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Sustainable Desalination System for the Atacama Region – Northern Chile

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CEO – TRENDS Group

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PROJECT OVERVIEW

- Listed in the **Sustainable Project Management Office** from the Ministry of Economy (GPS Office)
- **Largest Desalination Plant** projected in Latam Region
- Located in the **North of Chile** (III Region), solves water scarcity in the driest desert in the world
- **Environmental Permit** and **Marine Concession**, already granted
- **Capex**: USD $500 MM - $1,200 MM depending on off-takers location
- Currently seeking co-developer(s) and equity investor(s)
- ***Investors*s equity participation up to $300 MM USD***
- **Nominated** for the Design to Improve Life, INDEX AWARD, known as the "**Nobel Prize of Design**"



Chilean Government Policy

*"We want to promote a **shared infrastructure** policy to advance to a **Green Mining** industry"*

Ministerio de Minería
Gobierno de Chile

Mr. Pablo Terrazas
Mining Undersecretary March 2019

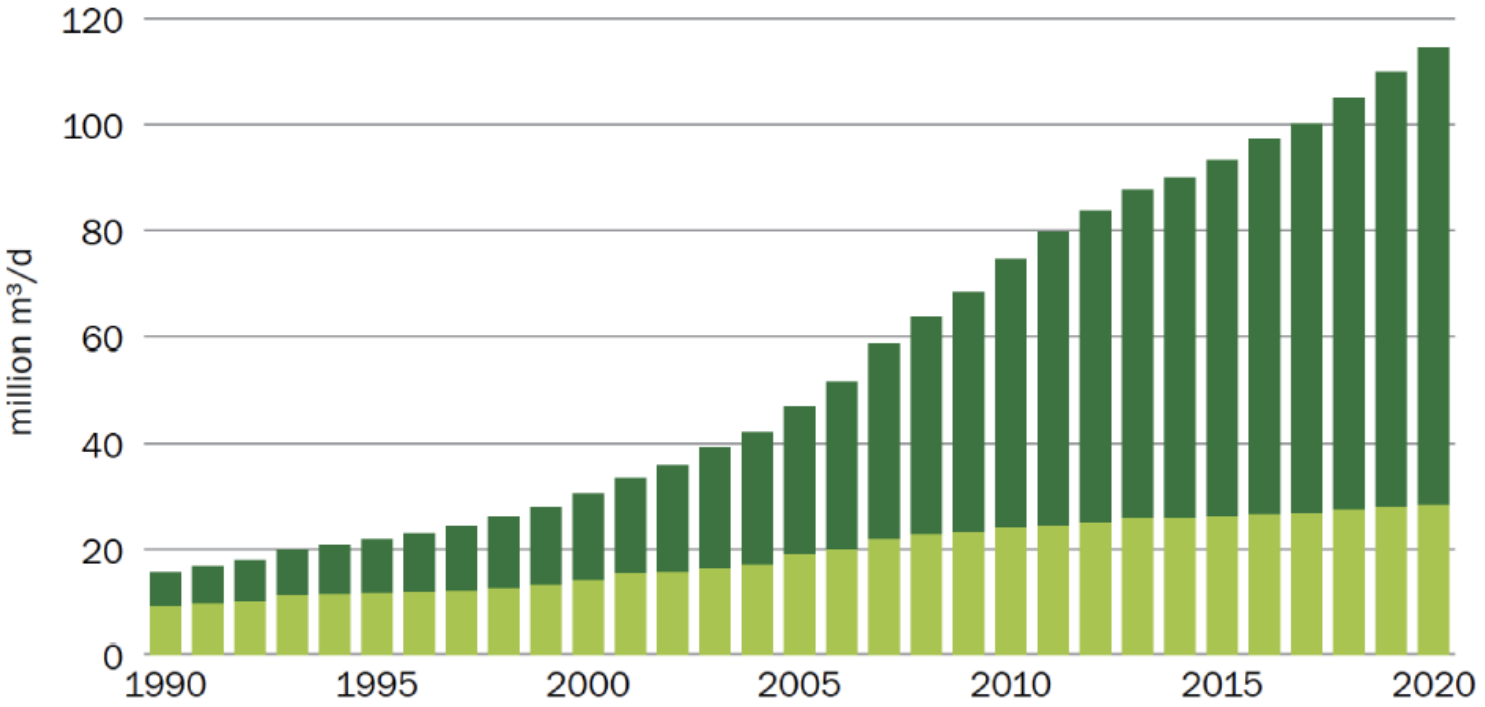
*"…neighboring mining companies should seek **scale economies** for the construction of shared **desalination plants**, **power generation** and **pipelines**"*

