Evaluating Strategic Partnerships between Telco and Energy Providers for Sustainable Business Growth

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Telco × Energy Collaborations: Quantifying Impact with Scenario Modeling

Vodafone & Suez Case Study

What Does "Success" Mean?

What should the success criteria for this collaboration consist of? Success is measured by delivering sustainable value, driving efficiency, and reinforcing long-term impact for stakeholders. Here are the KPIs that bring this to success.

01.
Water:
Efficient management and reduced waste through smart monitoring and optimized distribution

02.
Energy:
Lower consumption, greater use of renewables, and improved operational resilience

03.
Connectivity:
Secure, reliable networks enabling data-driven solutions and broader access

Orange x ENGIE

Powering Africa with sustainable connectivity. The partnership enhanced the resilience of critical digital infrastructure in the market.

Vodafone × Philips

IoT-powered streetlights driving smart city transformation.

TIM–Enel X
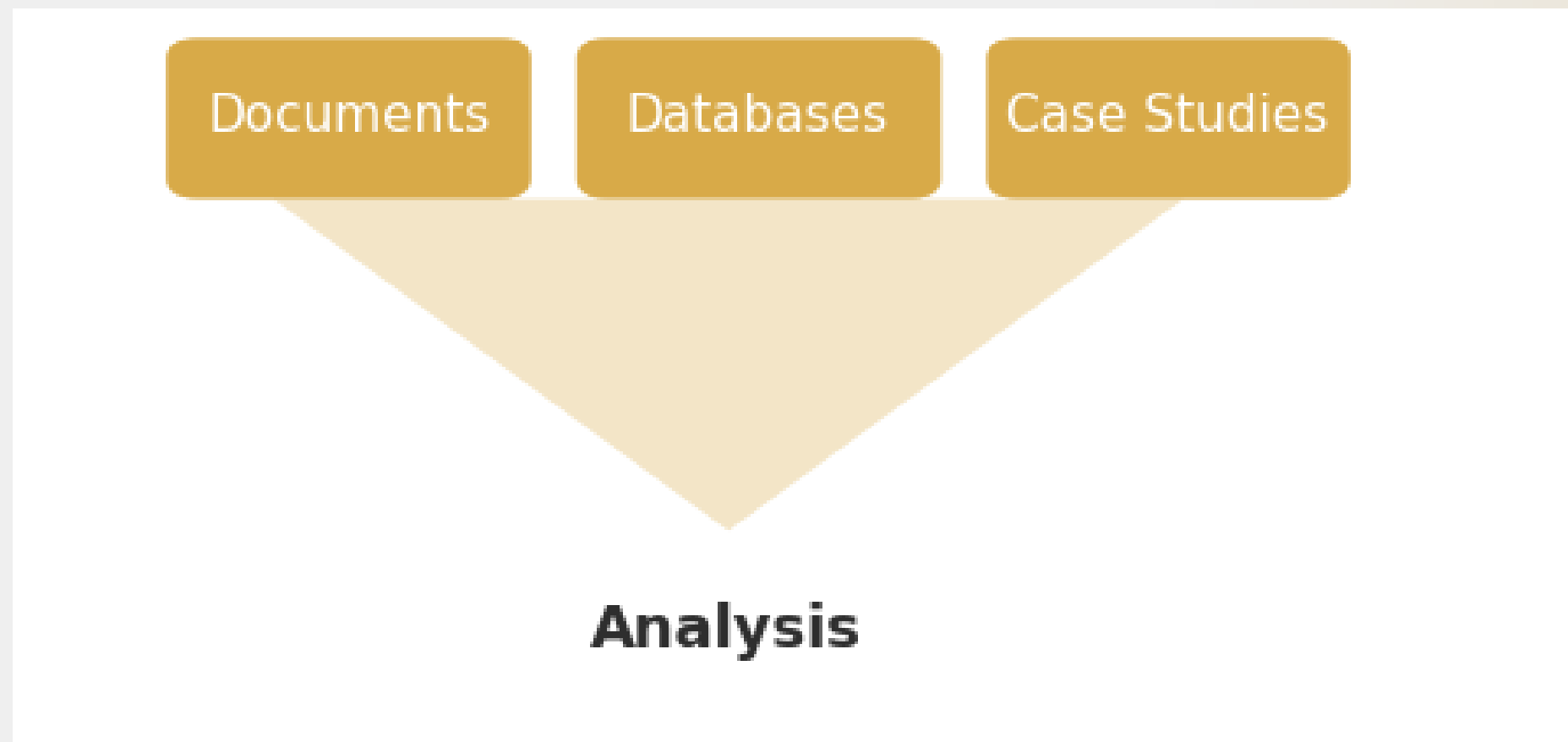
On-site solar driving cost savings and decarbonization.

