

ASECAP DAYS



MILANO 2024



ORGANIZED BY



HOSTED BY



ASECAP DAYS



MILANO 2024

THE ROAD TO SELF-CONSUMPTION

JOSE ENRIQUE MEZQUITA GALLEGO

GLOBALVIA, AUTOPISTA CENTRAL GALLEGA S.A (AP-53), SPAIN

ORGANIZED BY



HOSTED BY

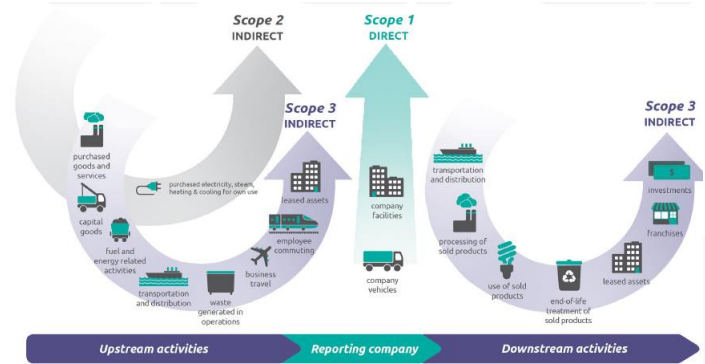


- The road to self-consumption:
 - Our commitment to reducing co2 emissions.
 - AP-53, Autopista Central Gallega S.A.
 - The beginnings HQ.
 - Tunnel.
 - From oil to electricity.
 - Main conclusions & Next steps.

OUR COMMITMENT



We are here



COMMIT
Dec 2020



DEVELOP
2021-Q1 2022



SUBMIT
May 2022



IMPLEMENT & REDUCE EMISSIONS → 2029

- **Baseline:** - 2019 Globalvia Carbon Footprint.
- **Scope:** - Scope 1 & 2 emissions (direct + indirect).
- At least 67% of scope 3 emissions (indirect).
- Subsidiaries: real portfolio (acquisitions/divestment).
- **Target years:** - 10 years → 2029
- **Commitment:** - Scope 1&2 emissions: 42% reduction by 2029
- Scope 3* emissions: 25% reduction by 2029

- **Global** and **ambitious** emission reduction target.
- Involves an emission reduction plan with **operational actions**.
- **Operational changes** and **technology investments** will be required.
- **A plan for each Group Subsidiary** has been developed to **contribute** to the emissions reduction plan.
- Requires annual follow-up, reporting and external disclosure (to be **internally audited**).

** Scope 3: only relevant categories included.*





AP-53

Location:

- Santiago de Compostela, Galicia, Northern Spain

Climate:

- Annual precipitation: 1.800 mm
- Rainy days: 150/160
- Annual average insolation: Kwh/m²/day: 3,6/3,8
- Sunny hours: 2.000-2.100
- Annual average temperature: 15,5°C

Main features :

- Motorway length: 57Km
- Toll Plazas: 5
- Buildings: 3
- Tunnels: 2
- AVDT: 6.008 (2023)





THE BEGINNINGS....HQ

Reduce energy consumption first...

- LED lighting (building and toll plaza)
- Heating&Cooling system fully renovated
- Insulation (main entrance)

Testing the waters...

- Test solar farm in 2022 (20 kw)
- Just a 5% surplus
- 25% reduction energy consumption
- IRR: 6 years

Let´s scale up!

- Toll Plazas (4) , 4x 11-10 KW
- Tunnel, 1x100 kW
- Going electric, 1x24 KW

TUNNEL

Main features:

- 320 m long (2 / 3 lanes)
- Cut&Cover method

Reduce energy consumption first...

