neglecting circular economy principles. Instead, the Group favours an approach based on life cycle assessments (LCAs) and the carbon footprint of projects, which leads to a more accurate and comprehensive evaluation of environmental impacts, without a monetary value. This same approach is applied to review the environmental solutions competing in VINCI's Environment Awards.

Direct greenhouse gas emissions

In 2024, emissions totalled 2.2 million tonnes of CO₂, of which 2.0 million tonnes of CO₂ for Scope 1 and 0.2 million tonnes of CO₂ for Scope 2 using the market-based approach. Market-based emissions decreased 8% from 2023, in line with the reduced energy consumption over the year, especially for carbon-intensive energy such as diesel, and the increased use of renewable energy.

Greenhouse gas emissions by business line, with change

(in thousands of tonnes of CO ₂ equivalent)	2024 Market-based Scope 1 and Scope 2 emissions	2023 Market-based Scope 1 and Scope 2 emissions	2024/2023 change	2024 Location-based Scope 1 and Scope 2 emissions	2023 Location-based Scope 1 and Scope 2 emissions
Concessions	92	105	-12%	157	149
VINCI Autoroutes	15	18	-15%	18	22
VINCI Airports	72	81	-11%	133	121
Other concessions	5	6	-10%	6	6
VINCI Energies	287	303	-5%	295	309
Cobra IS	146	149	-2%	147	150
VINCI Construction	1,641	1,804	-9%	1,669	1,831
VINCI Immobilier	4	4	+3%	4	4
Total	2,169	2,364	-8%	2,272	2,441

Indirect greenhouse gas emissions

In 2019, the baseline year, VINCI's indirect emissions (Scope 3), adjusted for acquisitions and disposals over the period, totalled approximately 49 million tonnes of CO₂ (adjusted for acquisitions and disposals). At 31 December 2024, the Group's Scope 3 emissions amounted to 48 million tonnes of CO₂, a slight reduction from 2019. In this figure, upstream emissions account for 38% and downstream emissions 62%. Two GHG Protocol categories alone account for nearly 95% of emissions: purchases of goods and services and the use of built, operated and maintained infrastructure.

About 88% of upstream emissions, totalling around 18 million tonnes of CO₂, come from purchases, primarily construction materials (concrete, steel, bitumen, etc.).

Downstream emissions amount to almost 30 million tonnes of CO₂, of which 16 million tonnes due to traffic on VINCI Autoroutes motorways and 4 million tonnes associated with the landing and take-off (LTO) cycle and passenger access at VINCI Airports as well as road traffic on networks operated by consolidated VINCI Concessions companies. The VINCI Highways business scope was limited to fully consolidated concession companies.

Other downstream emissions, estimated at nearly 10 million tonnes of CO₂, mainly include emissions associated with the use of equipment installed by VINCI Energies and the use of buildings completed by VINCI Construction.

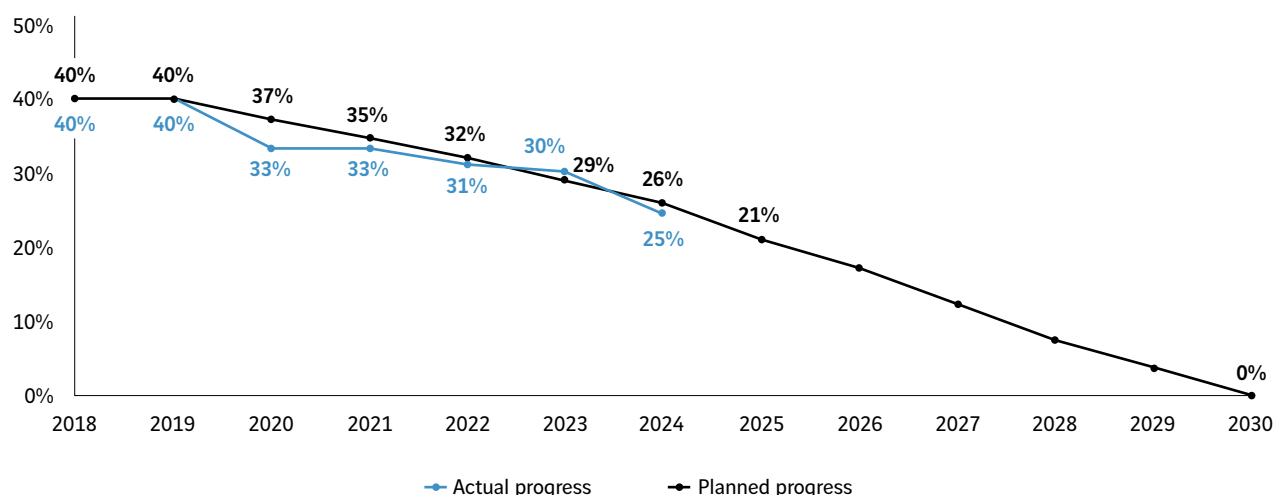
Given that biomass energy combustion in the value chain is not significant, the Group's biogenic Scope 3 emissions are deemed not material.

2.2.3.3 Progress against emissions reduction targets – Scopes 1 and 2

In 2020, VINCI built a methodology to monitor its progress towards meeting its commitment to reduce the Group's direct emissions (Scope 1 and market-based Scope 2) by 40% between 2018 and 2030. This methodology enables the Group to track its progress each year against its projected emissions reductions. These projections are used to evaluate the Group's performance between 2018 and 2030. They have been designed to take into consideration the Group's commitments and the pace of actions toward reducing emissions put in place by each business line. VINCI's low-carbon pathway takes into consideration any changes in scope within the business lines, as well as the organic growth of the Group's main businesses. Each newly acquired company is integrated into the Group's emissions reduction actions. The projected emissions reductions and the amount of gross emissions to be reduced are therefore adjusted for these acquisitions, while disposals are removed from the scope. This method is used to limit the adjustments and estimates needed to incorporate changes in scope, while objectively reporting on the Group's actions and its alignment with its reduction goal (see paragraph 5.2, "Changes in scope", of the methodology note, page 274).

In 2024, VINCI business lines acquired 71 entities, which emitted 12,000 tonnes of CO₂ equivalent over the year, and disposed of eight entities, which emitted 15,000 tonnes of CO₂ equivalent over the year. Total emissions in the baseline year of 2018, after adjusting for the total impact of acquisitions and disposals between 2018 and 2024, were thus 2.8 million tonnes of CO₂. At end-2024, the Group had reduced its greenhouse gas emissions by 21% compared with 2018 levels through measures taken by business lines, particularly the use of renewable energy.

Progress against the Group's direct emissions reduction target



This 40% reduction target between 2018 and 2030 follows on from the previous environmental commitment from the VINCI Manifesto for the period from 2007 to 2018. This commitment resulted in a 25% reduction in the Group's emissions between 2009 and 2018, which was expressed in terms of intensity relative to revenue. At 31 December 2024, a 25% reduction relative to the level reached in 2024 is needed to meet the 2030 target, which positions the Group slightly ahead (by 1 point) of its planned progress.

2.3 Optimising resources thanks to the circular economy (ESRS E5)

In a context of increasing scarcity of natural resources, some of which are essential to the operation of its businesses, VINCI seeks to limit the footprint of its activities by promoting a circular economy approach. The Group's approach involves improving design and manufacturing processes to extract less virgin materials, adopting efficient technologies and behaviours, and expanding reuse and recycling to reduce waste. Circular economy initiatives are locally rooted, in accordance with the diversity of the businesses and geographies in which the Group's companies operate.

2.3.1 Identification of material impacts, risks and opportunities

To identify the main impacts, risks and opportunities (IROs) associated with resources and the circular economy, as part of its double materiality assessment (see section 1, "General information", page 188), the Group conducted internal analyses and made use of existing research. For example, a 2022 environmental risk map for purchasing in France was used as a starting point for identifying main resource inflows and prioritising the associated risks. The double materiality assessment covered own operations and the entire value chain, including upstream and downstream processes, from the extraction of virgin materials to the end of life of products and waste produced by the Group. The material IROs that were identified and the relevant stakeholders are presented in the table below.

Material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Waste			
Negative impact: waste generated from the Group's operations Degradation of natural spaces and habitats and pollution of soil, water and air related to poor management of waste from the Group's operations (worksites, etc.)	All	Downstream Short term	Nature Local communities Residents Public authorities
Positive impact: creation of recycling systems and user awareness-building Direct contribution to waste reduction and recycling by developing waste treatment and recycling facilities and by raising the awareness of Group infrastructure users	VINCI Concessions VINCI Autoroutes VINCI Construction	Downstream Short term	Customers Nature Employees, subcontractors, temporary staff
Resource inflows including resources used			
Negative impact: depletion of resources Diminishment or depletion of natural resources (construction materials of mineral or forest origin, etc.) associated with the Group's operations	VINCI Construction	Upstream Long term	Nature
Opportunity: production of recycled materials Increase in revenue from the production and sale of recycled materials	VINCI Construction	Downstream Short term	Customers Investors and lenders Nature

2.3.2 Circular economy strategy (policies, objectives and action plans)

VINCI's circular economy strategy includes three levers to address the material impacts, risks and opportunities identified by the Group:

- promoting the use of construction techniques and materials that economise on natural resources (see paragraph 2.3.2.1, "Promoting the use of construction techniques and materials that economise on natural resources", page 219) to fight resource depletion;
- improving waste sorting and recovery (see paragraph 2.3.2.2, "Improving waste sorting to implement waste recovery more widely across the Group's businesses", page 220) to limit the impacts of waste generation, especially by creating recycling systems and building user awareness;
- increasing the supply of recycled materials and processing facilities (see paragraph 2.3.2.3, "Increasing the supply of recycled materials and processing facilities", page 222).

To implement these levers, each business line has made its own commitments and established action plans in accordance with its operational priorities (see the overview of the main commitments by business line and by focus, page 297). However, a network of experts from VINCI's business lines coordinates their initiatives, sharing best practices, feedback, regulatory intelligence and project management tools across the Group.

The estimated total CapEx and OpEx required to implement these action plans was deemed immaterial in relation to the Group's total CapEx and OpEx.

2.3.2.1 Promoting the use of construction techniques and materials that economise on natural resources

Policy for promoting the use of construction techniques and materials that economise on natural resources

At Group level, the activities that consume the most resources are construction activities, which mainly use concrete, steel, bitumen, asphalt mix, aggregates and wood (see paragraph 2.3.3, "Performance monitoring", page 224). These resources are defined in paragraph 5.3.5, "Resources, waste and materials", of the methodology note, page 276. The desire to secure access to these materials and ensure sustainability tracing are core to VINCI's circular economy policy. The policy, which prioritises construction techniques and materials that economise on natural resources, is applied by all business lines and focuses on the following actions:

- reducing the consumption of virgin materials;
- use of bio-sourced materials;
- development of reuse solutions.

