



SOLEVA

THE SOLAR ELECTRIC VAN



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TRAVELING VS FOOTPRINT

Adventure runs deep through our veins, but our love for nature has made us question the environmental impact of traveling. More and more, we have found ourselves trading in planes for camper vans and exploring places closer to home.

However, even this behaviour has an environmental price: Personal transportation accounts for 39% of all greenhouse gas emissions in

Switzerland (OFEV, 2019), and travel vehicles have twice the impact of normal cars due to their size and weight.

On top of that, the EU has announced a ban on fossil powered cars by 2035, and other countries as early as 2025. A transition in mobility becomes unavoidable. Still, very few solutions exist nowadays for travel vehicles, and responsible choices force us to compromise between adventure and environmental ethics.

But what if we did not have to compromise? What if there was a way to explore the globe with the autonomy and comfort of travelling by car and having a minimal environmental impact at the same time?

LET'S RETHINK THE WAY OF MOBILITY AND TRAVELING!



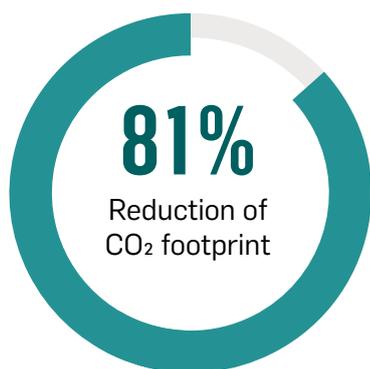
OUR MISSION

THIS HAS LAUNCHED US ON OUR MISSION: CREATE A SELF-POWERED, CLEAN ENERGY FUELLED, LOW-IMPACT TRAVELING VAN!

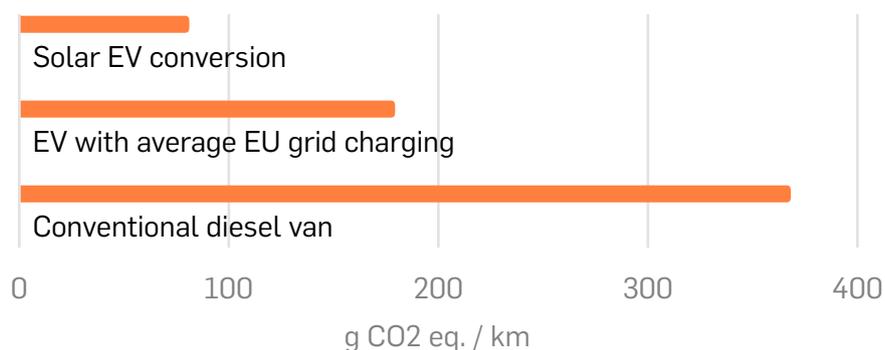
We achieve this by taking an old, retired van and giving it a new, exciting life. First, in a process called “retrofitting”, the old gasoline engine is replaced with an electric motor. Now an electric vehicle, the environmental footprint of road travel has improved significantly.

Next, our van is equipped with solar power, allowing us to be 100% renewable energy-powered and self-sufficient. This upgrade will be of great help in locations where reliable charging solutions are not always guaranteed.

Last, we will create an eco-friendly yet comfortable living space that will not lack any key elements (bedroom, bathroom, kitchen and living room). Its environmental impact is reduced to a minimum by using plant-based, reused and recycled materials.



CARBON FOOTPRINT

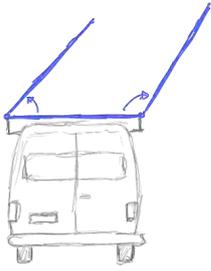


Comparison of the amount of CO₂ emitted per kilometre (in gCO₂eq./km) between a conventional diesel van, a new, electrical car charged by the average electrical grid in Europe and our converted electrical solar van.

A MOBILE SOLAR PLANT ON WHEELS

This converted solar vehicle will be a one of a kind demonstrator of the possibilities of sustainable mobility. Our design, aims for a high energy conversion efficiency from solar to battery and propulsion, allowing a high autonomy while minimizing the amount of batteries required. Moreover, we will collaborate with experienced professionals and local authorities to satisfy Switzerland's legal requirements and road safety regulations.

KEY SPECIFICATIONS



BATTERIES

refurbished lithium-ion
58kWh | 360V

+

SOLAR POWER

24m² | 5kWp



RANGE

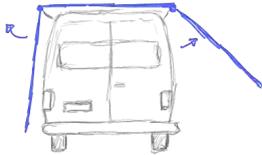
250km
autonomy

FULL CHARGE

2 days

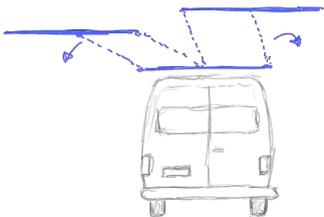
EFFICIENCY

24kWh /
100km



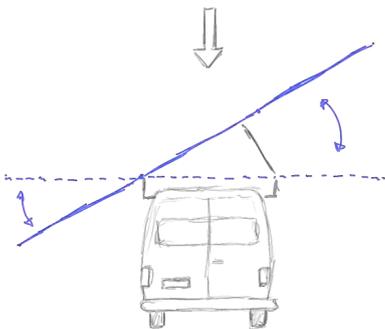
PLUS

- + Capability to power small scale off-grid events
- + Injection of excess solar electricity to the grid



SUSTAINABLE HABITAT

- Recycled materials for the insulation and structure
- Solar water heater
- Recirculating shower
- Ultra-filtration system for drinking water
- Composting toilet
- Inertial mass stove for heating
- Solar power for lights, cooking, fridge, charging, etc.





