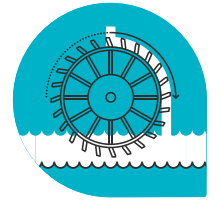


COMPANY NAME

Israel's macro-level, water system



SECTOR
Water

Israel's macro-level, water system is composed of multiple private and public organizations along a circular value chain that mimics the natural water cycle, extending from natural water sources to water storage and collection to waste treatment to reuse.

CHALLENGES

At the primary source phase are ongoing, regional, drought conditions; thus, Israel draws upon more expensive, recycled and desalinated sources. At the collection and distribution phases, there are limited measurement, and management, as well as limited funding for local and regional infrastructure. The two key challenges at the user phase are conservation and reflecting externalities in water price. Finally, at the recovery and treatment phase, the challenges include the introduction of new processes and technologies, and the costs of regulation and enforcement.

INNOVATIONS

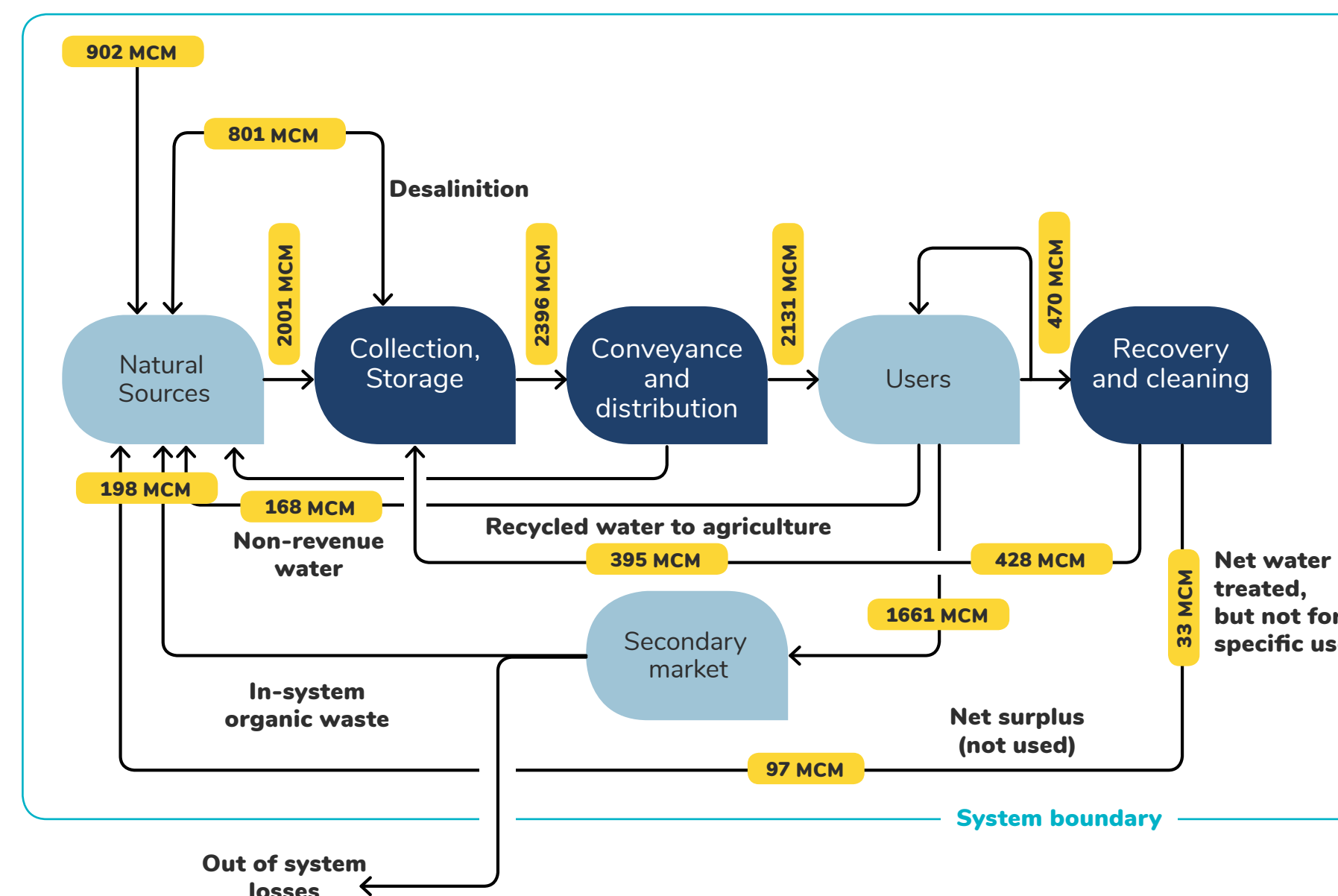
To ensure that all water customers (municipalities, industry, and agriculture) are provided with a clean, reliable source of water, in a drought-plagued region, the Israel water system has established a government-technology-industry nexus supporting continuous innovation through direct and leveraged investments in R&D, as well as a policy environment that supports such tech creation. After development, technology is beta tested in local, regional, and national government facilities providing "proof of concept" for both the national and international markets.

KEY ENABLERS

- Public ownership and control of water; this leads to central authority and comprehensive, integrated pricing amortizing costs across all parts of the value chain;
- Innovative ecosystem: driven by collaboration between research, business, and policy leadership;
- Legislative mandate for water measurement;
- Public requirement to Integrate water reuse in water planning and management (generally) and in agriculture (specifically).