The engagement of stakeholders, especially suppliers, is a key element of this approach, with the support of a network that coordinates responsible purchasing across the Group (see the presentation of the Group's responsible purchasing policy in paragraph 3.2.2.1, "Human rights and health and safety issues for purchasing and subcontracting", page 256).

VINCI Construction also implements this policy in a more operational manner, in several ways. It requires suppliers to complete environmental and social questionnaires and conducts audits to monitor their performance, engages in specific discussions with suppliers of high environmental-impact products (concrete, equipment, site supplies, transport), and certifies its activities under internationally recognised standards (ISO 14001, EcoVadis, etc.). In addition, its Building France Division has committed to 100% PEFC- or FSC-certified wood purchases by 2030 (see paragraph 2.6, "Preservation of natural environments", page 232), highlighting the need for a formal responsible purchasing policy for wood. This policy will be finalised in the first half of 2025 and will include key indicators and a rigorous monitoring process to guarantee its implementation.

Actions to promote the use of construction techniques and materials that economise on natural resources

Reducing the consumption of virgin materials

VINCI Construction's reduction target for upstream Scope 3 emissions

2022: 0%

2024: 14%

2030: 20%

VINCI is working to reduce its impact from the extraction of natural resources by promoting the use of materials from the circular economy when relevant. This commitment is consistent with VINCI Construction's target to reduce upstream Scope 3 emissions by 20%, which requires optimising the amount of materials used, developing the use of low-carbon concrete and implementing recycled materials (see the presentation of the transition plan in paragraph 2.2.2.1, "Climate change mitigation and energy", page 205). Out of the main resources used by the Group (concrete, steel, bitumen, asphalt mix, aggregates and wood), VINCI focuses on the procurement of recycled steel, asphalt and aggregates (see under "Actions to reduce emissions in the value chain" in paragraph 2.2.2.1, "Climate change mitigation and energy", page 209).

By incorporating reclaimed asphalt pavement into the production of new mix at asphalt plants, the Group has decreased its consumption of virgin aggregates and bitumen. The reclaimed asphalt pavement takes the place of new aggregates, and the binder it contains continues to fulfil its role in the new asphalt mix. Using this recycled asphalt is a priority for the Concessions business (see paragraph 2.3.2.2, "Improving waste sorting to implement waste recovery more widely across the Group's businesses", page 221). To reduce the consumption of aggregates in road maintenance operations, VINCI Construction has developed the Refresh® solution. It is an in-situ resurfacing process for use on local roads. A thin layer of the pavement is removed, recycled in situ with emulsion and directly re-laid. Refresh® is a cold-in-place method that requires no added materials and avoids greenhouse gas emissions associated with the manufacturing process or the use of trucks to transport the product.

Regarding concrete, one of first solutions used to reduce the associated use of virgin materials is sufficiency, which means not consuming more concrete than is necessary for the job. The Civil Engineering France Division of VINCI Construction is promoting an innovative hollow beam solution, called Optipoutre, that can reduce the consumption of concrete by up to 40%, while ensuring the same technical properties as a traditional concrete beam. It was employed for the overhead Marguerite Perey station, in Palaiseau, of the future Grand Paris Express Line 18. The use of low-carbon concrete, to which VINCI Construction has made a strong commitment (see under "Transition plan" in paragraph 2.2.2.1, "Climate change mitigation and energy", page 205) is also a way to economise on virgin materials, since the binders used in the place of cement are sourced from the circular economy. For example, blast-furnace slag is a co-product of the steel industry.

Use of bio-sourced materials

The use of bio-sourced materials is growing thanks to timber construction and plant-based binders as well as building processes.

VINCI Construction is developing the use of bio-sourced materials in its projects through its Arbonis subsidiary, which is industrialising timber construction, utilising the advantages of this renewable, recyclable material facilitating carbon storage. Opting for sourcing through a short supply chain, the teams mostly favour local tree species and work with the French National Forest Office (ONF) to support the country's certified timber suppliers. The Group has an excellent track record in timber construction and formulating low-carbon concrete. Building on this expertise, the Building France and Civil Engineering France divisions of VINCI Construction have launched a "Mixed structures and own production" transformation strategy. The plan is for the business line's teams to incorporate more wood and low-carbon concrete into the Group's projects, from design to use. An essential factor of the Group's competitiveness is to continue to develop the versatility of its teams. The Edenn business complex in Nanterre, built by the Group's own Greater Paris New-Build Functional Structures delegation, supports this goal. The mixed wood-concrete structure spanning more than 30,000 sq. metres will house the offices of Schneider Electric, among others.

Other projects using wood were in progress in 2024, such as the construction of the Silva tower in Bordeaux and the Envision EV battery gigafactory in Lambres-lez-Douai. The Weko project, backed by VINCI Immobilier, is testing an innovative construction technique involving a concrete column and beam structure, filled with bales of rice straw and coated on the inside with raw earth and on the outside with lime. These bio-sourced materials, mainly of local origin (rice straw from Camargue and earth from the building site), ensure the thermal inertia of the building's walls.

The Building France and Civil Engineering France divisions of VINCI Construction ensure that the procurement of bio-sourced materials meets relevant social and environmental standards (with respect to sourcing, harvesting techniques). Several framework agreements covering bio-sourced insulation material, cladding and outdoor flooring, etc. entered into effect for this purpose in the fourth quarter of 2024.

To improve building processes, Freyssinet, a company in VINCI Construction's Specialty Networks, has tested several alternative solutions to polystyrene in formwork for road joints and aims to gradually replace this material across all worksites of this type.

In addition, training programmes help to promote the use of bio-sourced materials. With a clear understanding of these new materials, teams can better respond to growing customer and government demands. Pricing and construction teams can more easily offer customers designs and alternatives that include bio-sourced materials.

Advancing reuse solutions

Reuse is a circular economy approach that aims to recover products, equipment or materials from a structure, generally at the end of its life, before it is demolished or rehabilitated, to be reused at another worksite. The entire building and civil engineering sector is concerned by this approach, but reuse is growing faster in the building business because its products, equipment and materials are easier to reuse. Furthermore, the regulatory landscape in France encourages reuse, such as through the French environmental regulation RE2020 and extended producer responsibility (EPR) for construction products and materials in the building sector. The Building France Division of VINCI Construction launched the development of a reuse stream in 2020 with La Ressourcerie, a reuse specialist developed through Leonard's intrapreneurship programme, to support operational teams in the tendering or execution phases. In addition to this expertise, the Group benefits from other essential links in the reuse value chain, including VINCI Construction companies like Neom and Cardem that specialise in demolition or cleaning as well as RESO Services, a VINCI Energies company that provides logistics services, with access to storage facilities. Thanks to in-house synergies, VINCI has developed robust reuse streams organised by product, in particular for ventilation ducts, glazed partitions, cable trays and electric cables. To date, these are mainly in the Greater Paris area.

VINCI also supports two reuse initiatives through Leonard's intrapreneurship programme, one of which is Circable, a new service by Cegelec Nord Grands Projets (VINCI Energies) dedicated to electric cable reuse. Through the Scale Up! programme, it also supported the rollout of 19 initiatives from the Environment Awards, which will continue into 2025 (see paragraph 2.1.2.1, "Employee engagement", page 201).

VINCI also collaborates with outside partners, as illustrated by the Avant-Seine rehabilitation site in the 13th arrondissement of Paris. Thanks to the work of two environmental organisations, Écominéro and Ecomaison, together with Neom, 744 tonnes of material were reused in 2024. Meanwhile, several programmes and tools have been put into effect to encourage Group employees to play their part in the reuse campaign. For example, VINCI Construction and VINCI Energies have developed their internal reuse marketplace, a digital platform where anyone can post an ad to rent out, hire, buy or sell any type of material or equipment. As an alternative to purchasing new equipment, the Reyuz application from VINCI Energies enables the sale of equipment not in use between its business units. At the end of 2024, 453 notices had been published and 6,837 pieces of equipment had been sold or were in the process of being sold on the platform.

Across a broader scope than reuse, VINCI also promotes circular economy principles. VINCI Construction is a contributor to the environmental organisation Écominéro and a founding member of CircoLab, an organisation that develops the circular economy in the property development and construction industries, of which VINCI Energies is also a member.

2.3.2.2 Improving waste sorting to implement waste recovery more widely across the Group's businesses

Policy for improving waste sorting and recovery

VINCI is implementing a policy to reduce the waste generated by the Construction and Energy businesses (mainly worksite waste) and by users of concessions (at airports, on roads, at motorway service areas, etc.) and to implement waste recovery more widely. Group subsidiaries are taking action in several ways to reduce waste at the source:

- developing reuse solutions (see previous paragraph) to avoid generating waste and the raw materials extraction associated with the use of new products;
- recovering waste by improving sorting and setting targets by business line and by geographical area for some entities;
- raising user awareness about waste sorting.

Definitions of waste indicators are provided in paragraph 5.3.5, "Resources, waste and materials", of the methodology note, page 276, and the monitoring of waste produced is indicated in paragraph 2.3.3.2, "Materials and waste", page 224.

Actions to improve waste sorting and recovery

At VINCI Concessions, 2024 saw the finalisation of a tool to systematically incorporate social and environmental clauses into contracts with third parties during the tendering phase. Among other stipulations, the clauses require the sorting of waste at source and waste management processes that support the Group's goals. The clauses were tested for the first time for Annecy Haute-Savoie Mont-Blanc airport. As a result, a few corrections were made before rolling out the tool across the VINCI Airports network.

Programme management at concessions

45% of reclaimed asphalt pavement reused at VINCI Autoroutes worksites each year

**2024: 48%**

VINCI Autoroutes' goal to recover 100% of asphalt and aggregates from removed pavement materials on its networks and reuse at least 45% of it at its own worksites each year is routinely integrated into any bids it submits for motorway maintenance contracts. Reclaimed asphalt pavement not reused directly at the worksite is tracked and companies are required to systematically commit to ensuring that 100% of it is incorporated into new asphalt for use outside the VINCI Autoroutes business line. As a result, out of a total of 1,153,000 tonnes of reclaimed asphalt pavement from VINCI Autoroutes' road renovation projects, 558,000 tonnes, or more than 48%, were recycled directly at VINCI Autoroutes worksites in 2024.

VINCI Concessions has also implemented similar initiatives. As part of a major programme to modernise the entire length of the Via Pribina expressway in Slovakia, the top layer of pavement was replaced with new asphalt. All 40,000 tonnes of the removed asphalt was recovered and recycled by local plants.

Motorway waste

Material recovery from operations waste

2024: 83%**2030: 80%**

VINCI Autoroutes aims to recover 80% of operations waste (non-hazardous waste, inert waste and soil) by 2030. To support this goal, 100% of rest areas and service areas in the network are equipped with bins to sort packaging and household waste. In 2024, VINCI Autoroutes recovered 83% of material from operations waste. To avoid food waste, redistribution solutions from the companies Too Good To Go and Phenix were rolled out at 120 service areas on the network, saving over 29,000 baskets in 2024.