Comisión Nacional de **Productividad**

Large Copper Mining Productivity Report
National Productivity Commission May 2017

Global Desal Capacity 1990-2020

More than $20 Billions are to be invested in LATAM desalinatio n projects



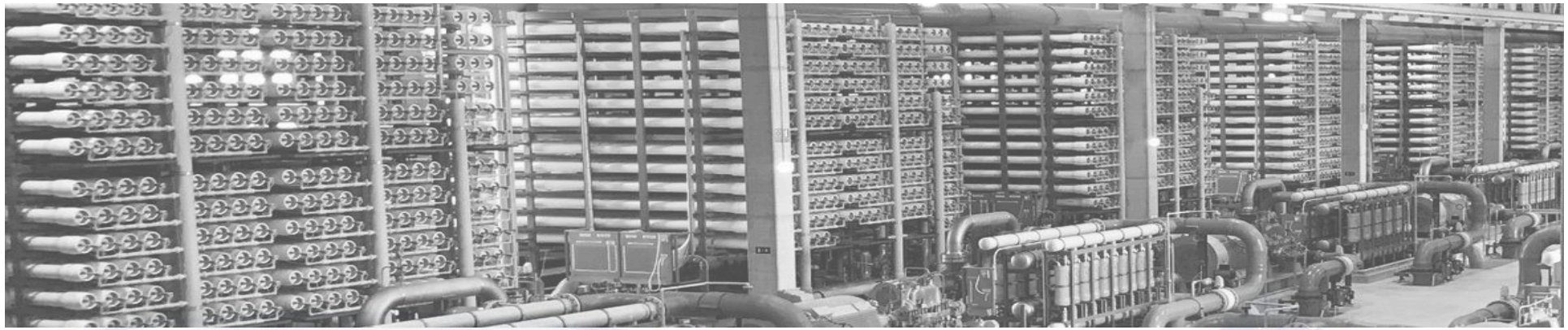
Source: Tom Pankratz, GWi, **Water Desalination Report**

ENAPAC's DRIVING PRINCIPLES

- **INDUSTRIAL WATER**

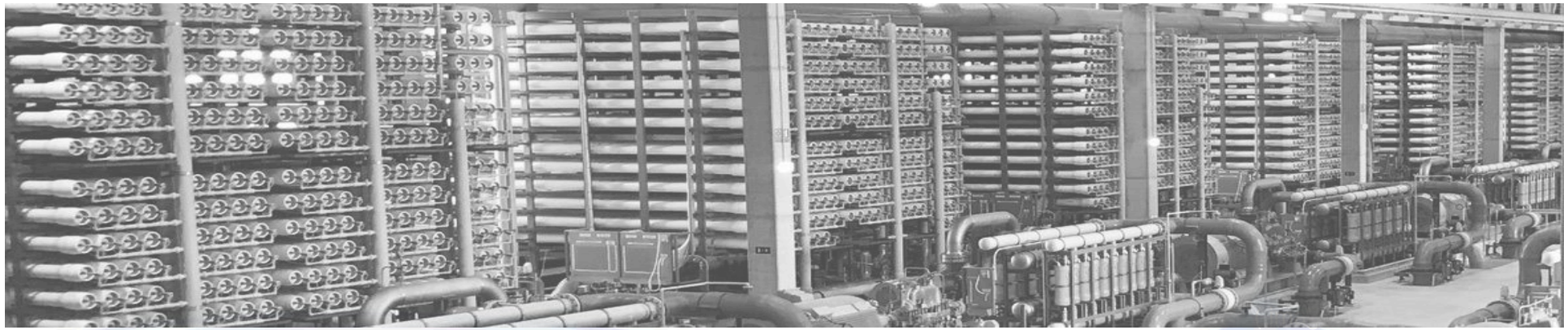
  - **Main focus on mining, the country's main industry.**

  - **For the next years, only for copper mining in Chile, a 230% increase is projected in seawater use.**



