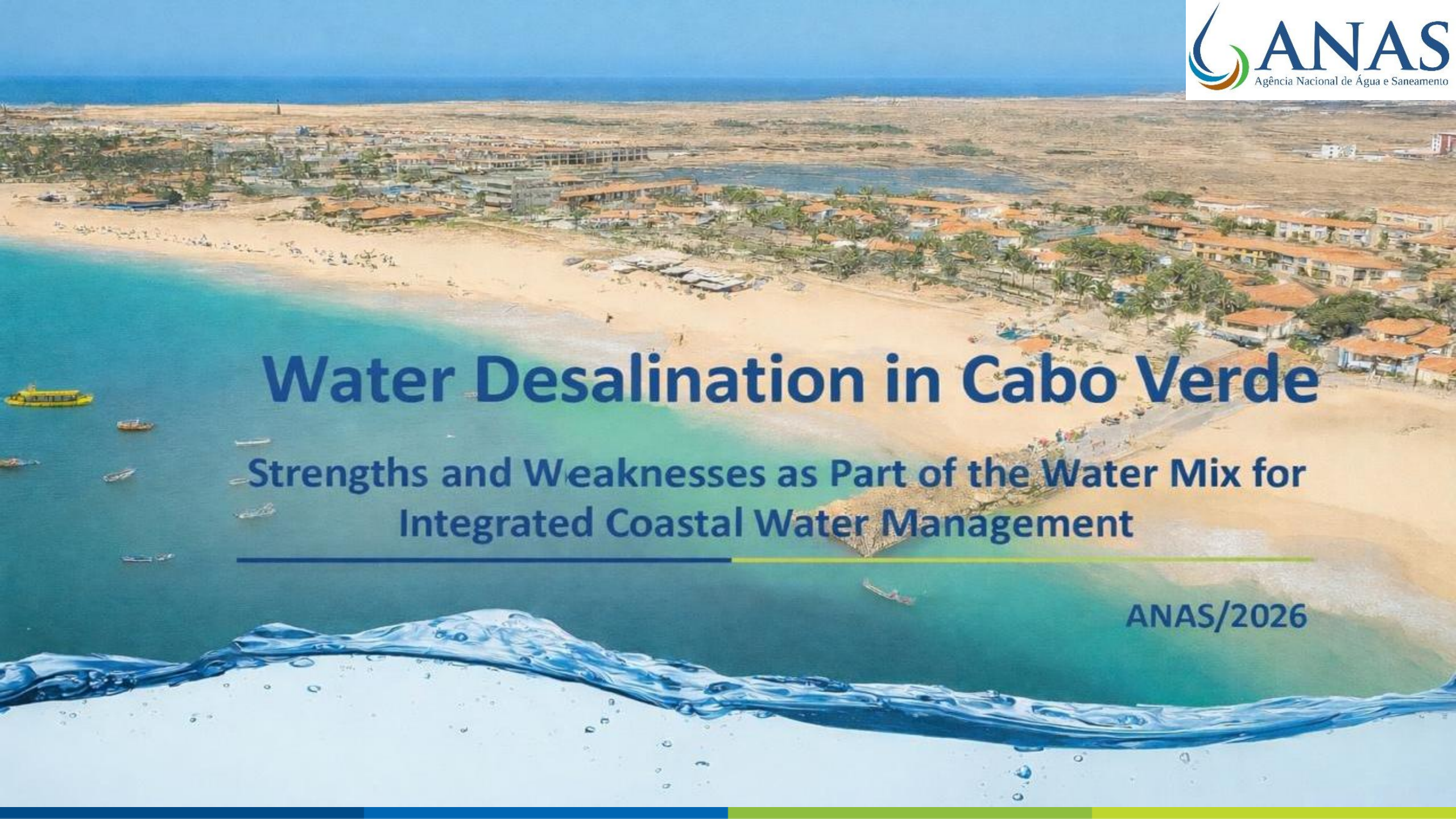


ANAS
Agência Nacional de Água e Saneamento

Water Desalination in Cabo Verde

Strengths and Weaknesses as Part of the Water Mix for Integrated Coastal Water Management