Further strengthening its commitment, VINCI Autoroutes is working together with the operators of commercial facilities at service areas across its network toward the shared goal of zero waste. In particular, these VINCI Autoroutes partners have pledged to implement actions and test solutions that promote the circular economy and reduce waste, classified into three levels of engagement (engaged, expert or outstanding), such as setting up dry bulk dispensers, and composters or bio-digesters to recover organic waste.

VINCI Autoroutes has worked with the environmental organisation Citeo since 2022 to improve waste sorting outside of the home. Escota was selected by Citeo's call for expression of interest in out-of-home waste. In 2023, VINCI Autoroutes and Citeo jointly organised a day of dialogue and experience-sharing on sorting solutions for mobility users, and their collaboration continued in 2024.

Airport waste

Number of airports with zero waste to landfill

2023: 24%**2024: 25%****2030: 100%**

To reach its target of zero waste to landfill across its airports by 2030, VINCI Concessions is taking ambitious initiatives to reduce, sort and recycle waste from its airport concessions. The main areas of focus for this action are: reducing waste at source, optimising waste sorting and collection by investing in on-site sorting centres, identifying and expanding local recycling streams, and increasing the share of material recovery over energy recovery. In 2024, 15 out of 59 airports in the consolidated scope, or 25%, met the zero waste to landfill target.

To achieve this goal, VINCI Airports works with its value chain, including subcontractors and service providers, and includes environmental clauses in its contracts with them. This measure was successfully tested at Santiago airport in Chile and at the continental airports in Portugal, with additional trials under way in France and Brazil. In 2024, VINCI Airports achieved a waste recovery rate of 67% across all of its activities. In regions without formal waste sorting and recovery systems, VINCI Airports is adopting an inclusive recycling approach that involves creating decent and sustainable jobs in the informal sector, among the existing communities of waste pickers.

Special measures are being taken to improve the management of cabin waste. VINCI Airports is working with some airlines to improve waste sorting in the aircraft, to facilitate the recovery of recyclable materials. In 2023, VINCI Airports signed a joint statement with the IATA, the IFSA, the ACI and other organisations, as well as several airline companies and airport groups, to revise legislation obliging airlines to treat waste from international flights as hazardous. The current regulation requires the waste to be incinerated or buried, even if it contains recoverable material. Following the statement, in September 2024, the European Commission Directorate-General for Health and Food Safety announced that "waste that does not contain remnants of products of animal origin (in this case, animal by-products), has not been contaminated by such products, and is collected and stored separately from international catering waste, falls out of the scope of the rules applying to animal by-products." Similar initiatives are being taken outside of the European Union. In Serbia, Belgrade airport has also obtained confirmation from the relevant ministry that the recovery and recycling of cabin waste sorted at source is acceptable to them. As a result, recycling of cabin waste will begin in the coming months. This regulatory change will enable VINCI Concessions to recover up to 20% additional materials (from cabin waste) in the years to come.

At Lyon-Saint Exupéry airport, 33 tonnes of waste from the airline easyJet has been collected and fully recovered, of which 86% was recycled in 2024.

Worksite waste

Recovery of inert waste at VINCI Energies

2022: 73%

2024: 75%

2030: 80%

VINCI Energies has pledged to recover 80% of its inert waste and materials and the Major Projects Division of VINCI Construction has pledged to recover 90% of all its waste, both by 2030. At 31 December 2024, VINCI Energies and VINCI Construction's Major Projects Division achieved a recovery rate for their waste and inert materials of 75% and 80%, respectively. Some divisions set precise goals, including the Building France and Civil Engineering France divisions of VINCI Construction, which have undertaken to achieve a recycling rate of 80% at all their worksites by 2030. At 31 December 2024, the Building France Division had recovered 93% of its waste (including inert waste and materials), while the Civil Engineering France Division achieved a rate of 89%.

On a more local scale, the Greater Paris New-Build Housing and Greater Paris Renovated Housing delegations (Building France Division, VINCI Construction) have also developed an overall waste reduction policy, promoting actions in the field, such as signs made from stone paper at worksites and a virtual catalogue of housing units. VINCI Construction in British Columbia (Canada) enhanced its waste management strategy in 2024 with the aim to increase its overall recycling rate to 60%. A table was drawn up to identify the waste materials to be recycled, based on the type of project or site (asphalt plant, workshop or material recycling facility).

VINCI Construction's commitments to improved waste management led to new collaborations producing innovative techniques and technologies in 2024. Thanks to the partnership with the startup Akanthas, waste analyses of three housing construction sites in the Greater Paris area were carried out using artificial intelligence.

Waste Marketplace, one of the business units having emerged from the intrapreneurship programme run by Leonard, offers a digital solution for managing worksite waste used both in-house and by non-Group companies. Not only can this tool be used to coordinate faster and more efficient dumpster collection, Waste Marketplace also supports companies in implementing custom solutions to handle special waste and improve recovery rates. It achieves this through a network of waste treatment specialists and industrial users of secondary raw materials, by adapting containers to waste streams and guaranteeing waste traceability.

In support of VINCI Construction's commitment to responsible waste management and with respect to extended producer responsibility in the building sector, the Greater Paris Renovated Functional Structures delegation began separating recyclable waste at worksites, with an initial recovery rate of 36%. The residual waste was entrusted to a specialist service provider. Thanks to these combined efforts, 90% of waste generated at worksites was sorted and 95% was recovered.

To help reduce and recover waste, Cobra IS engages the responsibility of its subcontractors by including environmental clauses in its contracts and is also developing partnerships with local businesses. For example, Cobra Comunicaciones Colombia has signed an agreement with Compuambiente, a company that recycles plastic from used cones and hard hats to make new objects.

To encourage the recycling of personal protective equipment (PPE), Sogea Environment (VINCI Construction) has partnered with Ulisse, a non-profit organisation promoting professional integration. With the participation of Gre'sy, Adéquation Entreprises and Les Ateliers Marianne, damaged PPE items are washed and repaired for resale in charity shops or recycled into industrial cleaning cloths. Discarded hard hats are sent to Sodilor (Deconstruction and Road Equipment delegation, Networks France Division, VINCI Construction), where they are taken apart. The ABS plastic shell is shredded and the recovered material is reinjected into the manufacturing process for road equipment at Sodilor's facility in Moselle. This new PPE recycling activity was created at Sodilor in 2023. Lastly, a contract was signed with the startup Takapas, which collects, sorts and shreds safety shoes for recovery. The metal components join the metal recycling stream and the rest of the shoe is transformed into solid recovered fuel (SRF).

Building concession user awareness of waste management

User awareness is a key starting point to reducing waste at concessions.

For this reason, concession companies run many campaigns to raise user awareness. Nantes Atlantique airport set up a partnership with the non-profit Les Restos du Cœur to avoid having to discard items recovered by security staff at screening checkpoints. The initiative reduces waste production at airports and enables consumer goods to be shared with disadvantaged people. Close to 600 kg of products are donated to the organisation each month. Lisbon airport is rolling out a similar initiative.

In France, the @BienArriver events held in the summer of 2024 at VINCI Autoroutes service areas raised motorists' awareness of the dangers of littering and the irresponsible disposal of cigarette butts. The VINCI Autoroutes Foundation renewed its anti-littering campaign urging users to stop throwing rubbish out of their car windows and its #StopMégots campaign in partnership with Entente Valabre to get people to stop throwing cigarette butts out of car windows. On average, 100 cigarette butts are discarded in this way every day per kilometre in each direction of traffic.

2.3.2.3 Increasing the supply of recycled materials and processing facilities

Policy for increasing the supply of recycled materials and processing facilities

The business of some Group companies is to produce materials, for example quarry operations. Their main challenges are therefore to develop alternatives for primary materials by deploying recycled materials and developing recycling facilities.

The "Increasing the supply of recycled materials and processing facilities" opportunity identified in the materiality assessment applies only to VINCI Construction's activities, the only business line to own material production sites (quarries, asphalt plants and material recycling facilities). Recycled materials offer VINCI Construction customers alternatives to the virgin materials used in the construction industry.

Actions to increase the supply of recycled materials and processing facilities**Expanding the production of recycled materials**

Double the production of recycled materials at VINCI Construction (*in millions of tonnes*)

2019: 10**2024: 16****2030: 20**

To limit the use of natural resources, more recycled materials must be available. VINCI companies work to increase the share of recycled materials used in their construction processes. VINCI Construction has set several ambitious targets for 2030. It will double the production of recycled materials at quarries and processing facilities compared with 2019. By 2030, its Road France Division aims to produce 25% of its asphalt mix using reclaimed asphalt pavement and have 80% of quarries and recycling facilities labelled Granulat+, meaning that they support the circular economy.

As a market leader in construction and industrial waste recovery, VINCI Construction's Road France Division is continuing the rollout throughout France of its Granulat+ programme applying circular economy principles to construction materials. This programme features the largest network of sites for treating mineral waste from the construction and manufacturing industries in the country, with 165 quarries and processing facilities equipped with dedicated waste collection, sorting and recycling capabilities in 2024. The recycled materials thus become certified, quality aggregates. Each Granulat+ site sorts all the waste collected, optimises recycling and recovery, and guarantees traceability of the waste treated. The programme aims to improve the treatment of recycled materials so that they can be used for more noble purposes. For example, excavation material from construction sites, which used to be considered final waste, can now be fully recovered. Granulat+ sites are spread throughout France, forming a dense network that favours short circuits and optimised packaging that rationalises consumption (big bags for urban or small-scale worksites). Progress in recycling techniques should eventually pave the way towards "perpetual quarries", which would operate without virgin mineral deposits.

In 2023, VINCI Construction launched Ogêo, a new brand offering aggregates formulated throughout France. Made up of both primary resources (quarry aggregates) and secondary resources (local materials from demolition and recycling), Ogêo is a range of highly technical materials from eight responsible collection channels. As part of Granulat+, this offering favours short circuits and confirms the division's commitment to optimising resources by using materials produced locally, as close as possible to worksites. VINCI continues to invest in this solution, as part of the Scale Up! programme, which supports the rollout of Environment Award initiatives (see the paragraph describing the programme). Outside France, new production facilities, including those in Lithuania, Spain and Canada, enable VINCI Construction to gain a lead in the commercialisation of recycled materials and to make a commitment to its customers in this strategic path.

