

مؤسسة مياه
لبنان الجنوبي



SLWE Strategy Revisited

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1.0 3 Years of Hard Work

In 3 years (2018-2020) SLWE has been able to:

Install 600 km of network

Increase storage capacity by 20k cum to 170k cum

Increase water production by 25% to 390,000 cum/day

Increase subscribers by 26,000 to 183,000

Carry out 900 maintenance operations to wells and pumps in addition to thousands on the network

Distribute 3,000,000 liters of diesel to the operating generators

Serve 1,200,000 inhabitants including 120,000 Syrian refugees



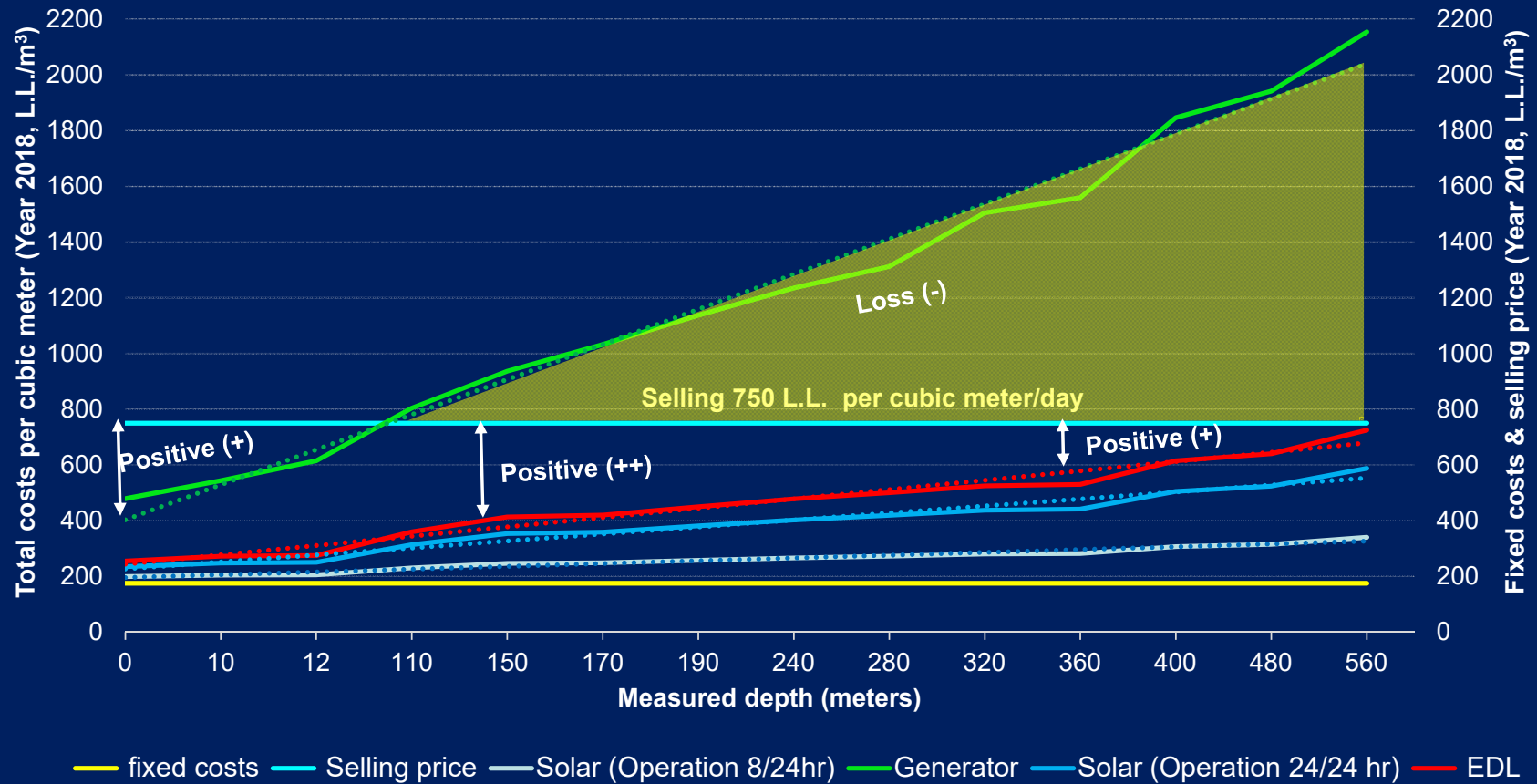
2.0 Summary in USD/LL – Current

| | ACTUAL | | | FORECAST | | | |
|--|--------|------|------|----------|------|------|------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| CAPEX (M. USD) | 5 | 14 | 6 | | | | |
| OPEX (M. USD) | 25 | 25 | 25 | | | | |
| SALARIES & BENEFITS (Bil. LL) | 24 | 26 | 26 | | | | |
| WATER EQUIPMENT & CONSUMABLES (TOOLS AND ACCESSORIES) (M. USD) | 1 | 3 | 3 | | | | |
| ICT HARDWARE & SOFTWARE (M. USD) | 0.1 | 0.5 | 0.5 | | | | |
| AUTOMATION SYSTEMS DEVELOPMENT (ERP, CALL CENTER, MOBILE APPS, WEBSITES, CLOUD COMPUTING, ETC) (M. USD) | 0.1 | 0.6 | 0.1 | | | | |
| ADMIN CONSUMBALES (PAPERS, INKS, ETC.. (M. USD) | 1.3 | 0.8 | 0.8 | | | | |
| CARS (MAINTENANCE, INSURANCE, FUEL, OIL CHANGE, ETC) (M. USD) | 0.2 | 0.2 | 0.2 | | | | |
| COMMUNICATION & MARKETING (M. USD) | 0.1 | 0.1 | 0.2 | | | | |
| MISCELLENIOUS (e.g., COVID19 PREPARDNESS AND RESPONSE) | 0 | 0.1 | 0.2 | | | | |