ANAS/2026

Location and Water Context of Cabo Verde

25°C – 30°C

Population

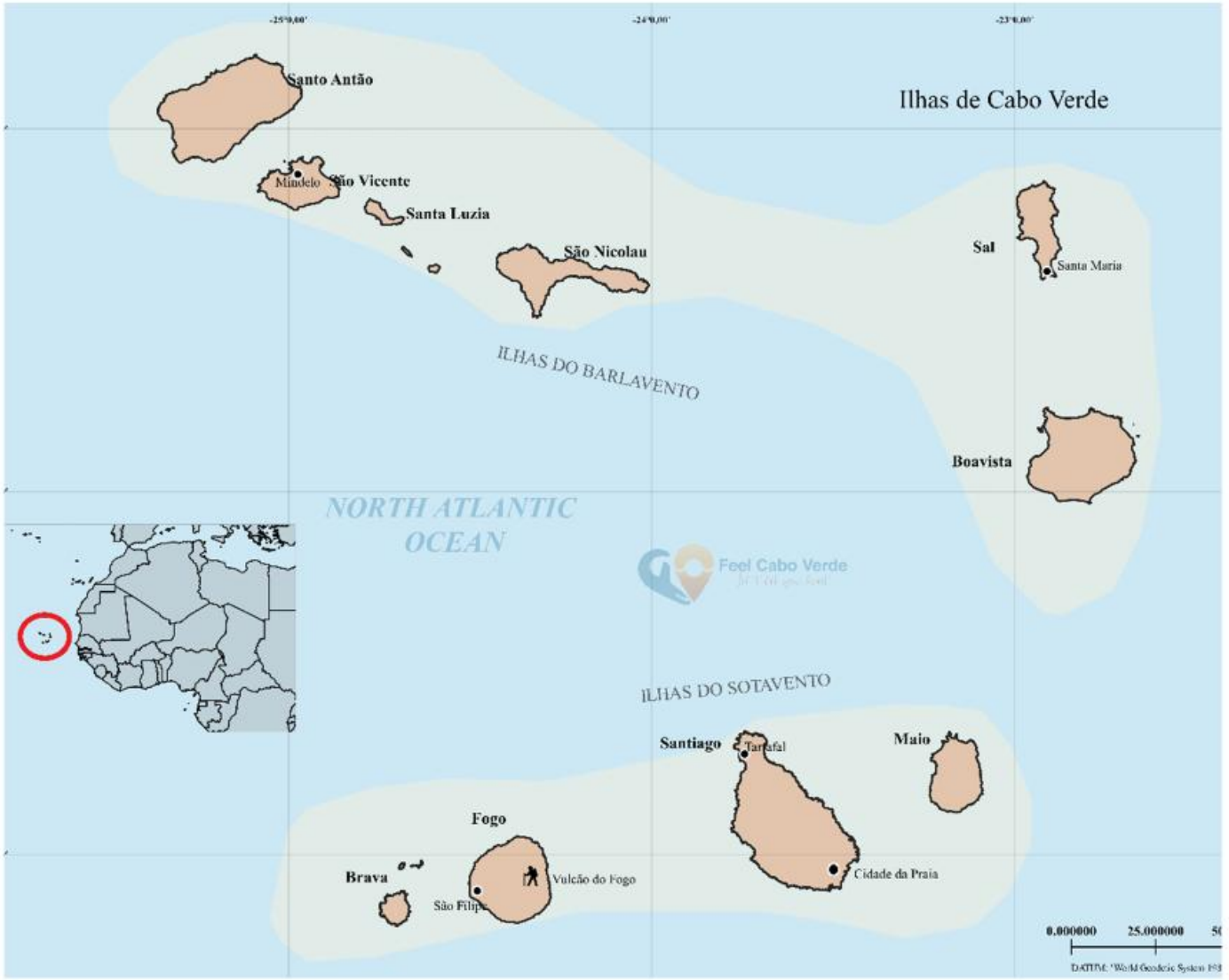
527,000