VINCI Construction is continuously developing innovative solutions to offer its customers new recycled materials. Since 2015, its Road France Division has been using a solution that recovers up to 100% of materials from old road surfaces and uses them to build new roads. A 100% recycled asphalt mix is not aligned with the business line's strategy, due to the significant carbon footprint of the final product. However, asphalt mix with up to 80% recycled material offers a more sustainable and relevant solution. Based on that strategy, VINCI Construction opened a TRX80 asphalt plant in Fos-sur-Mer in the summer of 2023. The fixed facility can incorporate up to 80% of reclaimed asphalt pavement into its production, marking a major step forward in this technology. As a comparison, in France bitumen asphalt contains about 20% recycled material on average. In 2024, its first full year of operation, the plant produced 112,000 tonnes of asphalt mix, which incorporates an average of 46% reclaimed asphalt pavement.

VINCI's 2024 Environment Day also provided the opportunity to launch the Extract platform in Bruyères-sur-Oise (Civil Engineering France Division) to increase and improve the treatment capacity of contaminated soil received for remediation.

Creating new recycling value chains

VINCI Airports implements a strategy for responsible waste management that goes further than local regulations, using the experience it has gained in regions without a formal waste processing and recovery sector. Salvador Bahia airport in Brazil and Belgrade airport in Serbia as well as the airports in Faro (Portugal), Phnom Penh (Cambodia) and Manaus (Brazil) have already installed their own sorting centres. This new process prevents waste from the terminal, offices, cargo activities and dining areas from systematically going to landfill. Once waste has been sorted, it is easier to avoid landfills and find interested recycling and recovery organisations. A partner company recycles any waste that can be recycled, while the rest is sent for incineration. As a result, recycling rates in 2024 were 24% at Manaus and 34% at Salvador Bahia compared with an average recycling rate of 3% in Brazil. At Faro, the recycling rate rose from 25% in 2021 to more than 40% in 2024.

Inclusive recycling projects have been launched at Phnom Penh airport (Cambodia) and at Manaus airport (Brazil). The objectives of inclusive recycling are both social and environmental. Projects of this kind can improve waste recovery in regions where industrial solutions are not available. At the same time, they create decent and sustainable jobs in the informal sector, among the existing communities of waste pickers. Based on the results of these pilot projects, VINCI Concessions will assess the feasibility of expanding the initiative and implementing inclusive recycling in other regions without formal recycling systems.

2.3.3 Performance monitoring

2.3.3.1 Resource inflows

Resource inflows are the products and materials used by the Group and its subcontractors (upstream value chain). The published amounts are expressed by weight. For VINCI, the most significant resources are the tonnage of aggregates, bitumen, asphalt mix, concrete, steel and wood. These resources may be purchased or extracted from quarries operated by VINCI companies. The definitions of these indicators and the data collection methods used are detailed in paragraph 5.3.5, “Resources, waste and materials”, of the methodology note, page 276.

Consumed resources

Consumed resources amounted to 75 million tonnes in 2024, 10% of which were recycled or reused. Bio-based materials, namely wood, represented less than 1% of consumed resources in 2024. Furthermore, 23% of the wood used was certified.

	Consumed resources	Recycled or reused resources	% recycled/reused resources
<i>(in thousands of tonnes)</i>	2024	2024	2024
Aggregates	45,742	5,280	12%
Bitumen	1,937	-	-
Asphalt mix	9,729	1,758	18%
Concrete	16,363	-	-
Steel	716	215	30%
Wood	107	-	-
Total	74,593	7,253	10%

The volume of technical products and materials consumed in 2024 was not material in relation to the Group’s total supplies.

Resources extracted from quarries

	World 2024	World 2023	Of which France 2024	Of which France 2023
Percentage of reclaimed asphalt pavement used in asphalt mix	22%	21%	24%	23%
Production of recycled material <i>(in millions of tonnes)</i>	16	16	11	10
Total recycled material as a percentage of total aggregate production	19%	19%	23%	22%

2.3.3.2 Materials and waste

	Hazardous	Non-hazardous	Inert	Excavated soils	Total materials and waste
<i>(in thousands of tonnes)</i>					2024
Materials and waste	481	1,722	8,402	17,322	27,927
Materials and waste recovered	75	744	7,296	9,513	17,629
Materials and waste recovered (%)	16%	43%	87%	55%	63%
<i>of which reused</i>			515	6,659	7,174
<i>of which recycled</i>		444	5,700	1,084	7,228
<i>of which other waste recovered</i>	75	301	1,081	1,770	3,227
Waste subject to disposal	405	978	1,106	7,809	10,298
Waste subject to disposal (%)	84%	57%	13%	45%	37%
<i>of which sent to landfills</i>	89	270	803	5,786	6,947
<i>of which incinerated</i>	13	16			29
<i>of which other waste disposal methods</i>	304	692	303	2,023	3,322

In 2024, VINCI companies generated and managed 27,927,000 tonnes of waste and materials. Inert waste and excavated soil accounted for 92% of this volume, mainly coming from the Construction business. These figures are likely to change significantly from year to year depending on the types of worksites in progress and their rate of advancement. For example, construction work can occasionally generate substantial amounts of excavated soil on large projects, while concessions generate a relatively stable amount of waste over time, at constant scope.

In 2024, more than 60% of the waste produced by VINCI companies was recovered. This recovery rate varies considerably based on the type of waste or material (16% on average for hazardous waste compared with 87% on average for inert waste), as well as on the region where Group companies operate. An average of 83% of the waste from VINCI Construction companies in France is recovered, versus 65% for the rest of the world.

In 2024, hazardous waste totalled 481,000 tonnes (less than 2% of the Group’s total waste) and included paint, aerosol sprays, solvents and waste electrical and electronic equipment. VINCI companies do not handle radioactive waste treatment.

2.3.3.3 Reuse

In 2024, to develop reuse practices in the Building France Division of VINCI Construction and at VINCI Energies Building Solutions in France (see under “Actions to promote the use of construction techniques and materials that economise on natural resources” in paragraph 2.3.2.1, “Promoting the use of construction techniques and materials that economise on natural resources”, page 220), more than 7,000 tonnes of materials were included in a reuse programme. This volume includes materials that came from a reuse programme, such as ventilation ducts recovered during a cleaning operation and then refurbished for use in a new construction project. The figure also includes materials sent to reuse centres, such as false floor tiles carefully removed during a rehabilitation programme for reuse on a third-party project.

2.4 Preserving natural environments – Pollution (ESRS E2)

2.4.1 Identification of material impacts, risks and opportunities

Material IROs were identified and assessed based on historical data covering revenue, costs, financial penalties and any controversies that many have affected the Group's financial results. The analysis focused on the sites and activities of the Group with the highest exposure. At the end of this process, only the risk of work stoppage due to light or noise pollution or vibrations was assessed as material. This risk concerns the Group's construction activities, which include earthworks, building, and installing and maintaining networks in urban areas. By definition, they are limited to VINCI Construction. The impacts on local residents are covered in paragraph 3.3, "Engaging with affected communities (ESRS S3)", page 260.

The policies and initiatives implemented to mitigate this risk are described below.

Material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Light and noise pollution and vibrations			
Risk: delay or stoppage of work due to nuisances for local residents or disruptions to ecosystems Loss of revenue due to the delay or stoppage of construction work and/or operations (permit temporarily or permanently revoked) due to the inability to carry out projects that generate light and/or noise pollution and/or vibrations	VINCI Construction	Own activities Long term	Employees, subcontractors, temporary staff Local communities and residents Public authorities Media Investors

2.4.2 Policies, objectives and action plans

2.4.2.1 Preventing environmental pollution and incidents

Policies and targets for preventing environmental pollution and incidents

Looking beyond the main focuses of the Group's new environmental ambition and compliance with regulations, VINCI companies develop and maintain continuous improvement processes adapted to the local context. The Environmental Guidelines signed in November 2020 by VINCI's Chairman and CEO and the Secretary of the Group's European Works Council provide a framework for reducing environmental impacts and risks associated with the Group's activities. All VINCI companies are expected to apply these guidelines and are responsible for ensuring that appropriate actions are also taken on the ground by subcontractors and joint contractors throughout projects (see paragraph 4.4.3, "Tailored actions to mitigate risks and prevent serious impacts", of chapter F, "Duty of vigilance plan", page 298).

Concretely, VINCI companies systematically roll out environmental management plans and training and awareness-raising initiatives to prevent all types of environmental pollution and incidents, including emergency situations. Pollution issues mainly involve the light and noise pollution and vibrations generated at worksites, which are a material risk for the Group.

2.4.2.2 Actions to prevent environmental pollution and incidents

Environmental management plans

Each Group business line implements environmental management plans that are adapted to their local situation, while complying with the guidelines set by VINCI. The plans meet regulations in force and satisfy certain certification standards, such as ISO 14001 (see paragraph 4.3.1, "Policies and procedures to prevent and mitigate risks in operations", in chapter F, page 301). They cover all risks related to light and noise pollution and vibrations in construction activities.

Focusing on preventing light and noise pollution and vibrations from construction activities

The light required for the operations and safety of some Group activities can be a source of light pollution. To limit this pollution, adapted lighting systems (light directed only at points that need to be lit for user and employee safety) are set up at worksites, when conditions allow. In addition, some Group entities have developed solutions for use by customers. For example, VINCI Energies frequently collaborates with universities and design firms to develop public lighting projects that limit light pollution and respect existing "dark corridors" (reservoirs and corridors suitable for nocturnal species) to preserve local fauna. Citeos offers to reduce light pollution through measures incorporated into its contracts for operating public lighting networks. These measures include efficient anti-light pollution equipment, smart lighting systems, automatic shutdown of certain light sources, and consideration for dark corridors.

To reduce noise pollution and vibrations, noise studies are performed at every worksite in France and at most worksites in other countries, beginning at the design phase, to propose suitable technical solutions to be deployed during construction.

At VINCI Construction, several noise reduction measures were rolled out in 2024. Some entities in France have designed a noise monitoring and management plan, which includes acoustic measures for all workshops and machines. Progress reports on these plans are drawn up twice each year. For several operations, a predictive map of worksite noise has been produced. At worksites, temporary structures such as facades and enclosures are installed, and operating hours are adjusted. This was the case for the Cœur d'Aéroport terminal at Marseille Provence airport, where work was sometimes performed at night to ensure user safety and enable business continuity. Sound level meters are used to take measurements before and during work at worksites in urban environments or close to homes. For the Ottawa Light Rail Transit (OLRT) worksite, a system has been set up to monitor and control noise and vibrations in real time. It enables coordination with work managers to employ mitigation measures or to stop work if noise levels exceeded the allowed limits. At quarries, vibrations are measured using seismographs, in compliance with operating permits, and verified by public authorities.

The Group trains operational teams and encourages them to set up systematic dialogue with stakeholders to promote the understanding of worksite constraints and respond to resident concerns.