3.0 Energy Cost of Water Production

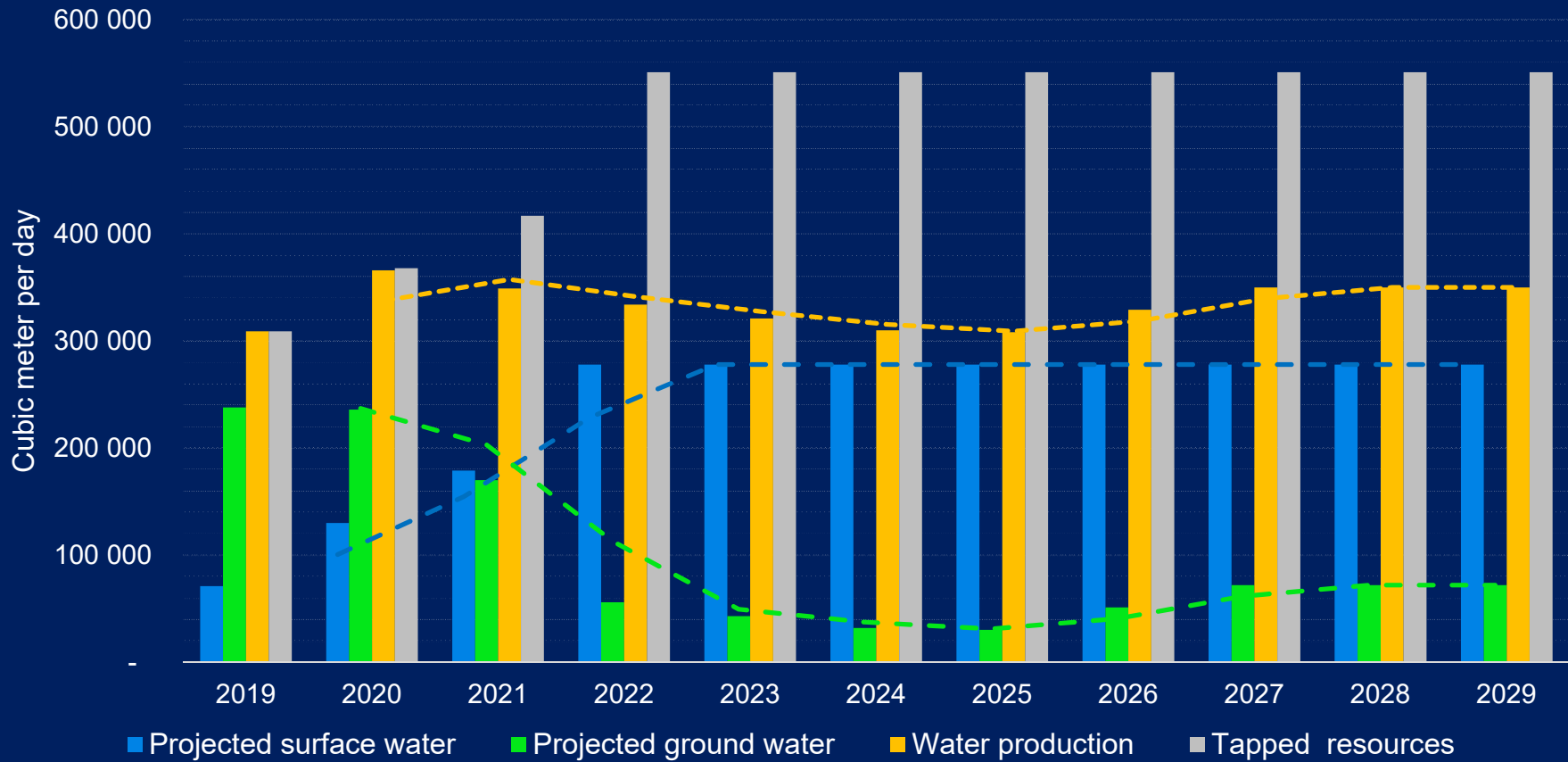
Cost of cubic meter by water depth





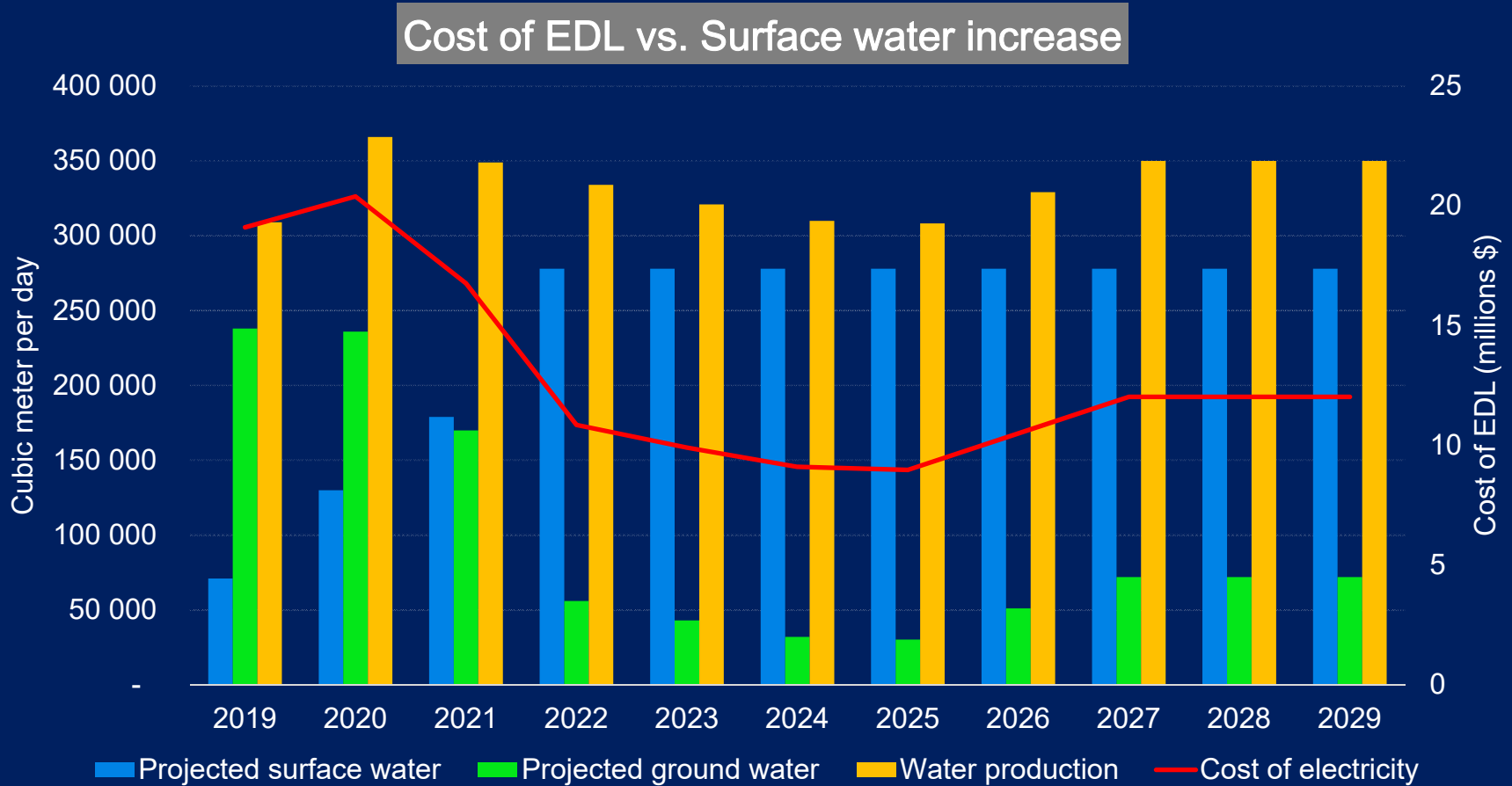
4.0 Surface/ Ground Water Supply

Surface water vs. Ground water





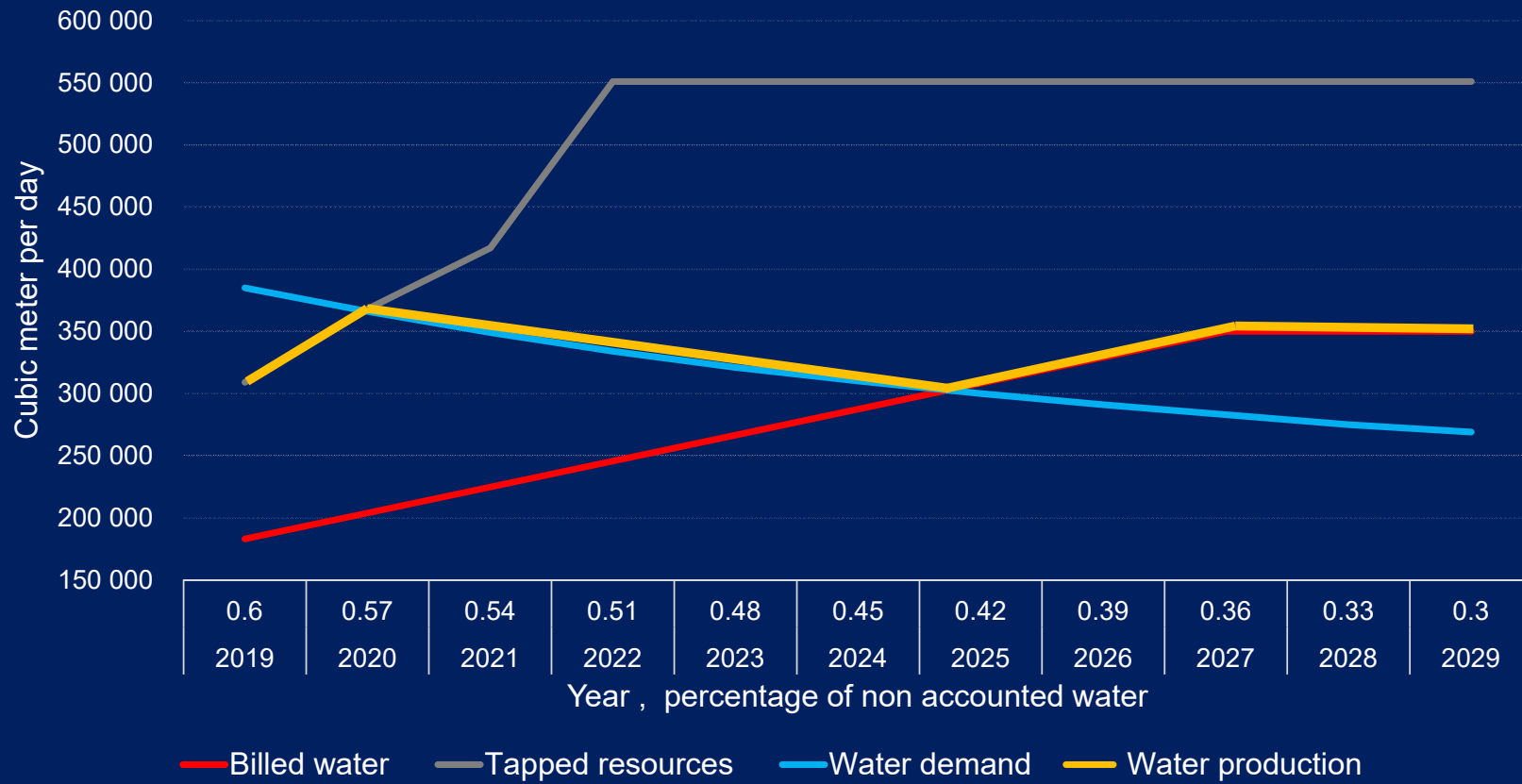
5.0 Cost of Power Surface/Ground





6.0 Water Demand

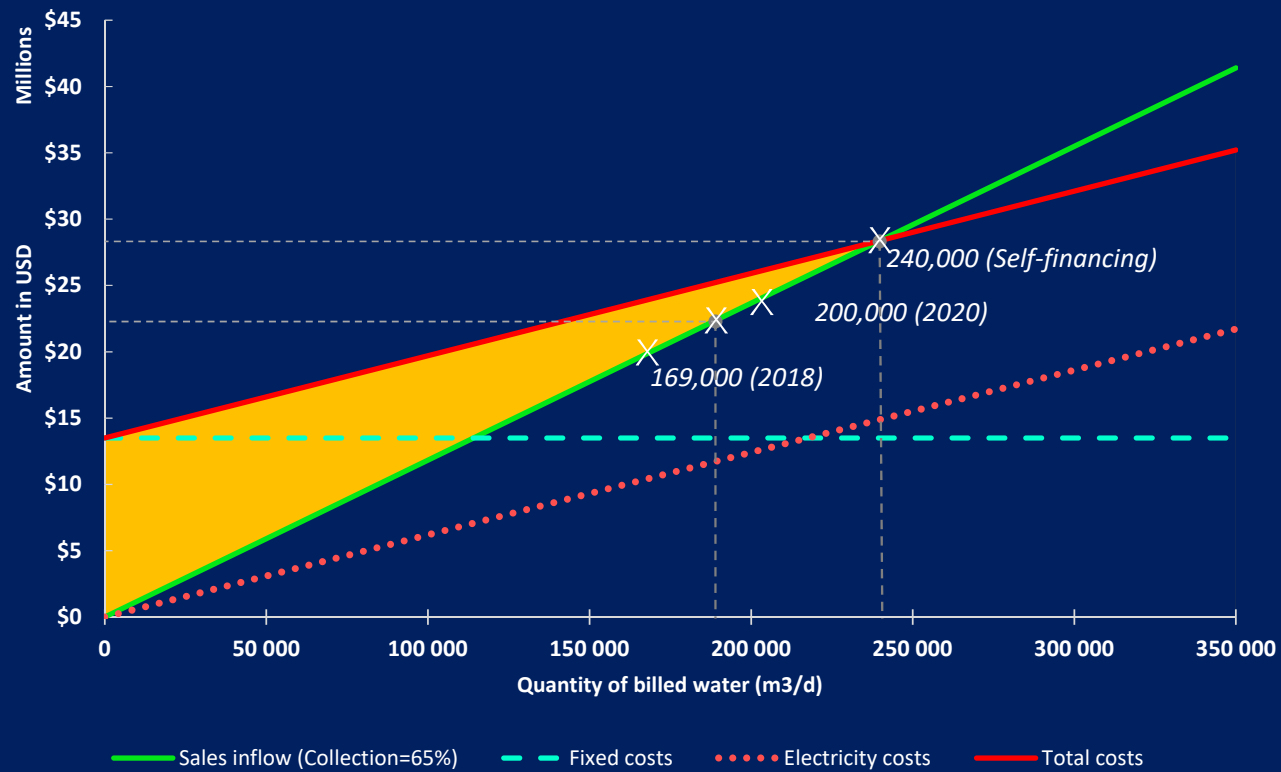
Water demand vs. Tapped resources





7.0 Financial Sustainability

SLWE self-financing capacity





8.0 Revolution in Water Affairs (RWA) (1/5)

Revolution in Water Affairs

Doctrine

Digitalization

Asset Valuation
Governance

Strategic

Operational

Technological



8.1 Revolution in Water Affairs- Doctrine (2/5)

Due to:

dire external work conditions and internal limitations
high depletion rate of developed and trained human experience
unsustainability of customized pluralistic knowledge base

We have to:

dramatically inhibit human intervention and control on multiple functional levels
build a virtual robust intelligent establishment with pre-engineered workflows and processes
mechanize knowledge base and experience storage

and govern through:

an integrated financial- operational asset valuation platform



8.2 Revolution in Water Affairs- Strategy (3/5)

Paradigm change from ground to surface water

Energy reliability on sustainable sources

Optimization of water production through water balancing and pressure management

Net-centric/ Platform-centric operating abilities

Decentralization of collection and promotion of municipal involvement

Customer partnership

Adoption of water quality control and governance protocols



8.3 Revolution in Water Affairs- Operations (4/5)

Virtual platform for digital integration

Operations software that pre-engineers workflows and processes for change facilitation and turnover effect limitation