Telefónica UK (O2) × UK Smart Metering Programme

Secure connectivity at the heart of the UK's energy transition.

Market Research

Data Collection

- Vodafone and SUEZ Press Releases
- AGCOM, ARERA, Eurostat, ISTAT
- Benchmark partnerships

Documents	Databases	Case Studies

Analysis

04

Main Case Studies

- Orange–Birdz (France): 3M LoRaWAN meters; single-country
- TIM–Enel X (Italy): On-site solar; reduced carbon footprint
- Deutsche Telekom–Shell (Germany): EV charging scale-up
- Vodafone–SUEZ: Multi-country, scalable, ESG-aligned

Local Partnerships

Orange–Birdz and TIM–Enel X are examples of local partnerships.

Scalable Partnerships

Deutsche Telekom–Shell and Vodafone–SUEZ are examples of scalable partnerships.

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Tech

Tech1

Narrowband IoT (NB-IoT)

- 15+ year battery life
- Deep underground coverage
- Large-scale, multi-country deployment

Tech2

AI & Predictive Analytics

- Leak detection & prevention
- Real-time monitoring of water flows
- Supports proactive maintenance

Tech3

Cloud Dashboards

- Unified data integration
- Customer billing transparency
- Supports regulatory compliance

Tech4

Monte Carlo Simulation

- Modeled ROI under uncertainty
- Sensitivity to tariffs, savings %, CAPEX
- Validated financial robustness

Business Strategy

01 — Vodafone Positioning
- €36.7B revenue, 310M customers
- Leader in 5G & NB-IoT (205M IoT connections by 2025)

02 — SUEZ Positioning
- €8.9B revenue, 40 countries
- 6M+ smart meters deployed, ESG-first utility

03 — Joint Value
- 2M+ smart meters by 2030
- 15% water savings target

04 — Synergies
- Vodafone: IoT backbone + customer base
- SUEZ: Operational expertise + ESG legitimacy

05 — Benefits
- Recurring IoT revenues for Vodafone
- OPEX efficiency + regulatory advantage for SUEZ