At VINCI Construction, a system to promote dialogue was set up in 2024. An application, MonChantier, was rolled out at The Link in La Défense and then at several other worksites, including a housing programme in Morangis. At housing programme worksites, information meetings for local residents were held, in collaboration with customers and social housing organisations, and a reception office was opened to respond to questions from renters. At a large majority of the West delegation worksites of VINCI Construction's Civil Engineering France Division, advanced measures have been taken to consult with local communities and residents. This was the case in 2024 for the Anne-de-Bretagne bridge in Nantes, foundations for wind turbines, the installation of acoustic screens at Porte de Gesvres near Nantes, and the Inelfe worksites (electricity interconnection between France and Spain). At Sogea-Satom in Africa, social mediators participate in consultations with local communities, beginning at the design phase for projects, to identify in advance any obstacles relating to the displacement of cultural or spiritual heritage assets or social infrastructure. For large worksites, a grievance committee is formed to gather feedback from nearby residents. Meetings with the management committee are held on a regular basis to discuss and resolve each complaint individually. For each problem, actions are planned and carried out until the parties are satisfied.

In Australia, Seymour Whyte (VINCI Construction) has set up a community engagement and stakeholder management plan to ensure effective communication and collaboration during projects. A centralised register of consultations is kept to help quickly address stakeholder grievances and concerns. The register makes it possible to quickly recognise and respond to concerns, carry out further investigations, roll out corrective action, maintain open communication throughout the process and monitor trends to continuously improve construction practices.

2.4.3 Performance monitoring

Grievances from local residents are monitored independently at the level of the Group worksites (see paragraph 2.4.2.2, "Actions to prevent environmental pollution and incidents", page 225). In 2024, no major environmental incidents were reported concerning negative impacts due to light or noise pollution or vibrations.

2.5 Preserving natural environments – Water (ESRS E3)

2.5.1 Identification of material impacts, risks and opportunities

Method used to identify material impacts, risks and opportunities related to water

During the process of identifying material IROs (see section 1, "General information", page 188), specific analyses were performed, focusing on water resources. Water consumption corresponding to water used to produce concrete and not returned to the natural environment was shown to be a non-material issue for the Group. The Group's sites and activities withdrawing significant volumes of water have been identified using the LEAP method (Locate, Evaluate, Assess, Prepare) developed by the Taskforce on Nature-related Financial Disclosures (TNFD). This involves the Group's fixed sites, i.e. those operated by entities in the Concessions business and the quarries (dewatering water management). Analysis data from the Aqueduct tool developed by the World Resources Institute (WRI) was used and was also incorporated into ResiLens (see paragraph 2.2.1.3, "Climate change adaptation", page 214), an internal tool for assessing vulnerability based on IPCC scenarios, to specifically identify sites located in areas exposed to water risks (such as water stress).

Any financial impacts, controversies or disputes involving VINCI and water resources were also reviewed. The viewpoint of the main stakeholders concerned, identified below, were taken into account in assessing IROs.

Material IROs related to water issues

Identification of material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Water withdrawals and water consumption			
Negative impact: degradation of natural environments related to water withdrawals Consequences for biodiversity and aquatic ecosystems of modifications to river levels, aquifers, and natural environments, related to water withdrawals for operations at the Group's fixed sites	VINCI Construction (quarries) VINCI Concessions VINCI Autoroutes	Own activities Medium term	Nature

2.5.2 Policies, objectives and action plans

2.5.2.1 Policies

Policies for conserving water resources

As part of its environmental ambition, VINCI implements policies to conserve water resources throughout its value chain, especially in areas of water stress, and sets targets for business lines to optimise withdrawals, collect and reuse water (in particular by creating closed water loops), and implement water saving technologies. These targets are set as a voluntary initiative. Implementing Group policies to conserve water resources is an integral part of VINCI's environmental ambition and falls under the responsibility of the Group's Vice-President for the Environment.

Specific business line policies

In the fall of 2024, the Road France Division of VINCI Construction published its water plan, which is supported by the division's management committee and covers its construction, materials and industrial activities. The plan's primary goal is to achieve water independence for the division's production facilities, works agencies and worksites. The main levers for action are fighting waste and replacing tap water with rainwater for some purposes.

The other business lines have aligned their water conservation policies with that of the Group.

2.5.2.2 Action plan

In response to the increasing scarcity of water resources, especially in areas of water stress, VINCI's action plan covers a range of initiatives: measuring water withdrawals and detecting leaks, adapting infrastructure to reduce its water needs, determining degraded modes of operation in the event of a shortage, and creating closed water loops. The Group also develops solutions to help customers address their own water issues.

Measuring water withdrawals and detecting leaks

To optimise its water consumption, the VINCI Group focuses on enhancing how it measures water withdrawals at its sites and detecting leaks within its own activities. VINCI's business lines use several smart tools to gather data on water and employ sensors to detect leaks.

10% reduction in VINCI Autoroutes water withdrawals from 2018 levels (*in millions of cu. metres*)

2018: 1.2**2024: 1.03****2030: 1.1**

VINCI Autoroutes has pledged to reduce its water withdrawals by 10% from 2018 levels by 2030 by enhancing its monitoring and optimising equipment. It is installing remote reading water meters on all its networks to optimise water withdrawals. This precise monitoring system enables the early detection of leaks. Notifications are sent by email and displayed on a software platform. As soon as a leak has been identified, a motorway worker is dispatched to the site to assess whether the leak can be repaired immediately or requires more work to pinpoint the source. VINCI Autoroutes has allocated a budget of over €4 million, excluding tax, to this leak detection programme. Performance will be tracked using indicators of response times, repair times, and causes. In 2024, water withdrawals at VINCI Autoroutes decreased by 15.5% from 2018 levels.

VINCI Concessions has rolled out a similar programme, using Smart Metering, a tool that communicates with water meters. It enables real-time monitoring of water withdrawals and automatic detection of leaks. Systems such as this one have already proved effective in reducing water withdrawals at several airports (Rennes Bretagne, London Gatwick, etc.) In 2024, work was under way to define needs and begin rolling out such systems more widely from 2025, across all airports in the business line. VINCI Concessions plans to equip all its airports with remote reading water meters by 2026.

Reducing the water needs of infrastructure and worksites

50% reduction in water withdrawals per unit of VINCI Concessions traffic (*in litres*)

2018: 23.26**2024: 20.78****2030: 11.63**

By implementing more precise monitoring of water withdrawals, Group entities are empowered to find solutions to reduce their infrastructure's water usage. In addition, as part of VINCI's commitments to the act4nature international initiative, which it renewed in 2024 (detailed in paragraph 2.6, "Preserving natural environments – Biodiversity (ESRS E4)", page 229), the Group will complete the mapping of its fixed sites in areas of high or very high water stress by 2025 and step up its efforts to reduce withdrawals.

VINCI Concessions has set a target to halve water withdrawals per unit of traffic by 2030. In this context, VINCI Airports is continuing to implement its POS water reduction plan (focusing on conservation, optimisation and awareness) on all its infrastructure. In addition to airports with the highest water consumption, airports located in areas of high water stress will be prioritised. Several Portuguese airports have implemented a predictive watering system that adjusts the amount of watering based on soil humidity, weather conditions and the type of plants being watered. The system has led to a 20% to 30% reduction of withdrawn water. VINCI Concessions is also drafting drought management plans in anticipation of the water restrictions that may be imposed in the event of a drought. These plans, developed as a priority for areas with a high risk of water stress, define degraded modes of operation for infrastructure to reduce its water needs. Faro airport has a management plan in place in the event that watering and car washing are prohibited.

Creating closed-loop water systems

To optimise the use of water resources, the Group is creating closed-loop water systems at various VINCI Construction and VINCI Concessions sites. These promote the reuse of water in their own operations and in services provided to customers, which contribute to reduced water withdrawals.

VINCI Concessions prioritises water reuse in airports. Several initiatives are under way in various airports in Brazil and Cabo Verde, where treated wastewater is reused in sanitary facilities, air conditioning systems (cooling towers), or to water green spaces.

2.5.3 Performance monitoring

VINCI responded to the CDP Water Security questionnaire for the 13th time in 2024 and is thus today among the 15,000 companies worldwide that take part in this disclosure initiative supported by 746 global investors. In 2024, the Group achieved a B score, thus maintaining its level of performance. The Group's water withdrawals, defined in paragraph 5.3.6, "Water withdrawal indicators" of the methodology note, page 277, broke down as follows in 2024:

Water withdrawals

<i>(in thousands of cu. metres)</i>	Water purchased from networks	Drilled water	Dewatering water	Total withdrawals
Concessions	4,234	1,154	n/a	5,388
VINCI Autoroutes	752	278	n/a	1,030
VINCI Airports	3,428	874	n/a	4,302
Other concessions	53	2	n/a	55
VINCI Construction (quarries)	n/a	n/a	36,018	36,018
Total	4,234	1,154	36,018	41,406

The Group's most significant water withdrawals are dewatering water from quarries, which is immediately returned into the water table or released into natural environments. The volume of dewatering water can vary significantly from year to year, depending on the amount of rainfall. The volumes of water purchased come from drinking water or industrial water networks. Drilled water is used for a range of operations, such as hosing down runways, cleaning materials and cleaning sites.

2.6 Preserving natural environments – Biodiversity (ESRS E4)

2.6.1 Identification of material impacts, risks and opportunities

Method used to identify material impacts, risks and opportunities related to biodiversity

VINCI has carried out studies specifically for the purpose of identifying the Group's material impacts, risks and opportunities related to biodiversity. The Group reviewed and analysed the sensitivity of its sites, activities and value chain to biodiversity issues, in addition to past biodiversity-related controversies or disputes involving VINCI. It also reviewed and analysed historical and projected data on biodiversity-related impacts on the Group's Ebitda. Activities that are dependent on ecosystem services were also identified. VINCI uses its Integrated Biodiversity Assessment Tool (IBAT) to identify sites located in biodiversity-sensitive areas.

The interests of all stakeholders, especially nature, are taken into account. VINCI is a member of several working groups focusing on biodiversity, such as Orée (Organisation pour le Respect de l'Environnement par l'Entreprise) and Entreprises pour l'Environnement, and has forged key partnerships with environmental protection organisations, experts, academics and educational institutions to advance scientific research and raise biodiversity awareness. Design firms, conservation organisations and local experts are frequently consulted for certain types of projects (large worksites, airports, quarries, etc.) and monitor them over the long term. For some projects, consultations are held with local residents, conservation organisations and government agencies. As a result of these investigations, the Group identified a risk of controversy related to the origin of the wood used in construction activities.

Assessment of biodiversity loss factors and dependencies

VINCI has assessed its value chain with respect to the five direct drivers of biodiversity loss, as identified in the internationally accepted guidelines of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). These five drivers are: land use change (see the "no net land take" commitment in this section), overexploitation of resources (see the section on optimising resources thanks to the circular economy), climate change (see the section on climate change), pollution (see the section on pollution) and invasive alien species (see the zero phytosanitary products commitment in this section). An analysis of dependencies on ecosystem services was also performed. Ecosystem services are defined as nature's contributions to society. They include provisioning services (direct consumption, productive uses, etc.), existence and heritage values, regulating services (water flow regulation, pollination, climate regulation) and option value (biological diversity). Except for the water flow and climate regulation services (mentioned in paragraphs 2.5, "Preserving natural environments – Water (ESRS E3)", page 226, and 2.2, "Acting for the climate (ESRS E1)", page 203), VINCI's activities across its value chain are not materially dependent on ecosystem services.