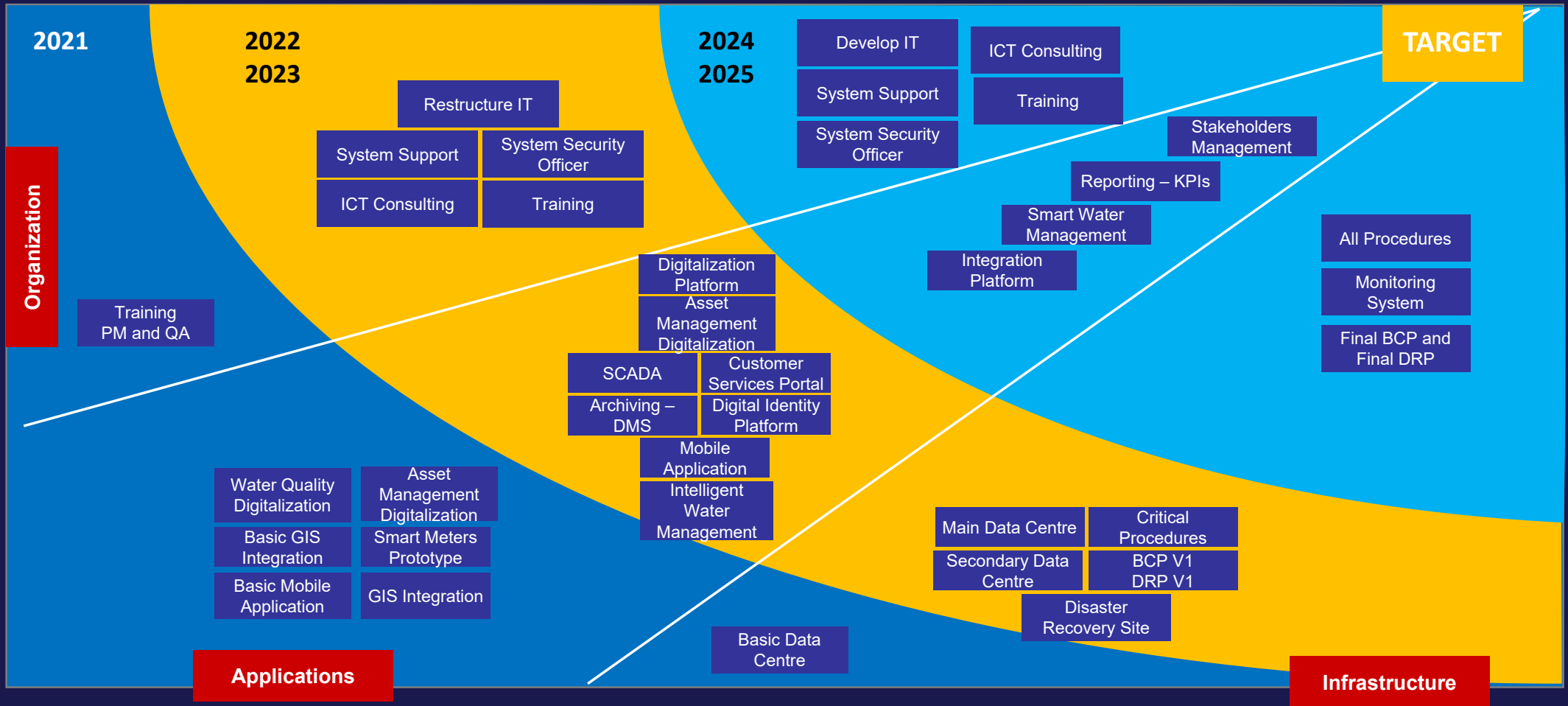
Quality control system

Mechanization of water distribution

Enforcement of ground technicians, core technical time, and top strategic management

Water quality soft control and governance

8.4 Revolution in Water Affairs- Technology (5/5)





9.0 Requirements

Retention of engineers and technicians for 2-3 years and support of employees

Increase expenditure in alternative and sustainable energy sources

Increase expenditure in surface water infrastructure

Support operation and maintenance

Increase investment in digitalization



10.0 Summary in USD/LL – Current & Forecast (2018 – 2024)

| | ACTUAL | | | FORECAST | | | |
|--|--------|------|------|----------|------|------|------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| CAPEX (M. USD) | 5 | 14 | 10 | 25 | 50 | 50 | 50 |
| OPEX (M. USD) | 25 | 25 | 25 | 24 | 20 | 16 | 13 |
| SALARIES & BENEFITS (Bil. LL) | 24 | 26 | 26 | 26 | 26 | 26 | 26 |
| WATER EQUIPMENT & CONSUMABLES (TOOLS AND ACCESSORIES) (M. USD) | 1 | 3 | 3 | 3 | 2 | 2 | 1 |
| ICT HARDWARE & SOFTWARE (M. USD) | 0.1 | 0.5 | 0.5 | 2 | 5 | 5 | 5 |
| AUTOMATION SYSTEMS DEVELOPMENT (ERP, CALL CENTER, MOBILE APPS, WEBSITES, CLOUD COMPUTING, ETC) (M. USD) | 0.1 | 0.6 | 0.1 | 0.5 | 0.5 | 0.5 | 0.5 |
| ADMIN CONSUMBALES (PAPERS, INKS, ETC..) (M. USD) | 1.3 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| CARS (MAINTENANCE, INSURANCE, FUEL, OIL CHANGE, ETC) (M. USD) | 0.2 | 0.2 | 0.2 | 0.5 | 0.5 | 0.5 | 0.5 |
| COMMUNICATION & MARKETING (M. USD) | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| MISCELLENIOUS (e.g., COVID19 PREPARDNESS AND RESPONSE) | 0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