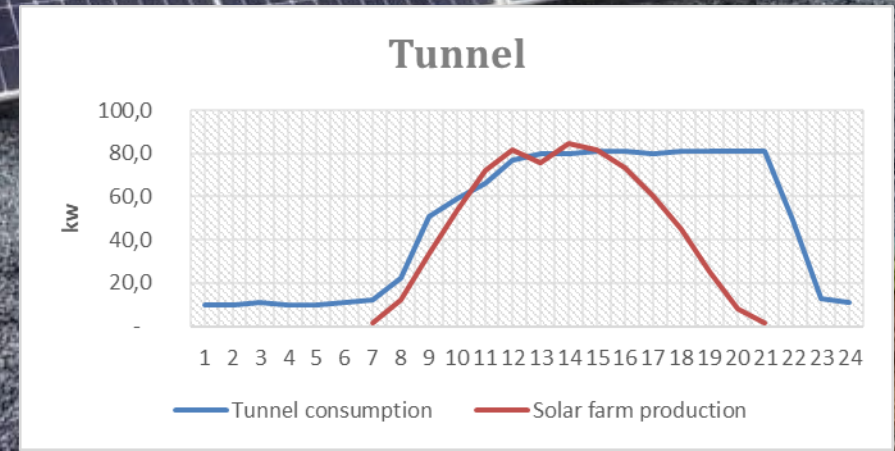
- HPS lamps to LED adaptative ones (-30%)

Analysing lighting patterns...

- Sunny days are key
- Production & Consumption curves

Main solar farm features:

- 100 kw(130 kw)
- Just a 4% surplus
- 38% reduction energy consumption
- IRR: 6,5 years (civil works included)





FROM OIL TO ELECTRICITY

Analysing fleet´s (11) consumption:

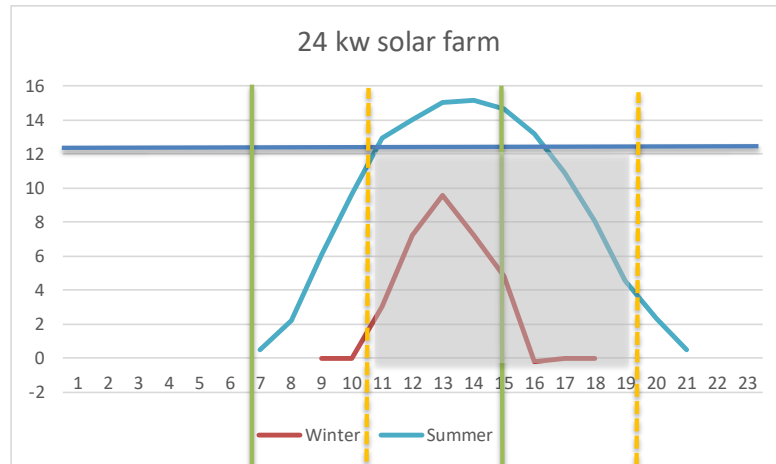
- Light vehicles (7): 63% / Heavy ones (4): 37%
- 24/7 Patrolling (2): 48% (77% Light vehicles)
- 18 K litres of diesel reduction

Reduce energy consumption first...

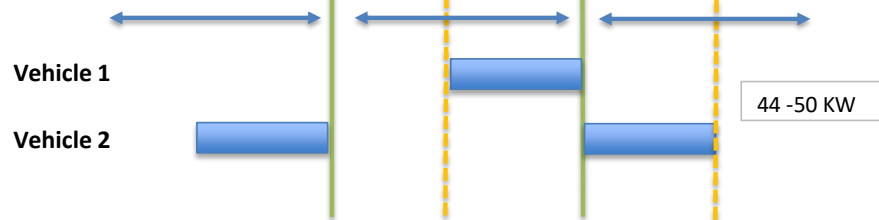
- From IC to EV (3X efficiency), VW´s ID Series

Keeping in mind our test solar farm..

- 24 KW capacity
- Charging points 3 x 11 KW AC + 1 X 30 KW CC
- 30% energy self produced for EV´s
- 23 K € annual savings (fuel+electricity)



11KW CA



MAIN CONCLUSIONS & NEXT STEPS :

- Buildings/toll plazas: 25/30 % self-consumption
- Tunnel: 38/40% self-consumption
- EV fleet: 30% self-consumption
- Carbon Footprint (Scope 1= direct & Scope 2= indirect)
- Carbon Footprint (Scope 3= indirect, commuting)
- What if.... increase solar power capacity?
 - 100% EV fleet
 - Free access to charging points to employees
 - Batteries in buildings+plaza tolls
- Does it make economic sense to install batteries?
- Promote self-consumption in other projects (Iberia)



ASECAP DAYS



MILANO 2024

THANK YOU

GRAZIE

JOSE ENRIQUE/MEZQUITA
GALLEGO

jemezquita@acega.es

+34 604 02 27 09



HOSTED BY



ORGANIZED BY