Identifying and locating sites with material biodiversity issues

Sites related to the Group's own activities and that are considered to have material biodiversity issues are the physical facilities operated by the Group's Concessions businesses (airports, renewable energy production facilities and motorways) and quarries, as well as the land owned by VINCI in connection with its property development business. Office sites are considered non-material from a biodiversity standpoint.

At sites where VINCI operates temporarily, especially construction, earthworks and maintenance worksites, biodiversity issues are not material and are in fact considered to be associated with the upstream and downstream value chain of the Group's activities. Excluding impacts to the affected communities mentioned in paragraph 3.3, "Engaging with affected communities (ESRS S3)", page 267, the Group has not identified significant social impacts generated by sites with material biodiversity issues.

Material IROs related to biodiversity issues

Material impacts, risks and opportunities	Businesses concerned	Position in the value chain and on the time horizon	Stakeholders concerned
Activities in or near biodiversity-sensitive areas			
Negative impact: biodiversity-sensitive areas – disruption or degradation of ecosystems related to Group operations Significant disruptions or degradation to the state of ecosystems and of flora and fauna, related to Group activities located close to or inside protected areas, Unesco sites, key biodiversity areas or sensitive areas	VINCI Concessions VINCI Autoroutes Cobra IS (Belmonte) VINCI Construction (quarries)	Downstream Short term	Nature and biodiversity Local communities and residents
Controversy risk: biodiversity-sensitive areas Controversies and major media exposure related to stakeholder pressure, such as from NGOs, on operations for the benefit of users of infrastructure	VINCI Concessions VINCI Autoroutes	Own activities Medium term	Employees, subcontractors, temporary staff Customers Public authorities Local communities and residents Nature and biodiversity Investors and lenders
Land use change			
Negative impact: soil sealing Degradation or destruction of natural environments and soil depletion related to soil sealing resulting from the Group's new construction and earthworks activities and its extraction of raw materials	VINCI Immobilier VINCI Autoroutes (new infrastructure) VINCI Concessions (new infrastructure) VINCI Construction (quarry expansions)	Own activities Short term	Employees, subcontractors, temporary staff Customers Public authorities Local communities and residents Nature and biodiversity Investors and lenders
Risk: controversy related to the use of wood from deforestation Controversies and major media exposure related to stakeholder pressure / NGOs if wood from deforestation is used	VINCI Construction	Upstream Medium term	Suppliers Nature Local communities and residents Employees, subcontractors, temporary staff
Opportunity: revenue from land recycling operations (urban reconstruction by reusing its assets) Implementation of land recycling projects	VINCI Immobilier	Own activities Medium term	Employees, subcontractors, temporary staff Customers Public authorities Local communities and residents Nature and biodiversity Investors and lenders

2.6.2 Policies, objectives and action plans

2.6.2.1 Policy for preserving natural environments and biodiversity

The Group's activities have impacts on natural environments, which VINCI strives to mitigate by applying the avoid, reduce, compensate (ARC) hierarchy. VINCI has undertaken to achieve no net loss of biodiversity by 2030. In 2024, it renewed its commitments to act4nature international, which were validated by the steering committee (whose members include the French Committee of the IUCN, environmental non-profits, France's National Museum of Natural History, the Global Compact Network France, etc.). The four main commitments remain aligned with past initiatives while targeting the issues identified in materiality assessments: strengthening governance, improving knowledge, reducing the pressures on biodiversity of the Group's activities, and developing the Group's expertise in restoring natural environments and supporting its customers. VINCI's commitments and progress report are published in French and in English on the act4nature international website. In December 2024, VINCI's commitments were also recognised by the global It's Now for Nature campaign by Business for Nature, a global coalition of more than 85 influential partner organisations and forward-thinking companies. In 2024, VINCI's business lines worked together to set targets and build road maps addressing the five key drivers of biodiversity loss. Several VINCI companies have forged partnerships with the scientific community and non-profit organisations (see paragraph 3.1.5, "Dialogue with stakeholders", page 232) to inform their programmes with accurate expertise.

At VINCI Autoroutes, the ARC approach is an essential part of any motorway project and integrated into all processes, from design and construction to operation and maintenance. It builds many structures along motorways to provide safe crossings for wildlife and reduce the fragmentation of their habitats.

VINCI Concessions is rolling out a policy to address biodiversity issues while taking into consideration the diversity of its activities. Biodiversity experts in the international network, which represents all three VINCI Concessions business lines, were involved in shaping the Biodiversity policy to ensure its close adaptation to local challenges and realities.

For many years, VINCI Construction has been implementing measures to promote biodiversity and mitigate the inherent impacts of its businesses. VINCI Construction companies strictly apply the ARC hierarchy with the aim to achieve no net loss of biodiversity. Thanks to its acquired expertise, the commitments it has made and the engineering work accomplished across its businesses, VINCI Construction can now demonstrate concrete results and examples of its preservation of biodiversity.

VINCI Immobilier is the first nationwide property developer to make a "no net land take" commitment, ahead by more than 20 years on the target set by France's Climate and Resilience Law. By 2030, each square metre of soil sealed will be offset by unsealing one square metre on another project. Due to this, VINCI Immobilier prioritises operations on soil that has already been sealed and no longer undertakes any project in which the number of square meters of land take exceeds the floor area built.

2.6.2.2 Action plan

Initiatives adapted to local environmental issues and the duration of the project are taken on long-term sites operated and managed by Group companies as well as worksites. These actions are based on the four main commitments to the act4nature international initiative indicated above.

Actions relating to the governance of biodiversity

A governance approach for biodiversity preservation has been in place for several years to coordinate the Group's commitments (see paragraph 1.2.1, "ESG governance", page 191). A Biodiversity Task Force, comprised of about 90 ecology experts and environment managers from VINCI's different activities, meets three times a year. It is responsible for monitoring the regulatory environment, developing scientific expertise, analysing risks, promoting initiatives and sharing best practices.

Actions to improve knowledge

Knowledge is critical for choosing effective initiatives that are best adapted to the context. With the right information, VINCI can systematically and accurately anticipate, measure and manage environmental impacts, including over the long term, while leveraging existing or emerging tools and techniques to preserve biodiversity. Building knowledge also means sharing information and working with experts and environmental and scientific organisations to create synergy, pool resources and optimise biodiversity conservation, especially near sensitive areas.

Integrate biodiversity into employee awareness-raising programmes and top management training courses

Employee awareness and training actions, particularly in relation to biodiversity, are described in paragraph 2.1.2.2, "Training and awareness", page 202.

Increase the number of local partnerships

As Group businesses operate locally over long periods, a number of educational initiatives are implemented to support regional actors.

Group entities have for many years developed strong partnerships with non-profits or research centres to support natural environments (nearly 1,200 agreements, of which 800 voluntarily, were signed or in effect in 2023), and they have broadened the scope of their collaboration.

VINCI Autoroutes has joined forces with many national partners in France, such as the Bird Protection League (LPO), France's leading agricultural union (FNSEA), the national beekeepers association (Unaf) and the National Forest Office (ONF). With the creation of the VINCI Autoroutes Foundation's biodiversity mission in June 2022, these partnerships have evolved toward natural environment restoration projects. Projects supported by the foundation must not be for profit or related to the company's business. They must be located in an administrative department covered by the VINCI Autoroutes network, but not on motorway property. By the end of September 2024, the foundation had supported 53 projects involving 29 non-profits, 12 local authorities, six wildlife care centres, five river protection associations and one government organisation (French Office for Biodiversity, OFB), contributing a total of €1.3 million in financial assistance.

At VINCI Concessions, partnerships also develop at a regional level. London Gatwick airport celebrated its support of the Gatwick Greenspace Partnership (GGP), which reached its 30th anniversary. Through this partnership, thousands of volunteers, local schools, and community groups have engaged in biodiversity enhancement activities. London Gatwick airport has helped rare species, such as the nightingale and great crested newt, return to their habitats. The GGP, funded in part by the airport, coordinates ecological activities within the airport grounds and surrounding areas. To combat wildlife trafficking, Manaus airport has partnered with the World Conservation Society (WCS) to train staff in identifying species affected by trafficking.

In 2024, VINCI Energies France signed a partnership with the association of French regional parks and the Bird Protection League (LPO).

Monitor the measures implemented for consultation with stakeholders

Along with their institutional partnerships, VINCI companies engage in continuous dialogue with stakeholders. They strengthen communication with local residents near worksites and infrastructure in operation, through information meetings, improved signposting, worksite visits and new communication channels.

- As part of its work to reduce noise pollution for local residents, VINCI Airports publishes information on flight paths and the results measured by its noise monitoring systems online. Local residents can also report incidents directly on these visualisation platforms.
- Websites were developed for VINCI Construction's road and urban development worksites, to communicate more easily with people living near many of its worksites in France.

Continue to deploy status indicators that take ecosystem functionality into account

In partnership with Patrimoine Naturel (a collaborative research and education entity focused on natural heritage, also known as PatriNat), under the aegis of France's National Museum of Natural History (MNHN), the National Centre for Scientific Research and the French Office for Biodiversity, VINCI Construction has developed a method to map and analyse the natural zoning of quarry sites, based on an ecological quality indicator (IQE) designed by the MNHN. Using this method, VINCI Construction can assess issues involving flora and fauna and determine the measures that must be taken to conserve existing species while providing a favourable environment for new ones. Since the partnership was founded in 2012, the method has been tested on some 40 quarries out of the 150 sites in France.

With the help of the firm I Care & Consult, VINCI Autoroutes is developing a biodiversity footprint tracking system to measure the impact of the presence, use, operation, maintenance and development of existing infrastructure. The system also takes into account all related services such as distribution and food management at service areas. The initial results show that the infrastructure's fragmentation of habitats, the direct impacts of motorway traffic (noise, contribution to climate change and pollution), and the agri-food model at the rest and service areas have an equivalent impact on biodiversity. This calculation gives meaning to the action plans and serves to align efforts with impacts identified. From a strategic point of view, it also ensures that all the necessary measures have been taken to reduce the impact on biodiversity and implement land rehabilitation solutions.

VINCI Concessions began work in 2024 to define a common set of specifications for performing inventories of fauna and flora. The specifications will then be rolled out across the network and used to develop a geographic information system (GIS) platform and a land use classification indicator. The indicator will show the type of land cover (soil sealing type, grassland, wooded area, forest, etc.), their respective surface areas, and the management practices being used.

