



VALHALLA

ESPEJO DE TARAPACÁ

Solar PV + Hydro Pumped-Storage Power Project

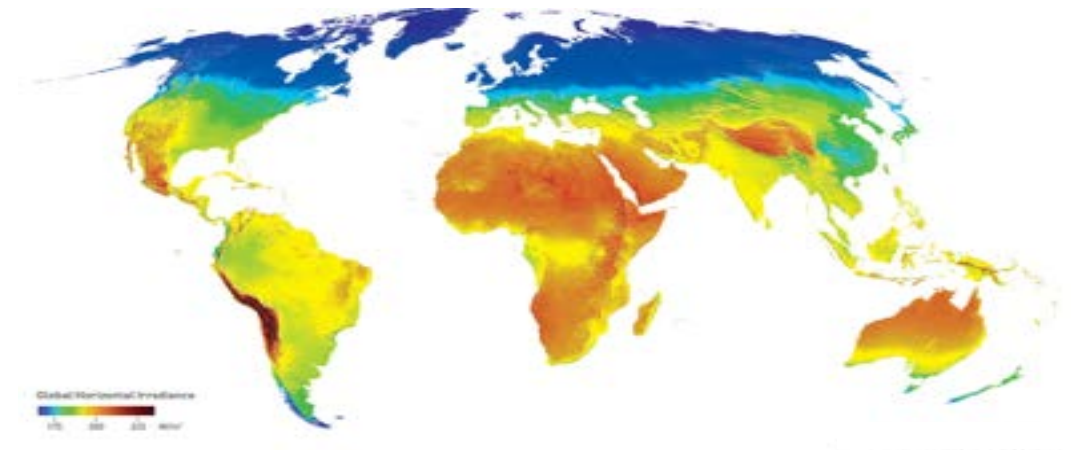
Capitalizing on Chile's

ABUNDANT NATURAL RESOURCES

Natural characteristics of the project provide competitive, reliable and sustainable energy supply.

/01 ATACAMA DESERT

Best solar irradiance conditions in the world.



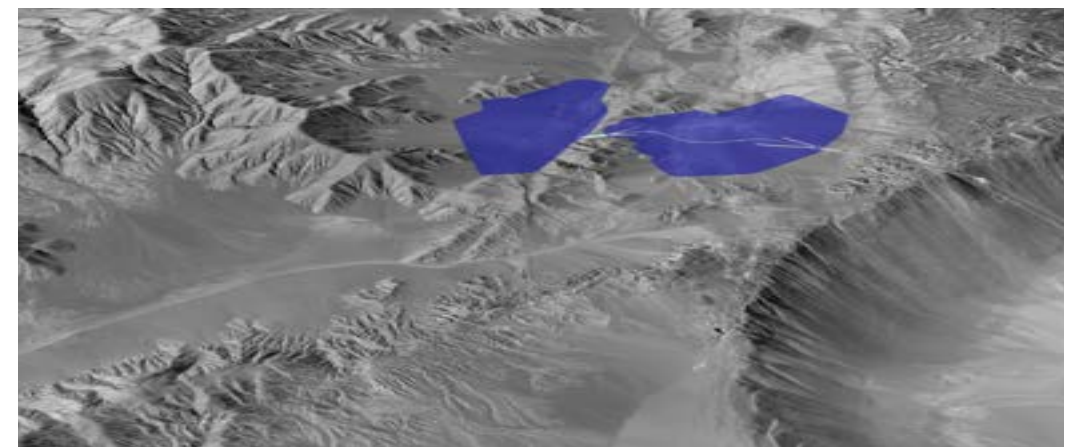
/02 PACIFIC OCEAN

Abundant water source not affected by hydrological volatility.