DRIVING PRINCIPLES

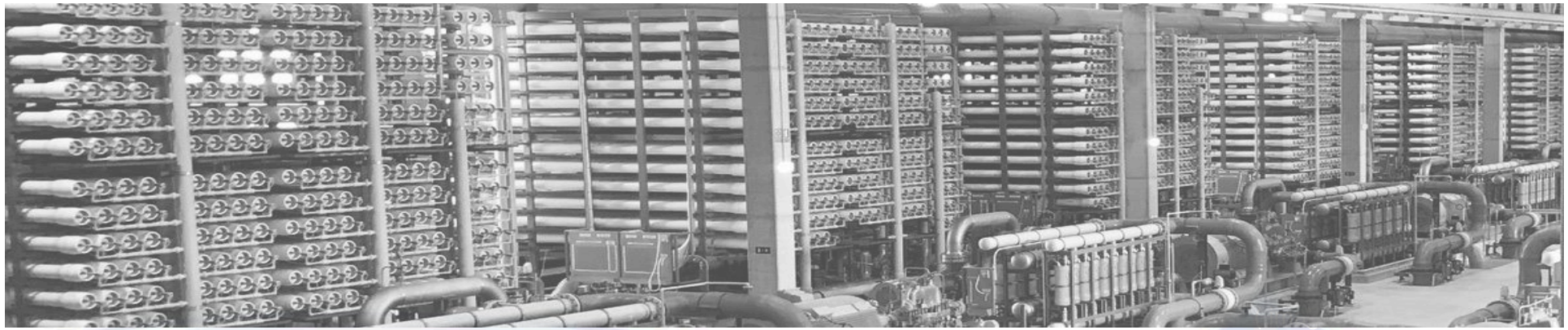
- **MULTICLIENT**
  - ➢ **Large-scale project designed for several users**
  - ➢ **Max. capacity of 2,630 l/s (227,000 m^3/day, 83 MM m^3/year)**
  - ➢ **Optimization of water tariff, availability, supply flexibility**



DRIVING PRINCIPLES

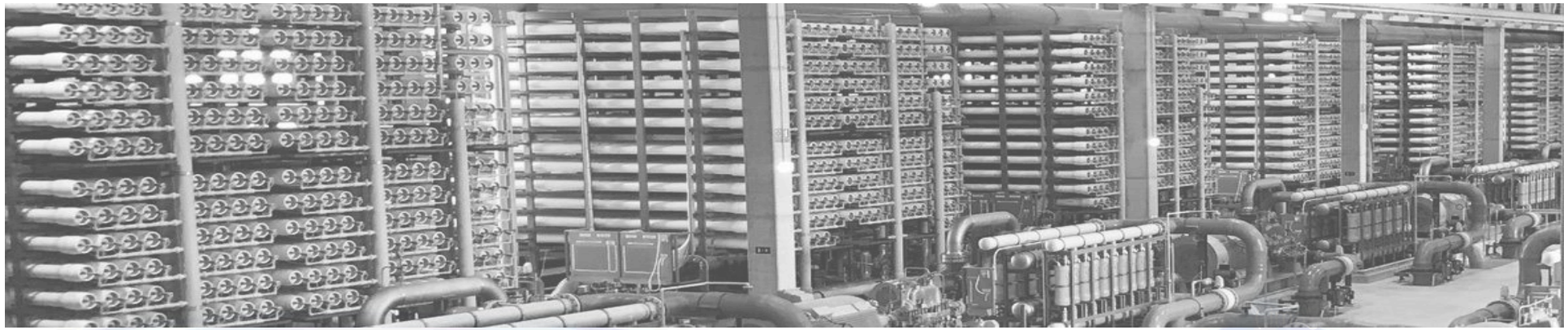
- **RENEWABLE ENERGY**

  - **Atacama has some of the best radiation levels in the world**



DRIVING PRINCIPLES

- **SUSTAINABILITY**
  - ➢ **Shared infrastructure**
  - ➢ **Maximization use of solar energy**
  - ➢ **Acceptance by local communities**