Avg Rainfall

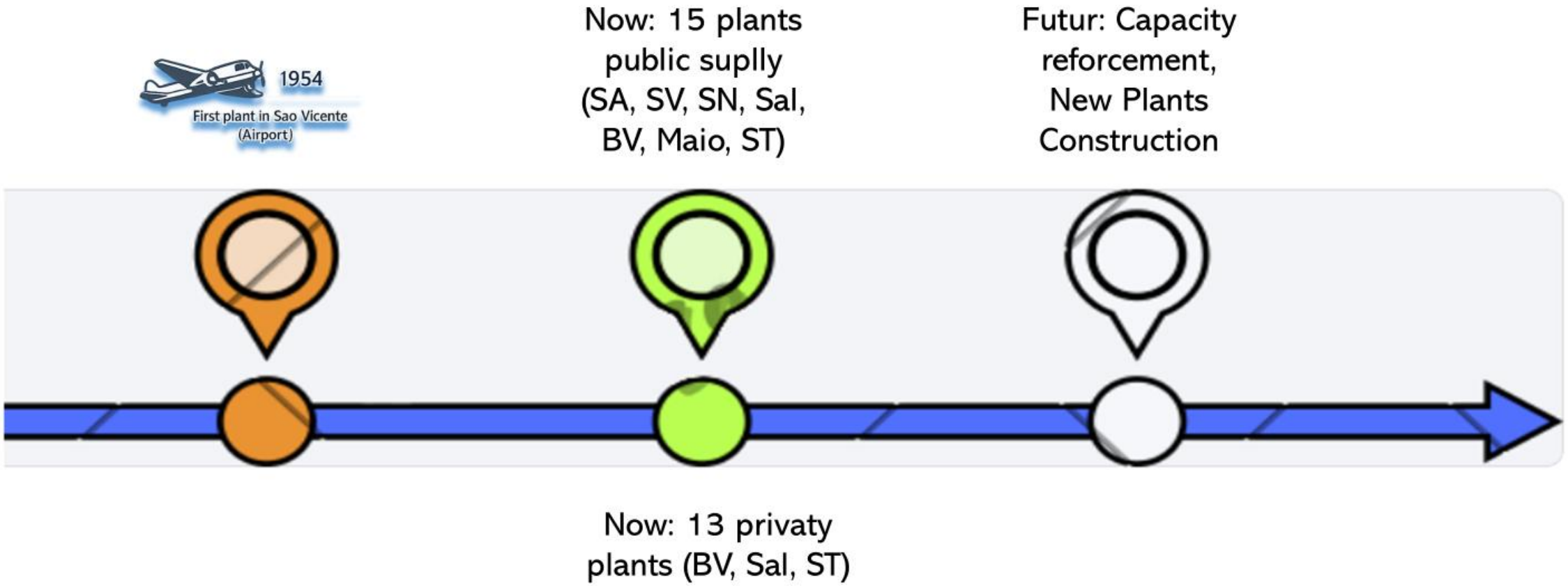
230 mm/year

Area

4,033 km²



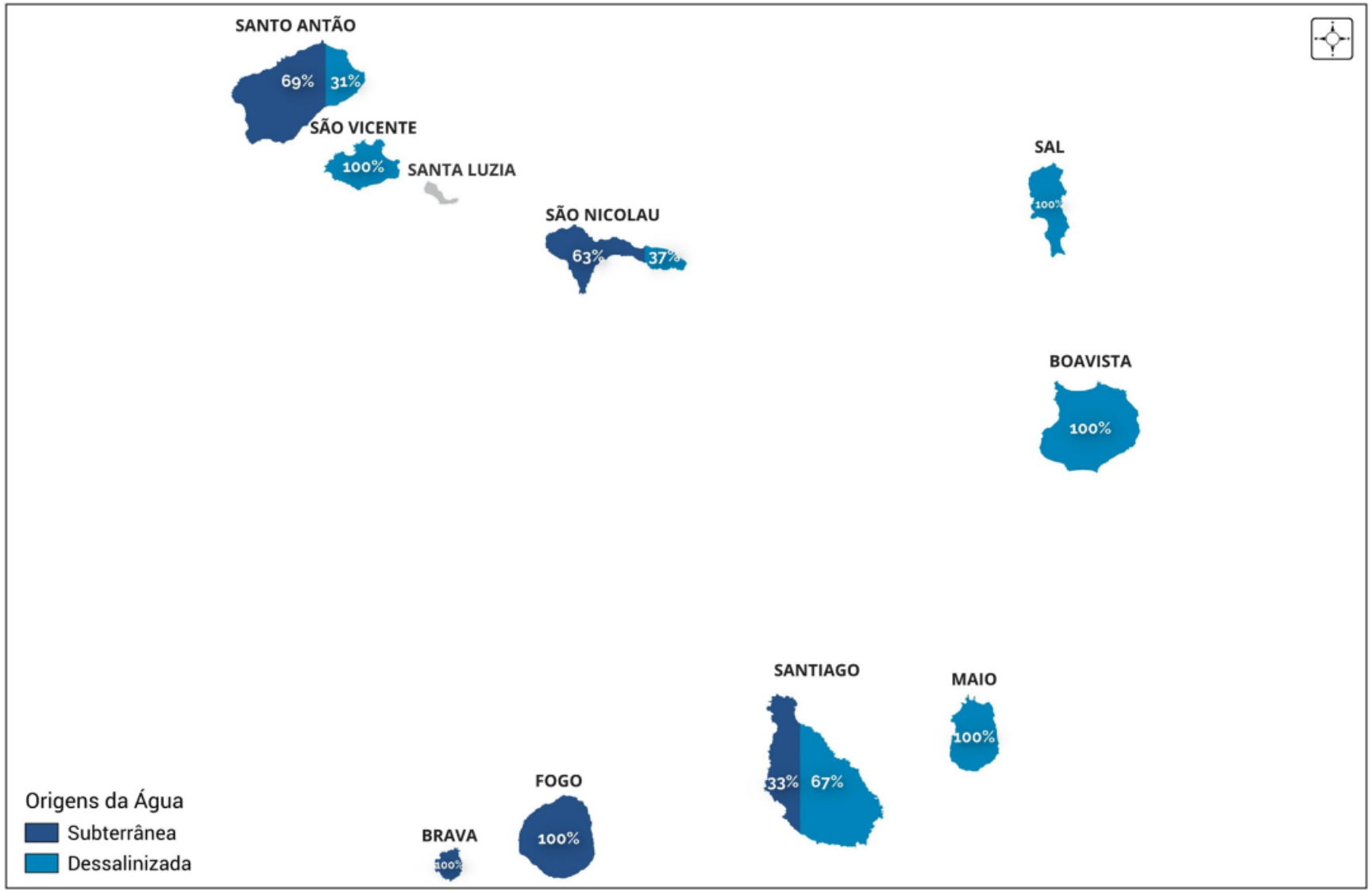
Desalination: A Strategic Choice Since 1954



Desalination: main origin for public supply

Fogo (no plant)

Brava (project ongoing)