Increase the number of fauna/flora inventory data in the public domain

Since 2012, VINCI Construction has been centralising and analysing fauna and flora data to expand the national natural heritage databases of the Inventaire National du Patrimoine Naturel (INPN). The inventories carried out at VINCI Airports sites will enrich this knowledge. Almost 200 taxons were counted at Nantes Atlantique airport in 2024. For the 10th year in a row in 2024, London Gatwick airport received The Wildlife Trust's Biodiversity Benchmark Award, which recognises its exemplary management of biodiversity over the 91 hectares of land surrounding the airport. Through many inventories carried out in this area over the years, London Gatwick airport has identified 3,120 species. More than 260 volunteers have participated actively in its conservation efforts. Following the example of VINCI Construction and VINCI Airports, VINCI will strive to share data from other businesses and increase by 20% the volume of inventory data it contributes to the public domain.

Continue research work

In addition to VINCI Construction's partnership with Patrimoine Naturel (a collaborative research and education entity focused on natural heritage, also known as PatriNat), VINCI supports research projects that promote biodiversity by working closely with the scientific community. In 2023, VINCI renewed its partnership with the schools AgroParisTech, extending the collaboration that created the lab recherche environnement research programme in 2008. The research programme focuses on improving the health, comfort and well-being of users by continuing to reduce urban heat island effects and impacts on the water cycle.

Despite offering cities valuable tools to adapt to climate change and reduce their environmental impact, ecosystem services appear to be under-optimised. Given that observation, AgroParisTech researchers focused on the following topics in 2024:

- integration of indoor air quality and overheating into the life cycle assessment of buildings;
- role of vegetation in regulating the microclimate and air quality in cities;
- connection between green neighbourhood models and building models to assess how vegetation contributes to thermal comfort inside buildings;
- continued work on the design of technosols.

The research team has also introduced subjects that it will continue to study in 2025: biodiversity in the soil (brown network) and the implementation and management of green spaces (urban and peri-urban).

Actions to reduce the pressure of the Group's activities on biodiversity

To reduce the pressures of VINCI's activities on biodiversity in relation to the five direct drivers of biodiversity loss identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, see paragraph 2.6.1, "Identification of material impacts, risks and opportunities", page 228), a range of actions adapted to issues are rolled out at entities.

Land use and fragmentation factor

Develop land recycling to avoid new soil sealing

Land recycling refers to developing property on obsolete land that has been restored and repurposed because it no longer serves its previous purpose or the buildings on it have fallen into disrepair. The notion of recycling applies when activity has stopped or is planned to discontinue in the near future. Examples of land to be redeveloped include abandoned industrial facilities, dilapidated housing, polluted land, and obsolete office complexes or shopping areas. VINCI Immobilier has set a target to generate more than 50% of revenue through land recycling and achieve the "no net land take" target (excluding Ubat and operations in Poland) by 2030. Its commitment is opening up promising opportunities for the Group in the areas of soil remediation, resource conservation and avoiding land take.

In 2024, VINCI Immobilier generated 41% of its revenue from land recycling operations, despite the difficult economic environment (see paragraph 2.6.3, "Performance monitoring", page 234).

Furthermore, VINCI's Environment Division and Leonard, the Group's innovation and foresight platform, are jointly leading a foresight programme, launched in 2022, focused on land recycling. A working group has been set up with experts from Group divisions to consider the different ways in which VINCI could advance in this area. The discussions underscored that the Group has all the expertise needed to implement land recycling in an operational and integrated manner to support regions.

"No net land take" target for property development

Since 2022, VINCI Immobilier has measured soil sealing before and after each project and declined to pursue any project in which the extent of land take exceeds the floor area built.

In addition to the land take calculation, VINCI Immobilier is accelerating biodiversity assessments in its operations. It now assesses biodiversity issues on all land by systematically using the Biodi-Bat mapping tool. This aid in operational decision-making is essential for implementing VINCI Immobilier's environmental strategy and ensures that a consistent approach is taken for all projects.

In 2023, the approach was enhanced with notifications sent to the commitment committee whenever a project exceeds certain soil sealing thresholds.

VINCI Immobilier also participates in several working groups to share best practices related to the "no net land take" strategy. The Biodiversity Impulsion Group (BIG) programme by the Observatoire de l'Immobilier Durable (OID) enables the sharing of knowledge and feedback with property development companies. Experts participating in the think tank La Fabrique de la Cité, initiated by the VINCI Group, explore issues such as no net land take and the city of the future.

Reduce factors driving natural habitat loss at concessions

Operators of linear infrastructure concessions are concerned with limiting the fragmentation of natural habitats during operations as well as construction work and reducing land use.

Their efforts focus on the ecological transparency of their infrastructure, the reversibility of barriers, and the restoration of sensitive environments and ecological connectivity. This includes building and restoring wildlife crossings, making improvements to hydraulic structures, restoring and enhancing sites of ecological interest, seeding and replanting slopes, sustainable roadside grass mowing, and so on. As they design and operate infrastructure over the long term, concession companies can develop expertise and use their networks under concession for field surveys and educational initiatives.

A voluntary rehabilitation programme that began in 2010 to restore ecological continuity on the network was completed in 2024. The programme mainly included the construction of 203 structures on the motorways under operation to enhance their ecological transparency for wildlife: overpasses (wildlife crossings over 15 metres in width, including structures for small and large animals that reproduce in the restored habitats), tunnels, benches and ledges for hydraulic structures, fish passages and one bat gantry. Also part of the programme were structures created for new projects and expansions.

Among its targets for 2030, VINCI Autoroutes aims to apply extensive management systems to 100% of its motorway network, and to carry out 200 land rehabilitation projects (500 hectares by 2030), under a partnership with the French National Forest Office (ONF), along the land under concession.

After the signing of the Buckingham Declaration in May 2023, airports in the VINCI Airports network took steps to implement its commitments by rolling out programmes to fight wildlife trafficking.

Reduce factors driving loss of natural environments at quarries

VINCI Construction expects all of its quarries to have a voluntary biodiversity or water preservation action plan in place by 2030.

The implementation of advanced biodiversity preservation measures is a firmly established practice at quarry sites. As regulations require them to rehabilitate sites after operation is complete, quarries have acquired extensive ecological expertise, especially in environment dynamics. Actions have begun to be implemented voluntarily during the quarrying phase so that species and operating quarries can coexist. Working with local nature protection organisations, operators sometimes discontinue work in specific areas during nesting periods or add elements to their sites to prevent wildlife from entering quarrying areas (e.g. fences).

Ecological management measures are taken in prairie areas to avoid mowing or to implement grazing strategies, which limit the impact of mowing on species. Some sites apply ecological engineering to recreate ponds or rock piles, which provide excellent habitats for animals. It is also worth noting that these initiatives are implemented over the long term during the operation of these sites. Measures and their effectiveness can therefore be monitored, which is often carried out voluntarily with conservation organisations.

Reduce factors driving natural habitat loss at worksites

VINCI Construction companies identify priority issues and apply the avoid, reduce, compensate hierarchy when responding to calls for tender. Solutions are then defined to adapt to the worksite, and, if possible, more efficient alternatives can also be put forward to customers.

VINCI Construction companies consider the potential effects of a project on biodiversity and take steps to avoid negative impacts (for example, by modifying worksite access routes to avoid crossing sensitive areas, adapting timetables to species, relocating fish and plants, etc.). Other adjustments to working methods to reduce the impacts of worksites on wildlife and natural environments include diverting waterways, marking out worksite areas according to species, creating retention ponds and fighting invasive alien species.

Concession companies include biodiversity preservation standards in their works contracts.

VINCI Energies implements measures adapted to the ecological issues of its worksites. In the United States, Chain Electric Company reduced the impact of its work in a plant-rich wetland by choosing adapted equipment (barge-mounted cranes, hovercraft, air mats, etc.).

Resources factor

An assessment carried out in 2024 on the Group's value chain showed that VINCI takes two main resources from natural environments. The first is wood used in construction activities, especially in building (see paragraph 2.3.2.1, "Promoting the use of construction techniques and materials that economise on natural resources", page 219). To guarantee resource traceability and avoid the risk for VINCI of using wood from areas with tree cover loss due to deforestation, the Building France Division (VINCI Construction) collaborates with its suppliers to locally source certified wood. It set the target to purchase 100% PEFC- or FSC-certified wood by 2030. 2025 will see the rollout of the first steps taken to achieve this target, such as meetings with the main labelling and certification organisations and the stakeholders concerned (sawmills, suppliers, forest owners, etc.). The percentage of certified-origin wood consumed in 2024 is provided in paragraph 2.6.3, "Performance monitoring", page 235.

The second is water, which is used by Group entities in their processes (see paragraph 2.5, "Preserving natural environments – Water (ESRS E3)", page 226). Other types of resources and their uses are detailed in paragraph 2.3, "Optimising resources thanks to the circular economy (ESRS E5)", page 218.

Climate change factor

Actions to reduce impacts relating to climate change are described in paragraph 2.2, “Acting for the climate (ESRS E1)”, page 203.

Pollution – phytosanitary products factor

Number of airports using no phytosanitary products **2020: 32** **2024: 57** **2025: 59 (consolidated scope)**

VINCI Autoroutes and VINCI Concessions have committed to eliminating the use of phytosanitary products in the maintenance of infrastructure under concession by 2030, except where required by regulations. At VINCI Autoroutes, consumption of these products has fallen by more than 99% since 2008 and they are now only used in areas with extremely limited accessibility or to treat certain invasive plant species. In 2024, 57 out of 59 airports in the consolidated scope of VINCI Airports met the zero phytosanitary products target, i.e. eight more than in 2023. A reduction of just over 71% in the use of phytosanitary products (in litres) occurred between 2018 and 2024 for the Concessions business as a whole.

For information on light and noise pollution, see paragraph 2.4, “Preserving natural environments – Pollution (ESRS E2)”, page 225.

Invasive alien species (IAS) factor

VINCI Construction has introduced IAS management plans at all its worksites and most of its quarries in France, and plans to train all workers on fixed sites in France about IAS by 2030.

VINCI Autoroutes has created a map of IAS locations across its network and is working with ecology laboratories to find better solutions for managing them. VINCI Concessions occasionally introduces control measures when locations are identified on certain assets.

Actions to develop our capacity to restore natural environments and support our customers

In addition to Group actions taken to reduce pressure on biodiversity, VINCI may be required to carry out ecological compensation operations, which take different forms depending on the role of VINCI entities in the projects.

Regulatory ecological offsetting

When acting as programme managers, some VINCI entities, such as those in the Concessions business, can take responsibility for introducing offsets when the major impacts of a project could not be avoided or sufficiently mitigated. For many years, entities in the Concessions business have been adapting offsets to local requirements and monitoring ecological performance.