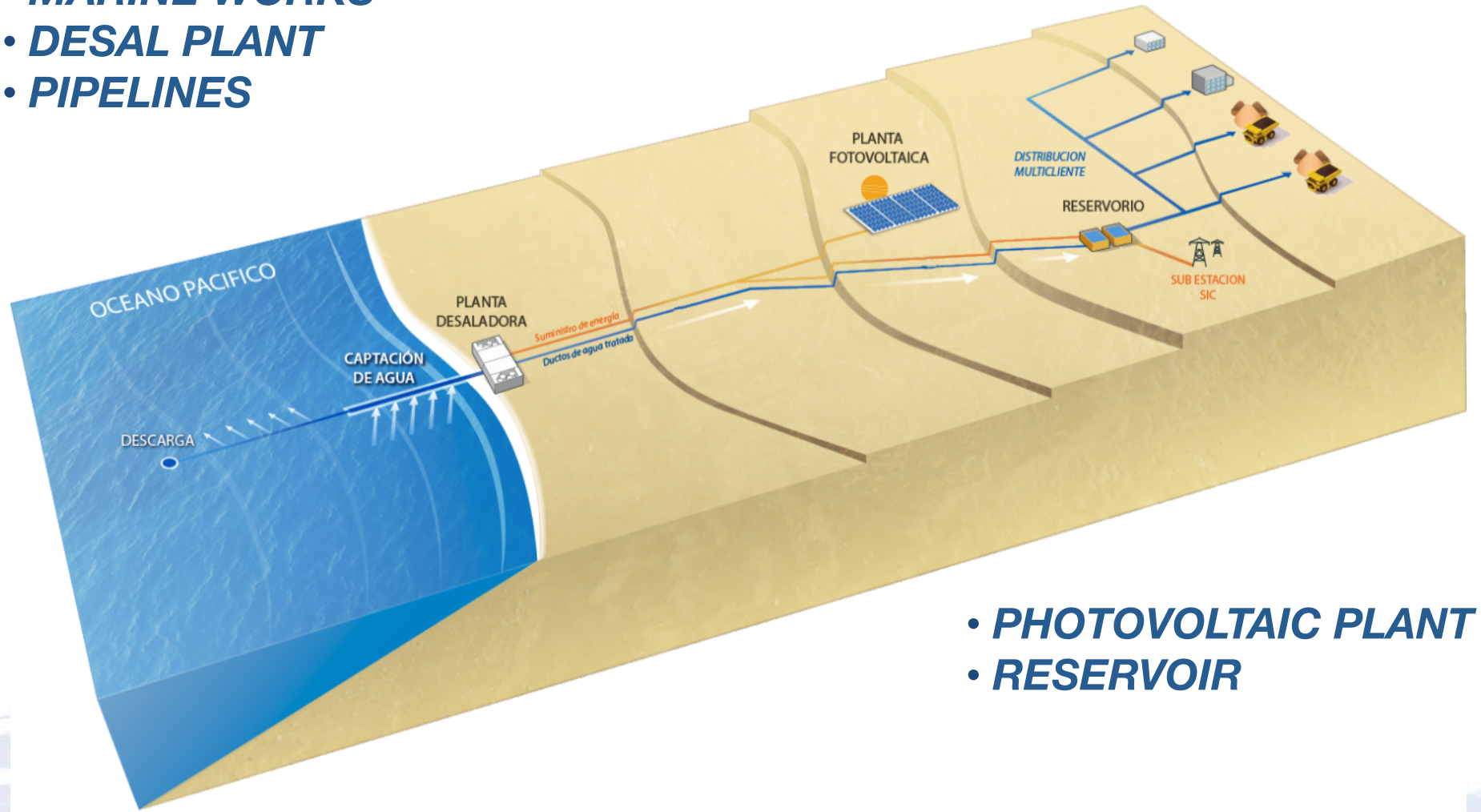
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TECHNICAL ASPECTS