SPREAD AWARENESS

Next to demonstrating the unexploited potential of solar energy, we will also spread awareness about renewable energy, sustainable living, and reducing our environmental impact. Therefore, we have planned to arrange :

- Presentations and educational events in schools, institutions and municipalities
- Presence at national fairs and shows on the topics of renewable transition and the automotive industry
- Regular activity on social media platforms such as Instagram, Facebook, and YouTube, including videos describing every step of the build, specific topics and implemented technologies
- Meet local entrepreneurs, governmental institutions, schools and universities all throughout the journey to promote the renewable transition and green mobility.



From left to right: Lucanael Kopf (Mechanical integration), Roman Schmitz (Mechanical integration), Max Chevron (CFO & Lead Electrical Integration), Sara Bossuyt (Communication and habitat), Tobia Wyss (Lead solar system), Curdin Wüthrich (CEO), Matthieu Bourgois (CTO)

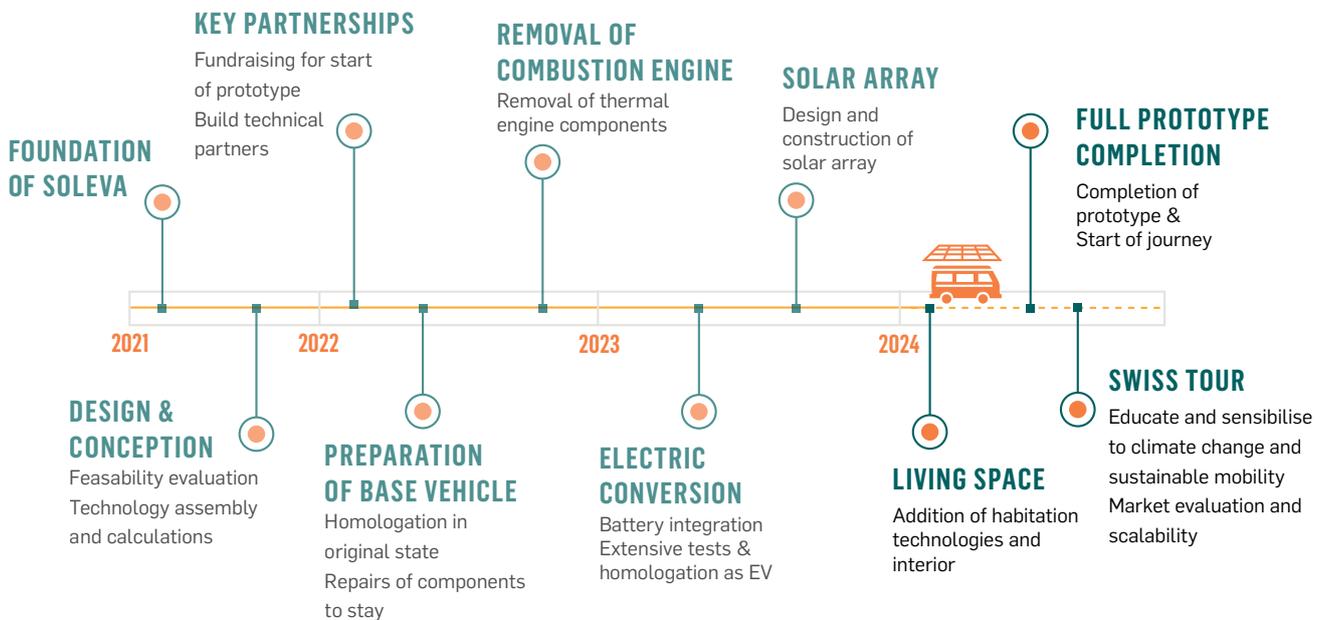
THE TEAM

The association Soleva was founded in 2021 and is currently led by 5 young and motivated professionals with the goal to promote solar, eco-friendly mobility. Our team, counting today more than 13 people, is united by the passion for developing an innovative project with a strong positive environmental impact. With the heart of travelers, we are dreaming of an environmentally responsible solution for both travel and living.

Our diverse backgrounds allow us to have experience in a wide variety of domains: electrical and mechanical engineering, physics, law and environmental engineering. Our team unites all the skills required to successfully achieve our goals, from building an electric car to coding solar controllers and integrating sustainable solar technology.

TIMELINE

The first year, 2021, was dedicated to the design and conception of the vehicle and the solar system. 2022 will be dedicated to the first modifications that allow us to start with a clean base (emptying the van and the restoring the chassis), followed by the transformation of the propulsion system and the homologation. Then, in 2023, the solar array will be added and the sustainable living space will be integrated. Finally, the demonstration journey, lasting at least one year, will start in 2024.



SUPPORT US

By sponsoring Soleva, you will help make an impact in the yet unexplored field of sustainable traveling. Moreover, you will show your presence in the fields of sustainability, circular economy, renewable energy and innovation. Below you will find the two sponsorship packs that we offer, but we are open to suggestions to meet any specific needs you may have.

SILVER GOLD PLATINUM

• Logo on our website, social media, videos, brochure, presentations and documentary			
• Dedicated posts on our social media about your partnership			
• Logo on our vehicle	 S	 M	 L
• Presentation at your institution			
• Dedicated video of your product & activities on our social media channels			
• Choice of logo location on vehicle *			
• Special brand highlighting on presentations			
• Exposition or use of the vehicle at your events			

SOLEVA'S PARTNERS:



MENTORS & EXTERNAL ADIVSORS:



MARC MÜLLER

Founder of ImpactLiving,
Environmental-Influencer



ANDRE HODDER

EPFL lecturer & researcher
Expert in Electrical motors
and Energy Conversion



LOUIS PALMER

Pionier in solar-
electric mobility



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