In the Cofiroute network (VINCI Autoroutes), as part of the compensation measures taken for the Porte de Gesvres reconfiguration in Nantes, more than 260,000 native plants and trees were planted along the northern and eastern ring roads and along the A11 motorway. Several measures to protect avifauna were also taken: a total of 15 hectares of wooded area and 3,000 sq. metres of wetlands were restored, offsetting by more than 200% the area of the wetlands impacted by the project.

VINCI Concessions also spearheads many offset initiatives. LISEA has initiated a large-scale environmental mitigation programme in the region crossed by the South Europe Atlantic high-speed rail line (SEA HSL), more specifically to protect 223 species and implement 3,800 hectares of environmental and forest mitigation measures across 330 sites along the line (30% were acquired by LISEA and transferred to conservatories of natural areas, and 70% come under agreements with farmers or landowners).

At quarries operated by VINCI Construction, offsets are also implemented in situ or ex situ, in the manner determined with government agencies and local nature conservation partners.

In its designer-builder role, VINCI Construction may be mandated by its customers to implement offsets at worksites.

For the Green Aggregates plant expansion by VINCI Construction UK, ecological mitigation and compensation measures were proposed for the expansion area as well as the ecological buffer zone. The aim is to create a mosaic of richly flowered open habitats and patches of bare ground, favoured by invertebrates. A long-term ecological landscape management plan defines the measures required to maintain the mosaic throughout the life of the project. The positive impact of the ecological design is clear, with a net gain of 5.6% in units of habitat designed specifically for the mix of invertebrates at the site, which uses the official Natural England biodiversity metric.

Voluntary offsets (restoration of natural environments, reforestation)

Several VINCI companies implement voluntary offsets to contribute to the reforestation of degraded lands to benefit local populations. Experts support these initiatives to ensure that projects meet high environmental and social standards.

In 2024, VINCI Airports continued to invest in reforestation programmes recognised by the French certification standard, Label Bas Carbone (see under “Carbon offsetting projects” in paragraph 2.2.2.1, “Climate change mitigation and energy”, page 213).

VINCI Construction also developed its offsetting efforts in 2024. For instance, 1,000 tree species were planted on a hill in the Santiago metropolitan area, in Chile, as part of a reforestation project.

Through its partnership with France’s National Forest Office, VINCI Autoroutes worked with the quarry operator Kleber Moreau in 2024 to rehabilitate the 3.3 hectares of a former rest area on the A83 motorway, located in Sainte Hermine (Vendée) and create an offsetting wooded area. This rest area was closed in 2009. The same year, the buildings on the land were demolished and soil remediation was performed.

The bulk of the rehabilitation work, organised into three phases, was carried out from January to March 2024. First, all of the asphalt, along with the concrete curbs and gutters and any remaining furniture, was removed to unseal the soil, and the level ground was reshaped with sloping contours. Next, organic soil was spread and meadows and wetlands were created. In the fall of 2024, local species were planted.

Restore green spaces and create ecological corridors

In environments that have been highly disturbed by human activities (areas of intensive farming, for example), green spaces along motorways provide refuges for biodiversity. To strengthen and promote this role, fencing may be placed closer to motorways to enlarge the area serving as a refuge. In the 30,000 hectares of land along its motorways, VINCI Autoroutes has identified more than 200 green spaces for potential regeneration. The company asked France's National Forest Office (ONF) to identify local biodiversity and make recommendations to enhance it. Through a partnership signed in February 2022, the ONF provides the expertise and synergy needed to roll out emblematic regeneration programmes more widely. VINCI Autoroutes follows the ONF's specifications in its ecological restoration projects carried out with local stakeholders.

Several VINCI Concessions assets have also developed projects to restore surrounding green spaces, such as the Wild Meadows project in the Czech Republic and Slovakia. Launched by Via Pribina in 2021, the project was developed with local biodiversity experts and Comenius University in Bratislava and involved sowing a diverse mix of native species along the expressway. Benefits of the project include creating vital habitats for invertebrates and pollinators, reducing the need for grass mowing or repairs, and preventing ground movement and the resulting potential damage to infrastructure. This is an example of sustainable land management that can be reproduced in a range of environments. After being tested on the R1 in Slovakia, the solution was implemented by the Via Salis concession in the Czech Republic over a larger expanse (48 km of wild grassland along the motorway). In the United States, the Ohio River Bridges – East End Crossing concession launched a similar project.

Implementing ecological engineering solutions to preserve and restore biodiversity

Environmental engineering has developed into a branch of engineering in its own right and can be applied to preserve natural environments. VINCI Construction has developed a specific range of solutions for its customers and brings its ecological engineering expertise to highly specialised projects to guarantee long-term efficiency. These solutions support VINCI's commitment no. 4 to the act4nature international initiative, "Develop our capacity to restore natural environments and support our customers".

Under the Equo Vivo brand, VINCI Construction carries out all types of ecological engineering work dedicated to restoring biodiversity and implementing ecological development projects. These projects meet three main objectives: maintaining and restoring ecological connectivity, hydromorphic restoration and site rehabilitation. This know-how comes from a deep understanding of earthworks, levelling operations, river hydraulics, plant-based engineering and the management of plant species (including the control of invasive non-native plant species). In 2024 Equo Vivo helped to restore land along the Mosson river and wetlands in Lavérune and Saint-Jean-de-Védas. Océlian (VINCI Construction) participated in restoration work on the Bienne river at Morez. The work aims to restore ecological continuity across two weirs, improve the flow and overflow of the Bienne and enable residents to re-engage with the river.

Developing nature-based solutions in urban environments

Beginning at the design phase, VINCI Construction works to reintegrate the important role of nature into cities and buildings through its Revilo® solution. It incorporates urban cool islands into development projects using four levers: rainwater management, a vegetation layer, soil permeability and urban surfaces that allow water to infiltrate. In 2024, the solution was rolled out at several worksites, including the car park for a hypermarket in Trélissac. VINCI Construction's experts also set up a consulting structure, Urbalia, to help urban planners and construction companies integrate biodiversity into their designs for the city of the future.

2.6.3 Performance monitoring

2.6.3.1 Identification of sensitive areas

In 2024, VINCI carried out a study to identify the impacts, risks and opportunities of its activities (see paragraph 2.6.1, "Identification of material impacts, risks and opportunities", page 228).

To assess the vulnerability of its sites with respect to biodiversity-sensitive areas and key biodiversity areas, VINCI uses the Integrated Biodiversity Assessment Tool (IBAT), which has been integrated into its internal ResiLens tool. IBAT is an alliance between BirdLife International, the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), the International Union for Conservation of Nature (IUCN) and Conservation International. It is a biodiversity data provider licensing commercial access to global biodiversity datasets and derived data layers, the World Database on Protected Areas (WDPA) and the World Database of Key Biodiversity Areas (WDKBA). VINCI has identified the following biodiversity-sensitive areas: Natura 2000 protected areas, Ramsar sites, state-specific protected areas, Unesco MAB programme biosphere reserves, Unesco World Heritage Sites, and IUCN protected areas in categories I to III. IUCN categories I to III aim to protect the ecological integrity of natural ecosystems and processes. Category IV includes sites in which regular management measures are required to conserve and, as needed, restore species or habitats. Category V protects lived-in working and cultural landscapes, which include, for example, farms and other forms of land use, such as France's regional nature parks. Category VI applies to areas with sustainable use of natural resources, mainly to benefit local populations.

Its analyses showed that less than 1% of the Group's fixed sites (quarries, plants, offices, airports, linear infrastructure) are located in or near IUCN category I to III protected areas, Natura 2000 protected areas, Ramsar sites, state-specific protected areas, Unesco MAB programme biosphere reserves or Unesco World Heritage Sites. Approximately 7% of fixed sites, mainly motorways, are located in or near Natura 2000 protected areas. And about 5% of fixed sites are located in or near key biodiversity areas.

An industry-wide evaluation is currently under way regarding the proximity analyses used to calculating distance from biodiversity-sensitive areas. Depending on the assumptions made, the impact on results and their comparability is significant. Initiatives adapted to local environmental issues and the duration of the project are taken on long-term sites operated and managed by Group companies as well as worksites. As Group businesses operate locally over long periods, a number of educational initiatives are implemented to support regional actors (see paragraph 2.6.2, “Policies, objectives and action plans”, page 229).

2.6.3.2 Monitoring offsetting measures put in place

Wildlife crossings and fenced sections

In 2024, the number of wildlife crossings increased compared with 2023, with the inclusion of 106 new crossings on the Cofiroute and ASF networks.

Wildlife crossings and fenced sections on the motorways of VINCI Autoroutes companies	2024	2023
Crossings for small and large wildlife (in number)	1,224	1,118
Fenced sections (in km)	8,949	8,949

Indicators used for quarries (VINCI Construction)

VINCI Construction's biodiversity indicators specific to quarries	2024	2023
Quarries that have set up a CLCS ^(*)	38%	33%
Quarries that have formed partnerships with local naturalists	20%	20%

(*) Commission locale de concertation et de suivi (local committee for consultation and monitoring).

2.6.3.3 Land use change

“No net land take” indicators

Extent of land take at VINCI Immobilier **2020: 13%** **2024: 15 %** **2030: 0%**

VINCI Immobilier is focusing its strategy to preserve natural environments, aiming to meet a “no net land take” target in France by 2030. Its approach involves the use of a calculation method defined on the basis of existing work to measure soil sealing before and after projects. Progress towards achieving the “no net land take” target is measured using the percentage change in land take (Δ DA) (see paragraph 5.3.7, “VINCI Immobilier’s ‘no net land take’ indicators”, of the methodology note, page 277). At 31 December 2024, the percentage change in land take for the year came to 15% (excluding Ubat) versus 6% in 2023.

Land recycling indicator

Revenue from land recycling operations at VINCI Immobilier **2020: 33%** **2024: 41%** **2030: 50%**

In 2024, 41% of VINCI Immobilier’s revenue was generated through land recycling operations, as against 70% in 2023. The significant decline observed between 2023 and 2024 is mostly attributable to the downturn in the commercial property market, which was one of the main drivers of the strong performance posted in 2023, along with some projects being postponed to 2025.

2.6.3.4 Fighting deforestation

Volume of certified-sustainable wood consumed by VINCI Construction’s Building France Division **2024: 60%** **2030: 100%**

At 31 December 2024, the percentage of certified, sustainably sourced wood out of the total consumed by VINCI Construction’s Building France Division was 60%.



This universal registration document was filed on 28 February 2025 with the Autorité des Marchés Financiers (AMF, the French securities regulator), as competent authority under Regulation (EU) 2017/1129, without prior approval pursuant to Article 9 of the said regulation.

The universal registration document may be used for the purposes of an offer to the public of securities or the admission of securities to trading on a regulated market if accompanied by a prospectus and a summary of all amendments, if any, made to the universal registration document. The set of documents thus formed is approved by the AMF in accordance with Regulation (EU) 2017/1129.

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