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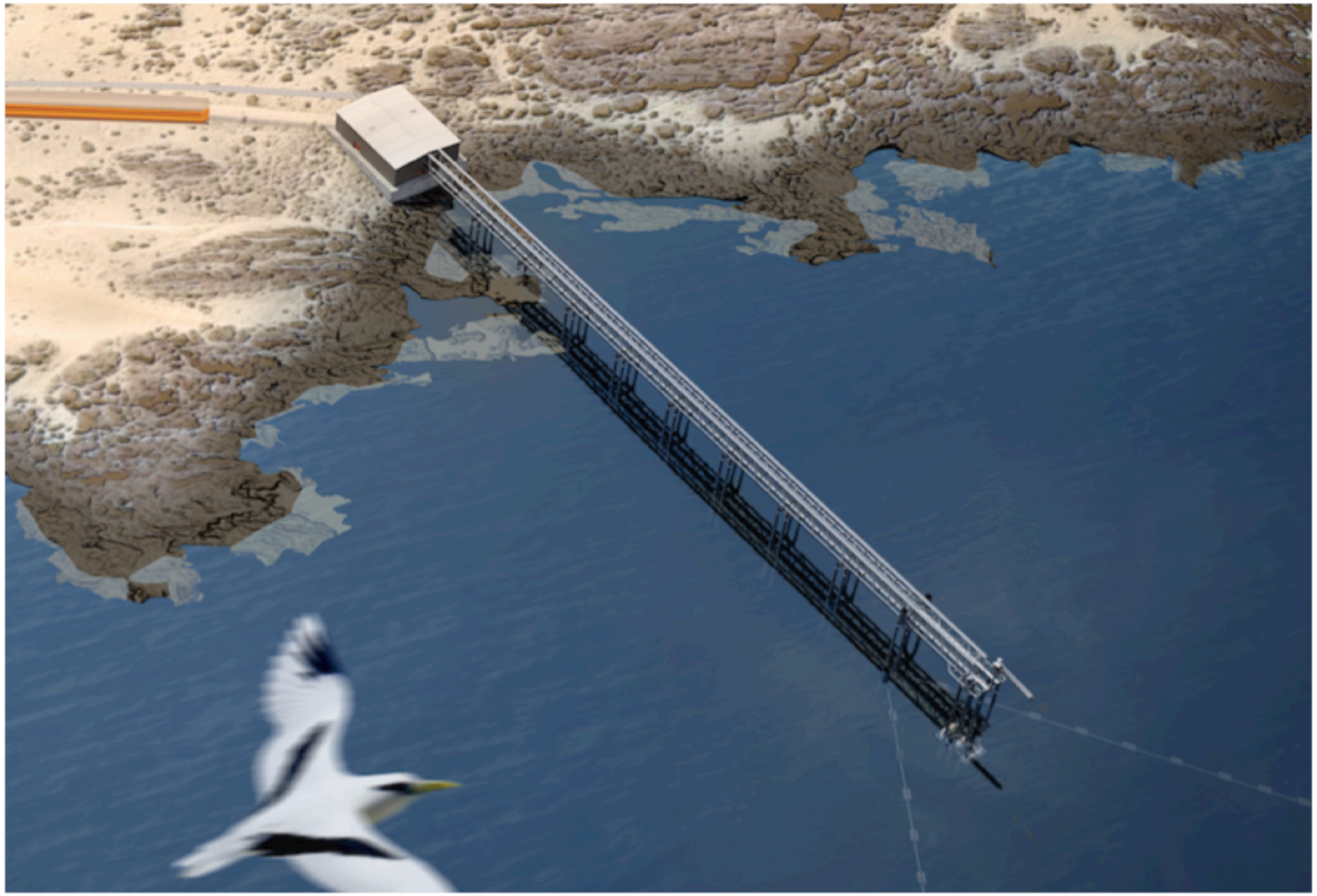
PROJECT COMPONENTS

- ***MARINE WORKS***
- ***DESAL PLANT***
- ***PIPELINES***



- ***PHOTOVOLTAIC PLANT***
- ***RESERVOIR***

MARINE WORKS
INTAKE AND OUTFALL



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DESALINATION PLANT
227,000 m^3/DAY



PHOTOVOLTAIC PLANT
100 MW



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RESERVOIR
600,000 m^3

First class floating cover technology protects water from evaporation and pollution