/03 NATURAL RESERVOIR

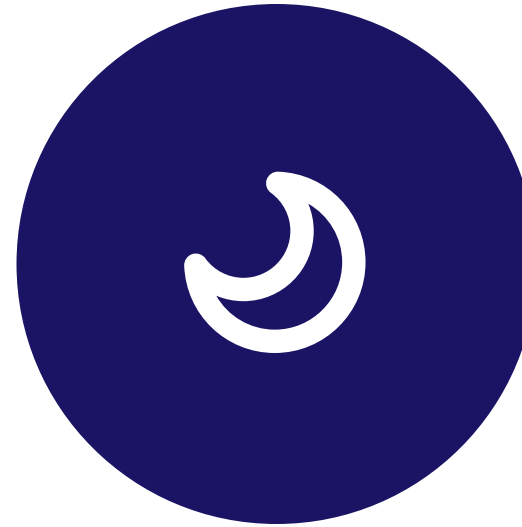
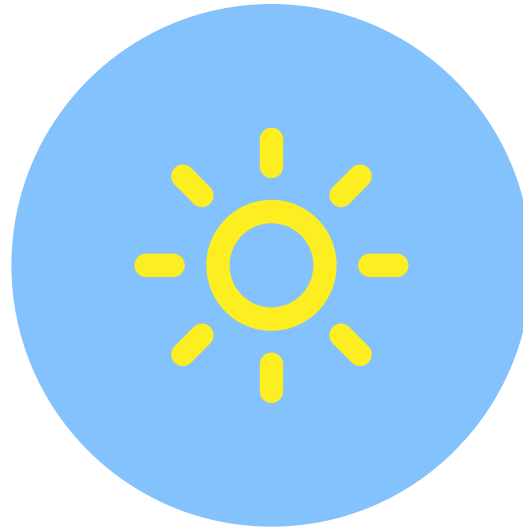
Natural concavity at 600 m above sea-level and at distance of only 3 km from ocean.



MAIN THEMES

24/7 RENEWABLE POWER

*Solar
Generation*



*Pumped-Storage
Hydro Generation*

Innovative and revolutionary power project which combines Chile's natural solar and hydroelectric resources with proven technology.

Competitive, reliable and sustainable renewable power available 24 hours a day, 7 days a week (24/7) to supply long-term PPAs.

Critical investment necessary to accelerate the growth and responsible incorporation of intermittent renewable energy in Chile's electricity market.

Diversification of Chile's energy matrix – away from imported fossil fuel – towards natural resource-based renewable energy, enhancing price stability and energy independence.

Video Insert (“The Concept”)

ESPEJO DE TARAPACÁ

At a Glance

PROJECT HIGHLIGHTS

Location	Tarapacá Region
Solar PV Capacity	600 MW
Hydro Pumped-Storage Capacity	300 MW
Average Annual Generation	1,500 GWh
Reservoir Storage Capacity	5 days*
System Interconnection	Lagunas Substation
Environmental Permit	Q3/Q4 2015
Construction Period	3.5 years
Estimated Investment	~US\$ 1.5 billion

PROJECT LOCATION



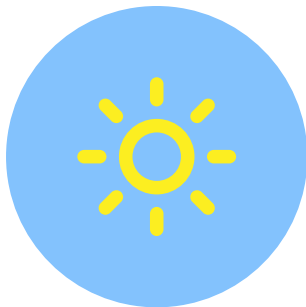
* Maximum surface area of the reservoir is 375 ha which corresponds to storage capacity for 11 days.

COMMERCIALLY INTEGRATED

24/7 Business Model

COMMERCIALLY INTEGRATED PROJECT

SOLAR PV PLANT



Daytime

300 MW available for generation (PPA & system spot).

300 MW available for pumping.



INTERCONNECTED
ELECTRIC GRID



FINAL CUSTOMER
200 MW PPA

PUMPED-STORAGE HYDRO PLANT



Nighttime

300 MW available for generation (PPA & system spot)

CORE REVENUES

PPA revenues.

Hydro plant firm capacity.

