SMARTCITY
EXPO WORLD CONGRESS

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Funding Challenges and Opportunities to Upgrade Urban Infrastructures and Services

1. A global infrastructure group around the world
2. Experience financing infrastructure
3. Challenges financing smart cities

A global group around the world

A global infrastructure group

60 years of experience and growth

55 countries

About 14,000 professionals

2018 Sales Eur 2.300 M

Infrastructure

Investments

Business areas

Generates

Infrastructure Business

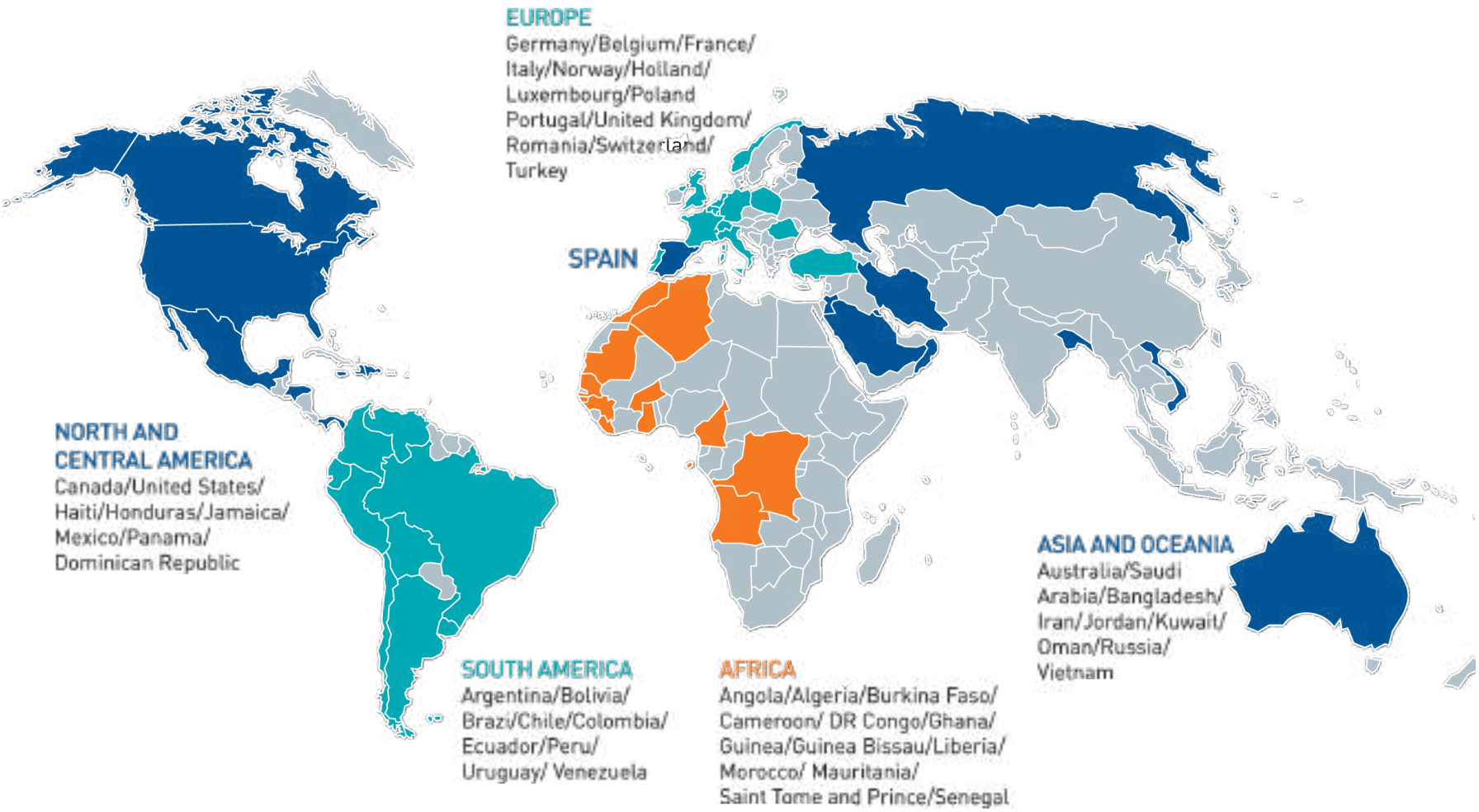
Implementation of engineering, construction & service projects