POTENTIAL OFF-TAKERS

North Cluster

- 01 Santo Domingo
- 02 Franke

East Cluster

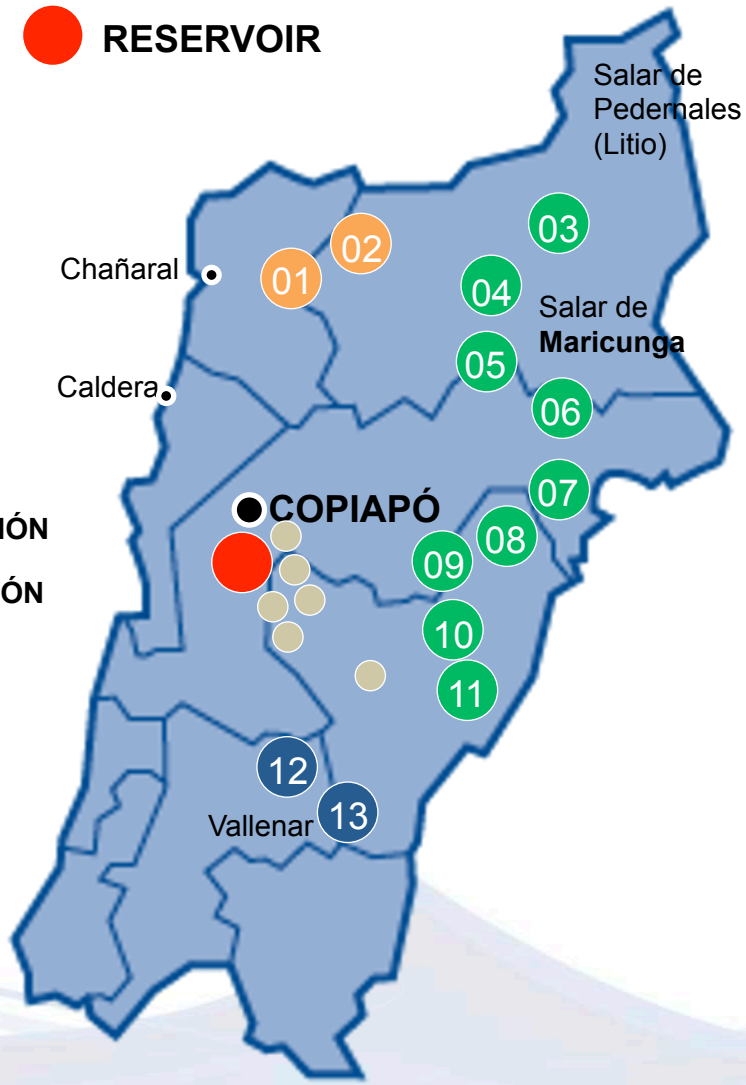
- 03 Arqueros
- 04 La Coipa
- 05 Fenix
- 06 Lobo Marte
- 07 La Pepa
- 08 Volcán
- 09 Maricunga
- 10 Caspiche – NORTE ABIERTO
- 11 Cerro Casale – NORTE ABIERTO