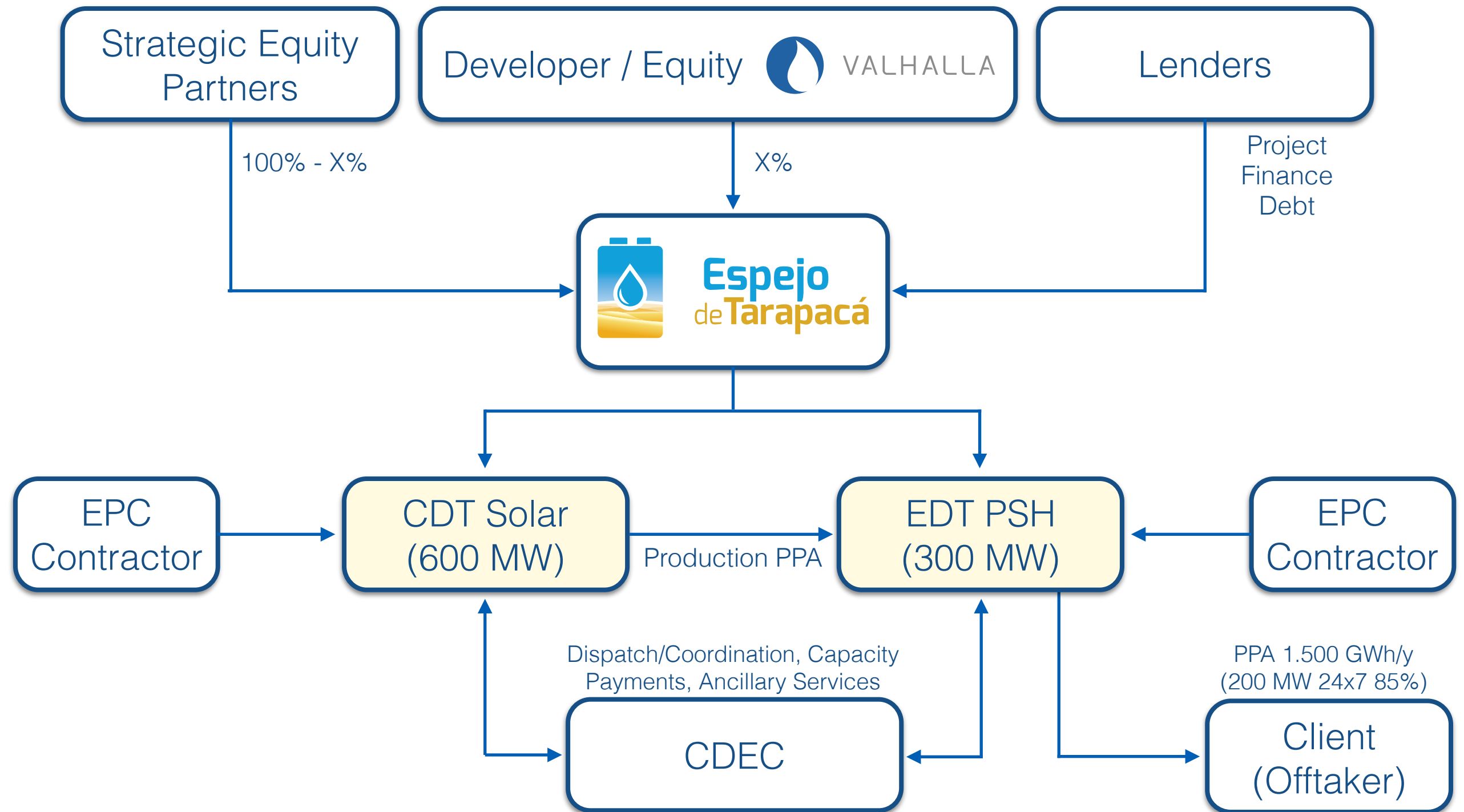
ADDITIONAL REVENUES

Spot energy sales.

Ancillary services.

Green revenues from renewable energy and carbon credit.

PROJECT FINANCE STRUCTURE



REGULATORY FRAMEWORK

/01 Plant Operation: **pumping** controlled by plant owner*, **generation** controlled by ISO

/02 Capacity Payment: full capacity recognition, as plant is available during peak hours

/03 Dispatch: price of stored energy considers Buying Cost + Roundtrip Losses

Ancillary Services: potential source of future revenue, once an Ancillary Services market is created

* ISO requires a tentative pumping schedule from plant owner

EARLY & COLLABORATIVE

Community Engagement

Project prioritizes establishment of sustainable, transparent and mutually beneficial relationships with surrounding communities.

Community engagement was initiated ~2 years prior to submission of environmental permits in order to address community concerns in early development stage.

Community engagement directly led by project management. Project maintains an office in Caleta San Marcos and a team member has lived in the community since March 2014.

Community engagement entailed more than 20 working group sessions and hiring of technical advisor for the community to analyze the EIA and preparation of additional studies.

In March 2015, individual collaboration agreements were executed with the Residents' Council and the Fishermen's Union of San Marcos which govern interaction with the community during development, construction and operation of the project .

Collaboration agreements included in addendum to EIA submitted to authorities.



Video Insert (“Engineering Profile”)



VALHALLA