

51+ solar roof program in Colombia



Launched in the framework of the “Ciudad Energética Colombia” initiative, the 51+ solar-roof project encompasses the installation of more than 51 photovoltaic systems in the city of Fusagasugá. Thanks to our large-volume purchases, we were able to reduce the system price per kilowatt hour by more than 20 percent.

With an annual volume of available solar radiation that is 32,000 times the country’s current power consumption, Colombia has tremendous potential in the area of solar energy. In light of this potential, our goal was to install more than 51 photovoltaic systems in the city of Fusagasugá. Given the number and size of the solar systems we intended to purchase, we were able to negotiate significant discounts.



EBP in the role of an experienced project coordinator

EBP initiated and oversaw the project in the capacity of an independent firm. Together with the Colombian consulting firm

Client

Swiss State Secretariat for Economic Affairs (SECO) and Colombian Mining and Energy Planning Unit (UPME)

Facts

Period	2018 - 2021
Project Country	Colombia
Number of PV systems	58
Cost reduction (%)	>20
Annual CO2 reduction	62

Contact persons

Roger Walther
roger.walther@ebp.ch

Franco Morales
franco.morales@ebpchile.cl

Corpoema, we selected the system users, confirmed their technical eligibility, drafted calls to tender, selected subcontractors for the installation work, and oversaw the installation of the photovoltaic systems. In doing so, we were able to draw upon the valuable experience we gained in the context of a **30+ Solar Roof Program** we coordinated in Chile in 2015.

Oliver Blank
oliver.blank@ebp.ch

Main success factors

The following factors were crucial to the project's success:

- High-quality PV installation company: We arranged an international call to tender to select a company that met the following criteria: excellent references in Colombia; excellent team members; and a willingness to cooperate.
- Transparency: When it came to selecting system users, we made use of clearly defined criteria and transparent presentation of the selection process.
- Power company involvement: We engaged with the power companies in order to ensure highly efficient approval procedures for installing the photovoltaic systems and connecting them to the power grid.

Benefits

- Lower costs: By placing large-volume orders, we were able to lower our investment volume per kilowatt hour of installed solar capacity by more than 20 percent. Depending on the individual customer rates for power, the amortization period came in at only three to four years.
- Reduced greenhouse gas emissions: The photovoltaic systems are capable of reducing annual carbon emissions by 62 tons.
- A pioneering role: The project allows the city of Fusagasugá to play a pioneering role. The photovoltaic systems installed on the city's public buildings are highly visible, and can be regarded as parts of a showcase project to promote solar systems throughout the region.

51+ Solar Roof Program in Fusagasugá in brief