06 — Strategic Fit
- Multi-country scalable model
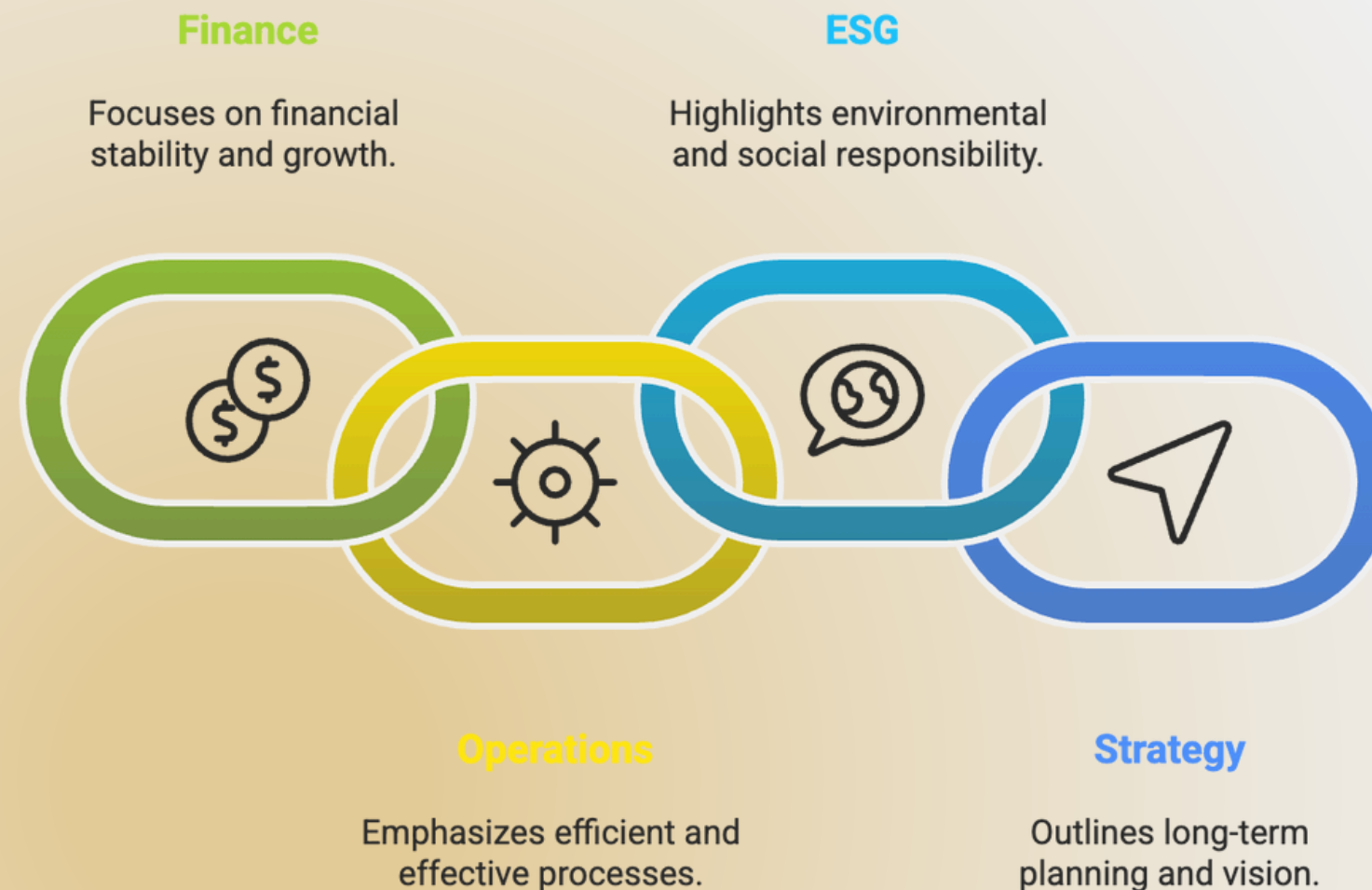- Alignment with EU Green Deal & UN SDG 6

Tests & Results

- Forecasting: 2 million smart meters by 2030, high chance to exceed target
- Financials: Project pays for itself in 5–7 years, then generates profit
- Impact: Saves 450 billion liters of water, equal to 300,000 cars' CO_2 per year
- Comparison: Vodafone–SUEZ = scalable & profitable; Orange–Birdz = limited to one country

Vodafone–SUEZ: Value Curve (MODEL)