MATERIAL FLOWS

Material and value flow mapping of the Israeli water system (MCM - million cubic meters).

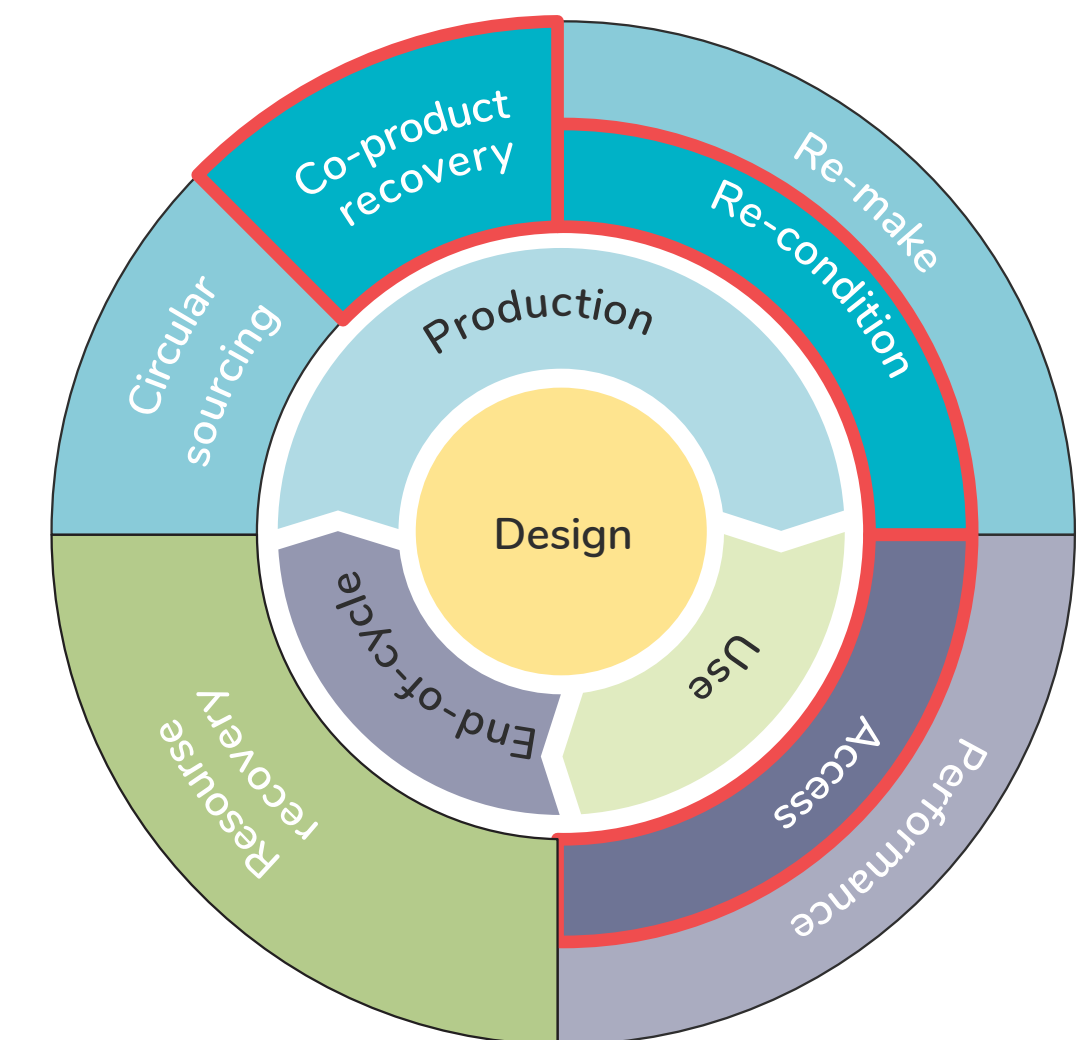


- Integrated value chain consuming about 2.13 billion cubic meters valued at an estimated 4.47 billion Euros annually.
- Desalination production estimated at 801 billion cubic meters with a market value of about 1.6 billion Euros annually.
- Recycled water estimated at 428 million cubic meters valued at 898 million Euros annually.
- Lost water (or non-revenue water) in the system estimated at 168 million cubic meters with a value of 352 million Euros.

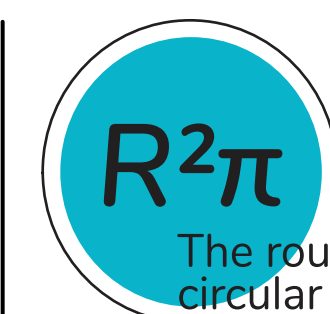
KEY OUTCOMES

The value proposition for the Israeli water system is to provide a living laboratory for innovation to provide clean, ready water on demand. This has led to the development of 300 companies involved in water technologies providing solutions in Israel and in global markets. The system has reliable infrastructure that maximizes reuse and minimizes waste and is managed and measured to ensure efficient and effective delivery such that Israeli produces about twenty percent more water than it consumes annually, allowing it to export water to neighbouring countries.

CIRCULAR ECONOMY BUSINESS MODELS



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The route to circular economy