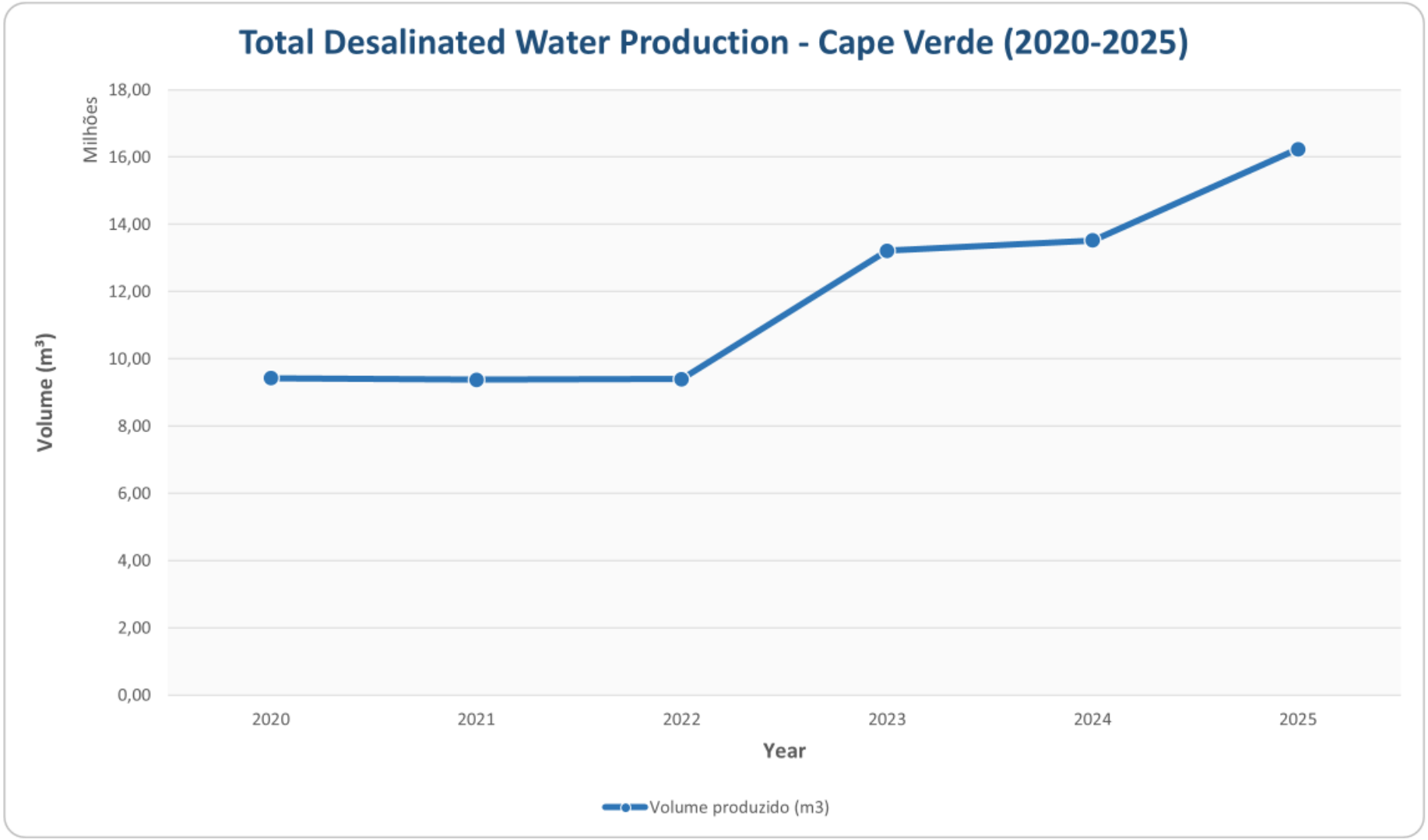


Base Cartográfica: - Divisão Administrativa (INGT)

0 50 100 km

Desalinated Water Use em Cabo Verde

- Public Supply
- Tourism – (Hotels with own units)
- Localized Agriculture - strong trend of increasing use
- Industry



