

Nature conservation areas on the way to climate neutrality



Although nature conservation areas play an essential role in preserving the biological diversity of the world's flora and fauna, their own operations are often far from sustainable. In Chile, EBP has supported several projects aimed at helping conservation areas achieve climate neutrality.

Numerous conservation areas in Chile face similar challenges:

- a) Local populations experience virtually no economic benefits from the protected status of nearby conservation areas and are unable to identify with their missions.
- b) The administrators of conservation areas tend to neglect local populations when selecting management-level employees.
- c) Infrastructure at nature conservation areas is often inadequate, including inefficient electrical and HVAC systems powered by fossil fuels.

Energy is the key to climate neutrality

The key to achieving climate neutrality at nature conservation areas is to identify renewable and efficient sources of energy to power buildings and transportation both inside and outside of the conservation areas.

Realization of showcase projects

In Chile, EBP was commissioned to oversee several projects aimed at helping nature conservation areas achieve climate neutrality. In approaching our assignments, we worked closely

Client

REPIC - Renewable Energy Promotion in International Cooperation - an interdepartmental platform of the Swiss federal agencies SECO, SDC, FOEN and SFOE

Facts

Period	2012 - 2020
Project Country	Chile
Success factor 1	Inclusion of beneficiaries
Success factor 2	Benefits to locals
Success factor 3	Environmenta I education

Contact persons

Roger Walther

with local stakeholders to develop and implement the appropriate measures:

- Renewable sources of electricity and heating in the Conguillío National Park and the Coyhaique National Reserve in Chile
 - The goal was to make progress towards climate neutrality in both of these nature conservation areas. We identified and developed renewable sources of power and heating for the Baita Lodge in the Conguillio National Park. In Coyhaique, we planned for and completed the renovation of a visitors' center. Solar arrays now generate electricity for the buildings, and the heating system was converted to a highly efficient wood-based system.
- Solar energy to refrigerate fresh fish in Chile's Juan-Fernández Reserve
 The livelihood of the local populations on the Juan-Fernández islands is secured primarily by their fishing industry. To keep the fish cool, we installed a solarpowered refrigeration system.
- Environmental education for children in Baquedano
 Working together with our partners, we were able to raise
 school children's awareness of environmental issues at the
 nature park. This work included the production of an
 animated film for the Baquedano public School.
- Environmentally sustainable transportation in Valdivia,
 Chile

The significance of solar-powered boats for sustainable water transport has increased in Valdivia. As early as 2012, we developed and realized one of the first public solar-boat projects in Latin America.

Untapped potential at nature conservation areas

The conclusions we have drawn from our efforts to promote the climate-neutral operation of nature conservation areas indicate the following:

- Conservation areas offer immense potential when it comes to inspiring both tourists and locals to take a greater interest in the wonders of nature. They represent laboratories for various sensitization approaches.
- There is tremendous potential at conservation areas for developing renewable sources of energy and energyefficient practices. This potential can be exploited to generate power and heat both inside and outside of the conservation areas.
- Transportation is one of the biggest challenges we face as we seek to reduce greenhouse gases. This also applies to transportation in nature conservation areas.
- It is essential to engender identification with conservation areas and efforts to achieve climate neutrality among all stakeholders, including the beneficiaries. This is an important way to motivate them to support projects and make resources available in keeping with their means.

roger.walther@ebp.ch

Antonio Espinoza antonio.espinoza@ebpchile.cl

Christoph Hauser christoph.hauser@ebp.ch

Reinhard Zweidler reinhard.zweidler@ebp.ch

 Strategic alliances with other nature conservation areas around the world do much to facilitate the transfer of knowledge and valuable experience.