Investment Business

Development, external financing, construction & management of energy assets

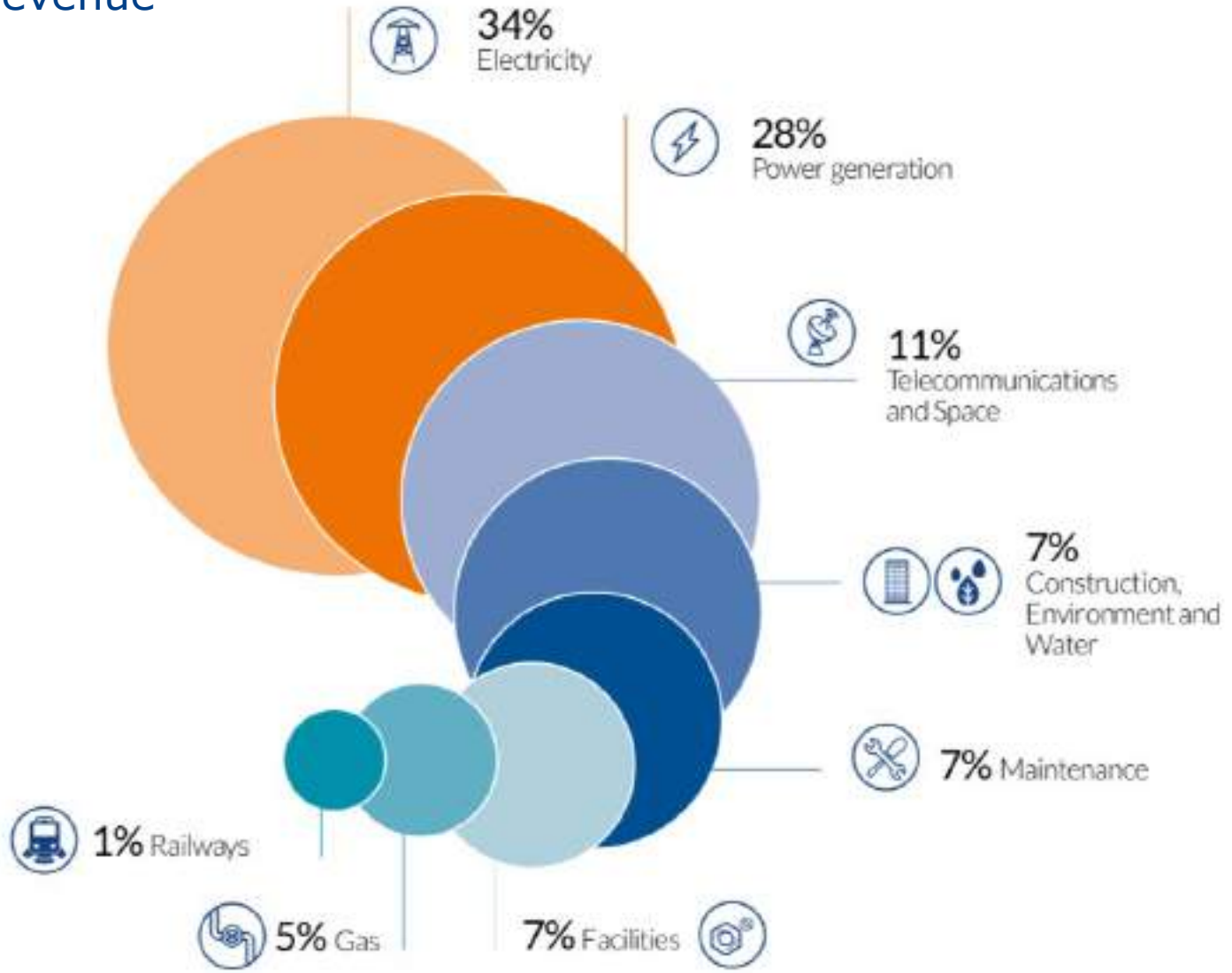
Strengthens

Geographical Diversification



Income Diversification

2018 revenue



Development, implementation, O&M and management of Projects

Electricity infrastructure

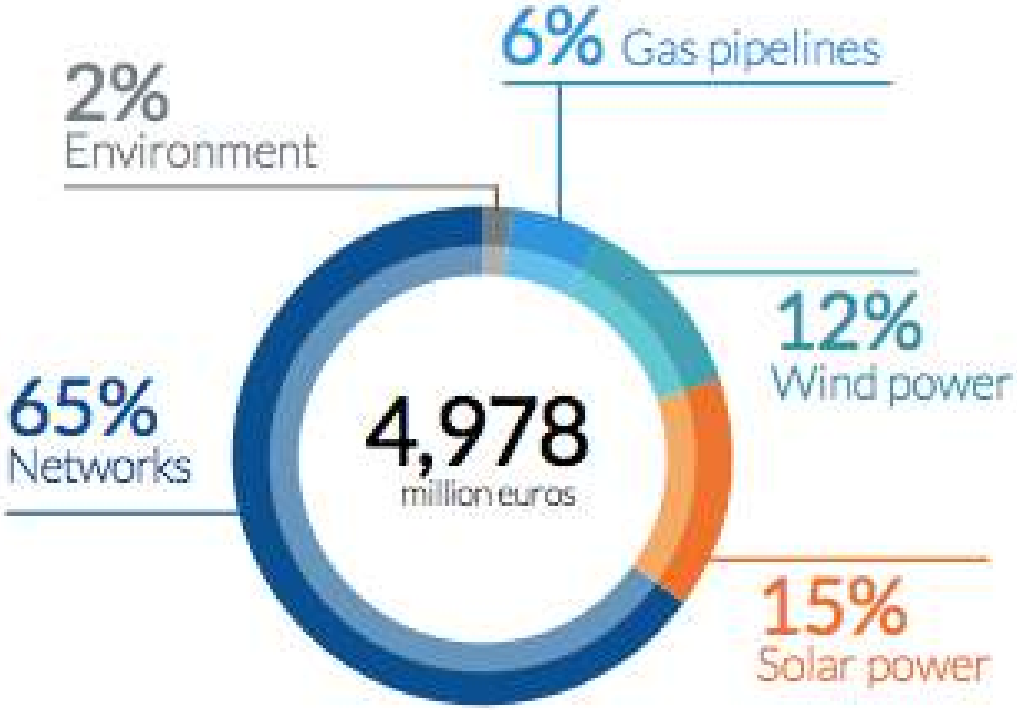
Gas infrastructure

Power generation

Environment

Assets Managed

By activities



Situation

64.2% in operation

35.8% under construction

PROJECTS: TRANSMISSION

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PROJECTS: RENEWABLES

PROJECTS: COMUNICATIONS

PROJECTS: ENVIRONMENT

PROJECTS: WATER DISTRIBUTION

PROJECTS: RAILWAYS

Smart cities activities

Smart cities activities

Smart Services

Local partner with a global mindset, leading the way in technology and innovation.

Every day.
In your city.
With you.