Desalination Strengths

Climate-Independent

Security Supply

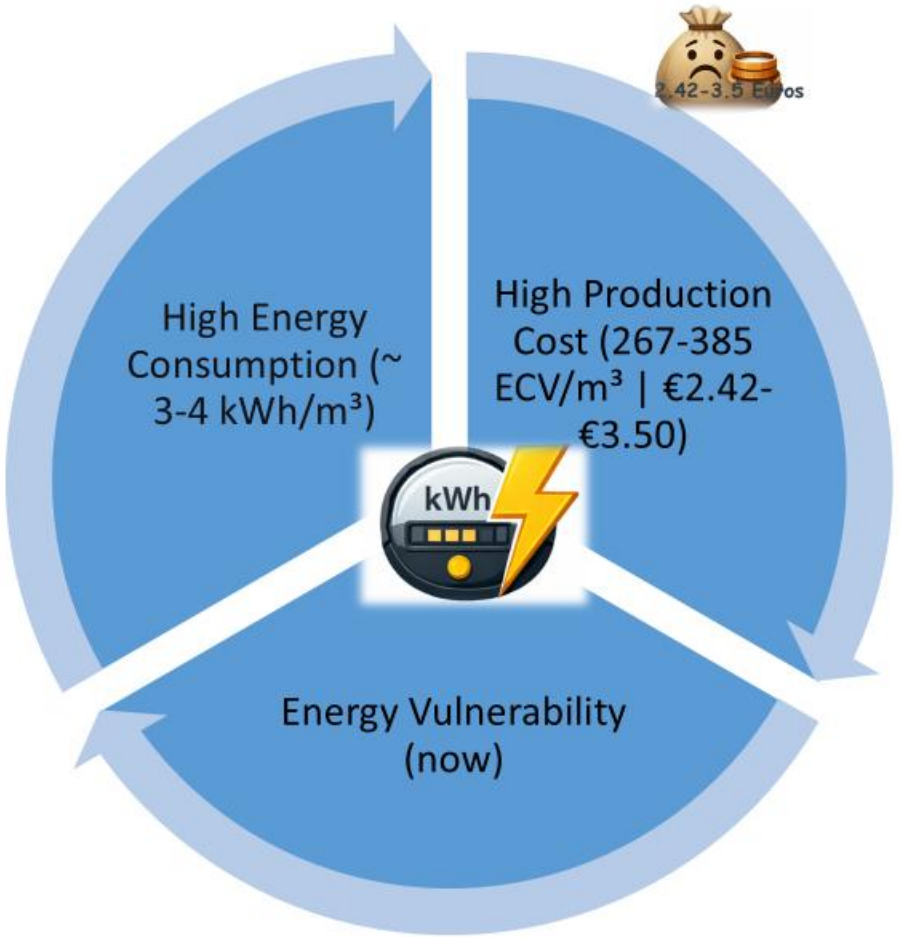
Supports Economic Growth

Abundant Marine Resource

Protects Groundwater

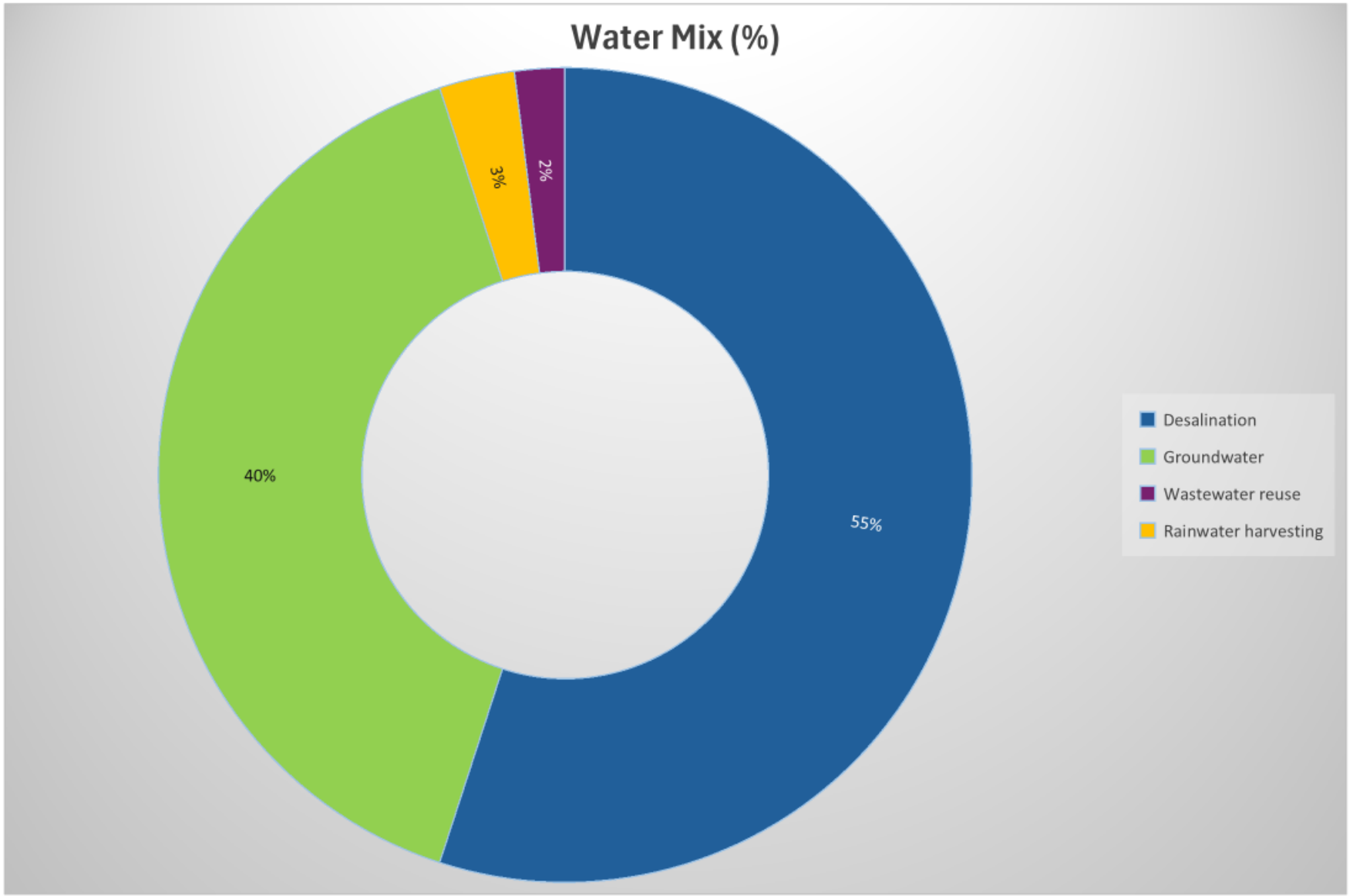
Renewable Energy

Dessalination Weaknesses & Challenges



- External Tech Dependency
- Brine Environmental Impact
- Remineralization for chemical stabilization

Desalination in the Integrated Water Mix



True water security means combining it with groundwater protection, security water reuse, and efficiency

Opportunity

- Integration with renewable energies (solar and wind)
- Technological improvements in reverse osmosis
- Integrated coastal zone planning
- Remineralization for chemical stabilization
- Expansion of water reuse

Ongoing Projects

Project	Location	Capacity	Energy Source	Financing	Conclusion
Agricultural Desalination	São Domingos	883.300 m³/year	Solar	Cooperation with Hungary (€42M total program)	2024 (1st phase)
Agricultural Desalination	Santa Cruz	Under implementation	Solar	Cooperation with Hungary	"Soon"
New Palmarejo Plant	Santiago (south)	5.000 m³/day	Conventional	Japan Cooperation (Toyota Tsusho)	2028
New Calheta Plant	Santiago (north)	10.000 m³/day	Conventional	Japan Cooperation (Toyota Tsusho)	2028
100% Solar Unit	Brava	250–300 m³/day	Solar (100%)	Luxembourg (Cooperation)	Ongoing

Conclusion

💧 **~95%** of urban supply (several islands)

📈 **>42,000 m³/day** installed → +15,000 m³/day by 2028

💶 **Cost:** €2.42–3.50/m³ (high but essential)

☀️ **Innovation:** 1st 100% solar (Brava) + 1st agricultural (S. Domingos)

⚠️ **Critical challenge:** Supply continuity (e.g., Brava)

🎯 **Way Forward:** Integrate renewables • Reduce costs • Expand reuse • Protect aquifers

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Thank You for Your Attention!