Central Cluster

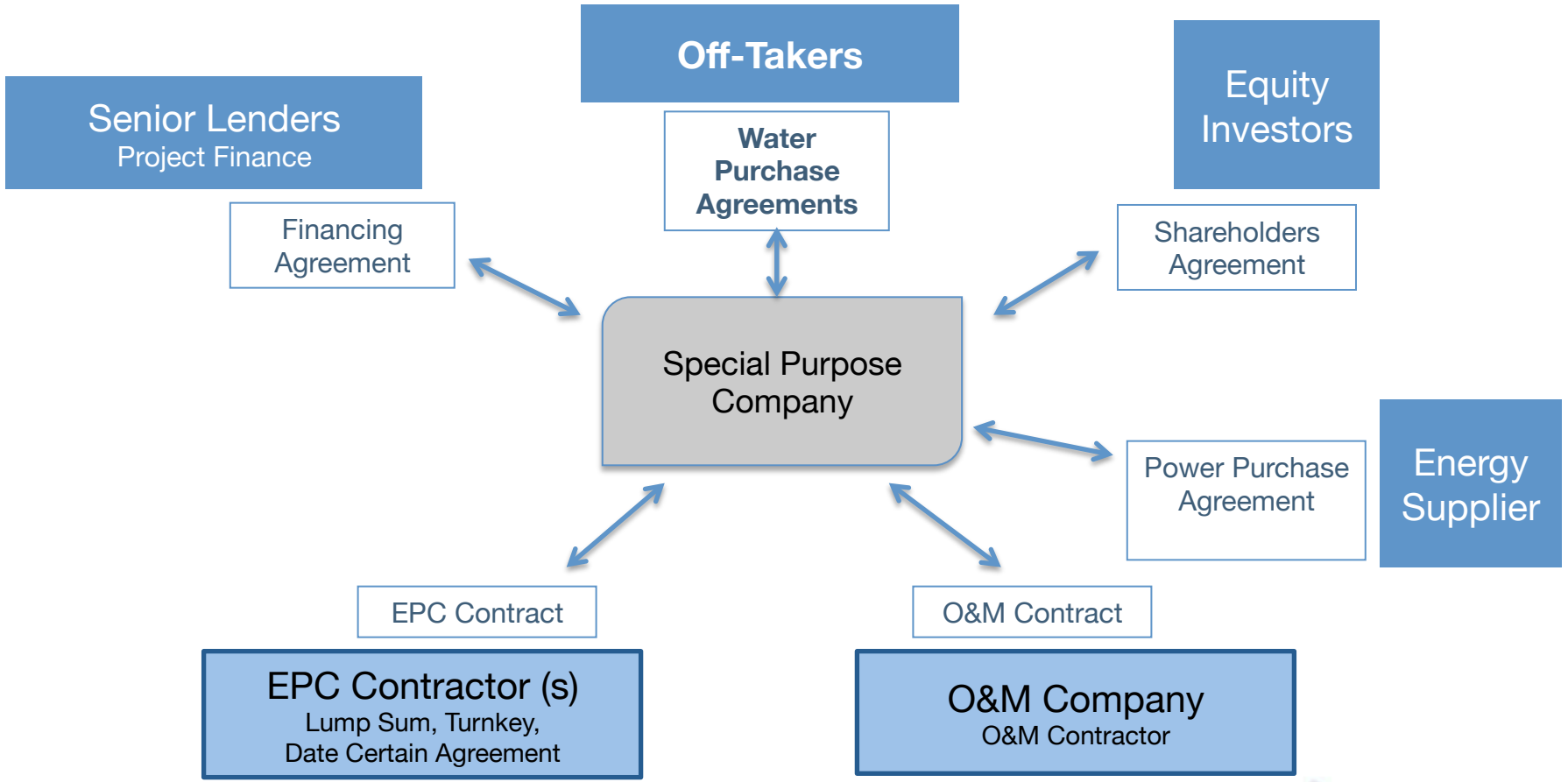
- ENAMI
- Atacama Kozan
- Pucobre
- Carola - Coemin
- Candelaria
- Caserones

South Cluster

- 12 Relincho - NUEVAUNIÓN
- 13 El Morro - NUEVAUNIÓN



PROJECT STRUCTURE



BUSINESS MODEL

- **Similar to project-financed power generation projects**
- **20 to 30 year initial operation period**
- **Long-term water purchase agreements (15 years +)**
- **Water tariff structure designed to avoid volume risk**
  - Fixed monthly payment that covers capex, shareholders' return, financing cost and fixed operating cost
  - Variable tariff that is a passthrough of variable costs

DEVELOPMENT BUDGET

SPENT	USD MM
➢ Basic engineering ➢ Environmental impact study ➢ Marine concession ➢ Relationship with all potential off-takers.	**5.0**
TO BE SPENT IN ORDER TO REACH FINANCIAL CLOSURE	
➢ Rights of way ➢ Mining concessions ➢ Environmental impact study for one pipeline ➢ Negotiation of water purchase agreements, EPC and O&M contracts	**5.2**

ATTRACTIVE FEATURES FOR INVESTORS

- **Competitive Project**

  - Optimized water tariff through shared infrastructure
  - Most mining projects cannot afford individual desalination systems, we have a solution for them
  - Only multiclient project in the III Region

- **Long-term stable cash flows and attractive returns**

  - Long-term stable EBITDA with limited volume risk (monthly fixed payment and pass-through of variable cost)
  - Attractive returns
  - Flexible equity, depending on Capex involved, up to: USD $300 MM
  - Canadian, Japanese, Polish and Chilean first class off-takers, among others|

ATTRACTIVE FEATURES FOR INVESTORS

Opportunity for newcomers to the Chilean infrastructure and desalination markets.

Highly correlated with mining, Chile's actual and future growth driver.



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THANK YOU

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MANAGEMENT & TECNOLOGÍA