Consultancy
- Smartcity strategic plan
- Smartcity positioning

Maintenance
- Efficiency in costs and investments
- Return on investment

Design
- Turnkey projects
- European funds (EDUDIs, FEDER).
- Suitable model of city
- Citizens laboratories

Integration
- Partners ecosystem
  - Large companies
  - SME
  - Start-ups

Monitoring
- Tracking
- Cost control

Development
- Latest technologies
- Disruptive solutions
- Own solutions

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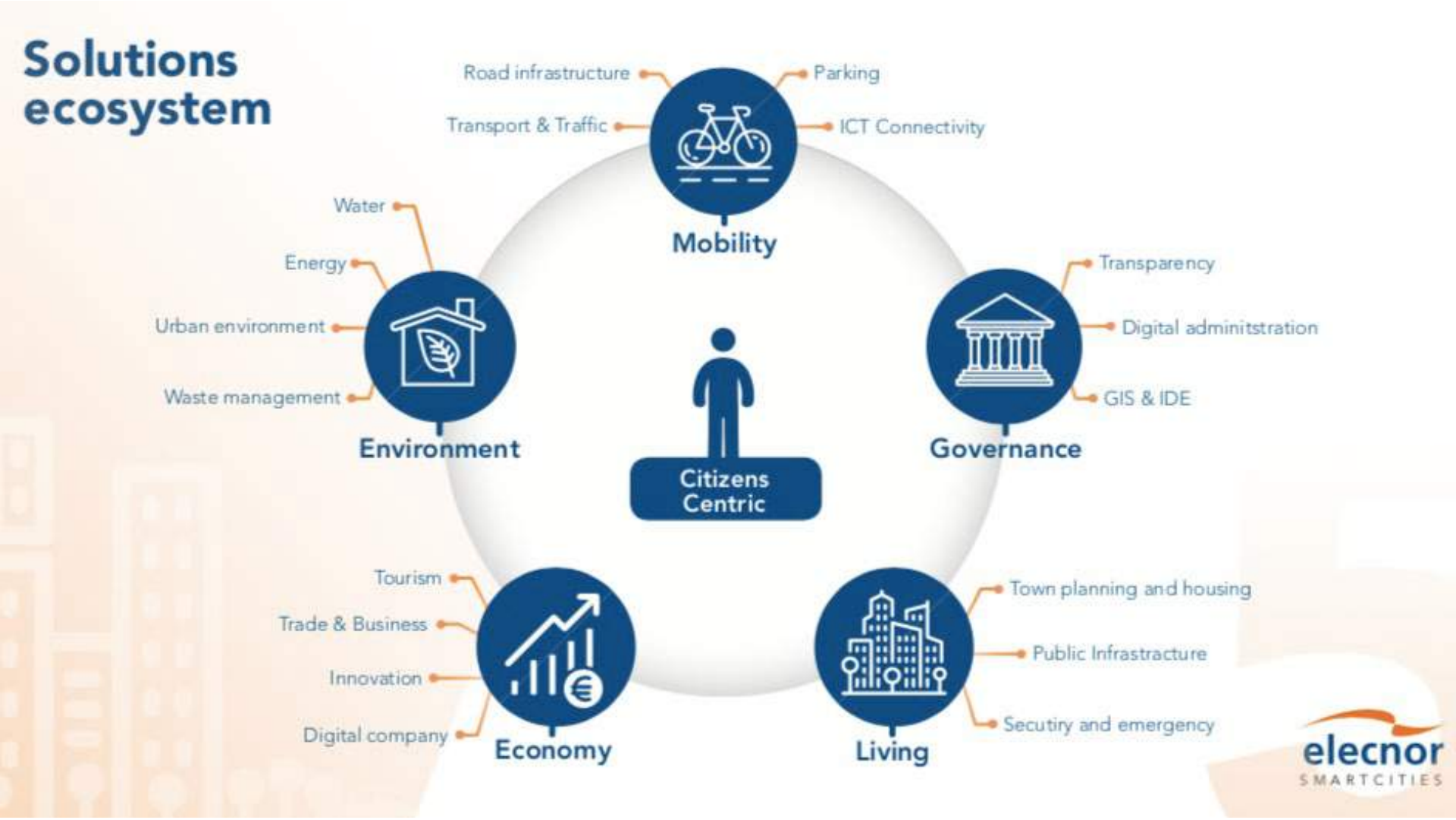
SMARTCITIES

