

**ASECAP DAYS**



**MILANO 2024**

**VIA PLUS**  
by VINCI HIGHWAYS



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# **A Comprehensive Approach to Creating Sustainable Roadway Environments**

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We endeavor to design, build, operate and maintain urban areas that offer a more pleasant lifestyle, more effective infrastructure and more people-oriented workplaces that rely as little as possible on our planet's finite resources.

# Categorizing Our Emissions

Scopes 1, 2, 3

1

**BURN**

**Direct emissions** from sources owned or controlled by a company



2

**BUY**

**Indirect emissions** from purchased electricity, steam, heat, and cooling.



3

**BEYOND**

**Upstream & downstream emissions** associated with a company's activities



**By  
2030:**

**VINCI Group targets to reduce its direct emissions (Scopes 1 and 2) by 40%, and reduce indirect emissions (Scope 3) by 20% from 2019 levels**





# VINCI and The Carbon Trust



## Studying Scope 3 Emissions on Our Highways

A specific model has been developed for each VINCI concession, considering specifics such as road characteristics (gradient, length, speed limits, etc.) fleet composition, and traffic

- Results demonstrate that free-flow / ETC reduce CO2 emissions by up to 60% versus traditional gated toll plazas
- Evidence verifies that ETC and free-flow have proven environmental benefits versus conventional systems
- ETC optimizes traffic levels on road networks and contributes to reducing scope 3 emissions



# The Pursuit of Improvement and Progress



# MAKING PROGRESS ON CLIMATE RELATED ACTIONS

## Scopes 1, 2 & 3



### ENERGY EFFICIENCY

Full deployment of LED **lighting** and reduction of lighting intensity: **11 highways are already fully LED**

Replacement of existing **Heating, Ventilation and Conditioning facilities** by more energy-efficient HVAC systems

Implementation of **energy monitoring systems; Building management systems** optimize the use of infrastructure, emergency lighting automation, and optimization of inspections

Optimization of **temperature set-points** for air conditioning and heating

**Fleet renewal with less emissive technologies:** passenger cars, light commercial vehicles

**Green electricity power purchase** agreements subscription with guarantees of origins

**Solar energy:** Installations of photovoltaic plants for self-consumption: **East End Crossing over the Ohio River**



### CLEANER VEHICLES



### RENEWABLE ENERGY

## Scope

1 & 2



### ROADWAYS

**Charging stations** for clients' use (rest areas, parking): EV charging points on the M11 in Russia and along the operated Lima Expressa

Promotion of **carpooling** and encourage **eco-driving** among clients and employees. Creation of **carpool lanes**

**Traffic management** during the peak hours to smooth traffic flow: dynamic pricing

**Eco-modulation tariffs:** For clean vehicles

Deployment of **free flow tolls** to smooth traffic flows

**Mobility As A Service:** charging stations subscription, other services, carbon offsetting

Encourage subcontractors to use **more efficient equipment**

Support or fund for the **decarbonization of territories:** solar power plants for injection to the grid, hydrogen stations

Intermodality infrastructures: connection between roads and public transports (bus platform,...)

## Scope

3



### PARTNERS AND SUBCONTRACTORS



### TERRITORIES

# Approaches for Infrastructure Sustainability

Considering Multiple Angles

## Immediate Savings

Immediate energy savings can be had by making technical changes at the infrastructure level:

1. replace highway lights with **AI-controlled LED bulbs**
2. **install solar panels** to power facilities
3. **modernize HVAC systems** to reduce waste

## Clean Air

To promote cleaner air and electric vehicle usage, road operators can:

1. **install charging stations** along the road
2. **convert maintenance fleets to EVs** to reduce fossil fuel use

## Environmental Protection

Other green initiatives should aim to protect the environment itself:

1. **optimize project designs** to minimize biodiversity loss
2. **use non-pesticide maintenance solutions** to control roadside vegetation
3. **reforest nearby areas** to create carbon sinks
4. Create wildlife crossings

## Recycle

Establish programs that recycle materials, and incentivize the public for engaging in green behaviors:

1. Establish recycling programs that let drivers pay for tolls with “green credits” from their recyclables
2. Reuse road asphalt to reduce transport logistics



# VINCI Highways & Sustainable Mobility

Aiming for Net Zero by 2050



## Fleet Electrification

Implementation of 100% electric fleet providing road assistance, road monitoring, and maintenance services to customers.



## Green Amenities

Providing travelers with free and fresh drinking water from air (ambient humidity through a solar powered transformation process)



## Solar Power Plants

Network of solar fields at roadway projects: Lima Expresa (Peru), Ohio River Bridges (USA), JIO (Jamaica), Via Pribina (Slovakia), Lusoponte (Portugal).



## Lighting Technology

Smart, adaptive lighting systems for streetlights, and the application of light-colored pavement coating decreasing lighting requirements.

# VINCI Concessions & Sustainable Mobility

Aiming for Net Zero by 2050



Fully Recycled Roads



Sustainable Aviation Fuel



Public Incentives



Create Carbon Sinks



Water From Air



Ecological Engineering

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# THANK YOU

**GRAZIE**

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