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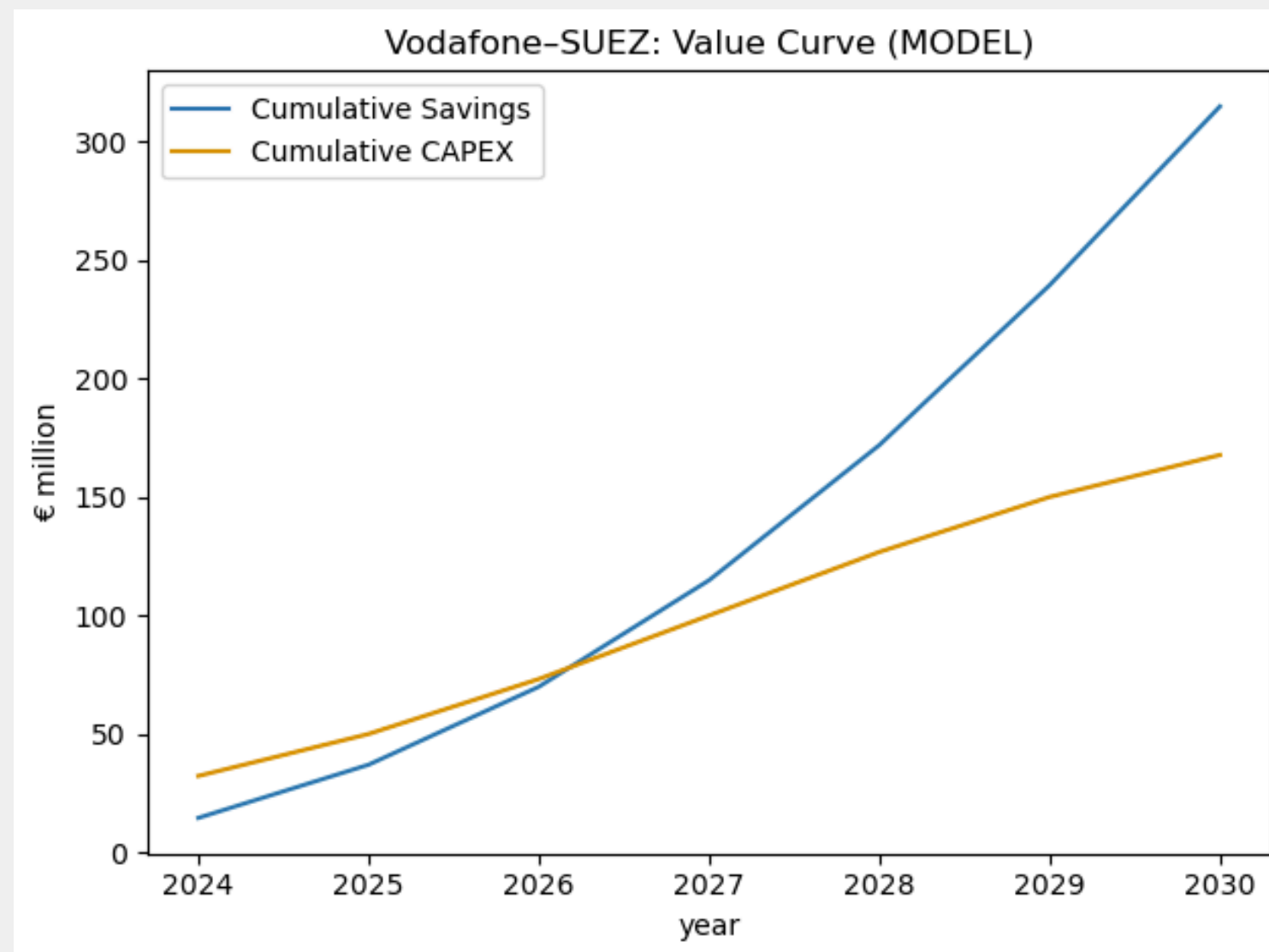
Conclusion: Why Invest?

- Financially viable: Positive ROI, strong scalability
- Operationally proven: 6M+ meters already deployed
- ESG aligned: Supports EU Green Deal & UN SDG 6
- Strategic fit: Replicable model for JOIN Group investments

Finance

Focuses on financial stability and growth.

ESG

Highlights environmental and social responsibility.

Operations

Emphasizes efficient and effective processes.

Strategy

Outlines long-term planning and vision.

Future Work

- Expand into multi-utility platforms (water + energy + waste)
- Renewables integration (solar/wind-powered water systems)
- Geographic scaling into high water-stress regions (Africa, Latin America)
- Access to real operational datasets for refined modeling
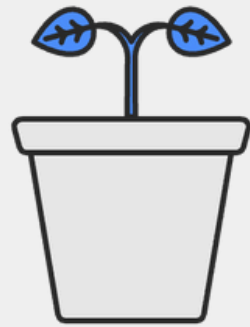
Multi-Utility
Platforms

Renewables
Integration

Geographic
Scaling

Operational
Datasets

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Thank You

Q&A