Smart cities activities



Smart city

Vertical Solutions

gisal — Lighting & Energy

alhambra — ITS for Metro & Commuter

elcano — Railway Services Platform

Kyros — LBS Services

ICT Integration
IT Infrastructure
Business Intelligence
Geospatial Analytics

deimos elecnor group

Innovation | Integration | Disruption | Technology

Experiences financing infrastructure

Elecnor financing experiences financing infrastructure

- **Developed markets:** contractors **not involved** in financing **or** become the **sponsors** (equity+project finance debt)
- **New opportunities: Energy efficiency projects in Spain with municipalities**: vendor finance and after credit rights sold to an energy efficiency fund

Elecnor financing experiences financing infrastructure

- **Africa and Asia**: **EPC+F** with ECAs and DFIs and multilateral agencies for Government or owned utilities

Hydroelectric plant

Laúca
(Angola)

Participated as EPC contractor

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Arrangers

HSBC

ECA support

CESCE OeKB EULER HERMES

Elecnor financing experiences financing infrastructure

- **Latam:** we find all situations.
  - Only EPC
  - EPC+F
  - PPP-IPP
  - Banks, IFDs and agencies, investors,
  - Project bonds market
    - EUR 73 MM for wind farms in Brazil (2019)
    - EUR 133 MM for transmission lines in Brazil (2019)
    - EUR 200 MM for transmission lines in Chile (2017)
  - Peculiarity: discount of construction certificates

Smart cities finance

Sources of finance for smart cities projects

- Grants
- Intergovernmental transfers
- Supranational financing
- Taxes
- Municipal debt: bank loans, bonds
- Fees form users
- Assets sales/rentals
- Vendor finance
- PPP, IPP, BOT, concessions
    - Equity from private sponsors/investors
    - Commercial debt under project finance schemes

- **For the municipalities:**
  - Limited capacity for public funding
  - No “bankable” risk
  - Social and political difficulties to transfer the cost to the end users
  - Complexities to access grants

Challenges to raise funds

- **For the private sector**
  - "Difficult" assets (chips and intangible)
  - Capital-intensive investments
  - Technical obsolescence
  - Time to reach a proper return
  - Untested – lack of experience, track record increases risk perception
  - Uncertain regulatory framework
  - Difficulties to isolate assets/cashflows
  - Multisectorial: singularity vs. standardisation
  - Size: too big … or too small!
  - Bad project structuring

Challenges for private sector financing

- Be creative
- Be innovative
- Be disruptive
- Be smart!!

"The financing solution"

- **Classic municipal funding**
  - Classic utility funding
    - Vendor finance
- **Mix of different funding instruments and models**
- Blended solutions with EU, multilateral agencies, state owned funds
  - Concessional finance/grants
  - Guarantees for first loss
  - Partial guarantees
  - Along with commercial financing from banks or bond market
- **Private initiative: SPONSORS**
  - Contractors
  - Technology providers
  - Utilities
  - Financial investors

Private initiative : learning from other experiences

- Infrastructure is an asset class
- Sophisticated sector with a consolidated experience and deep knowledge
- Lot of players in the market with different approaches
- Specialised financial investors
- Lot of liquidity in the market
- Need to find new opportunities: smart cities are!!
- Global market: opportunities with different risk profiles
- Political and social support to smart cities

Lessons learnt from infrastructure

1. Adequate risk analysis
2. Adequate risk sharing
3. Alignment of interest
4. Right partners: skin on the game
5. Business model with adequate return
6. Structured finance solution
7. Adequate legal structure
8. Good governance
9. Political and social support
10. Affordable operational risk
11. Good management
12. Adequate Follow-up
13. Monitoring of impacts

The most important thing for raising finance

Make it right from the beginning

REAL NEED FOR THE POPULATION

SOLID PREDICATABLE PROJECT CASHFLOW

ADEQUATE RETURN

GOOD PROJECT STRUCTURING

ADEQUATE PARTNERS

GOOD TEAM

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