

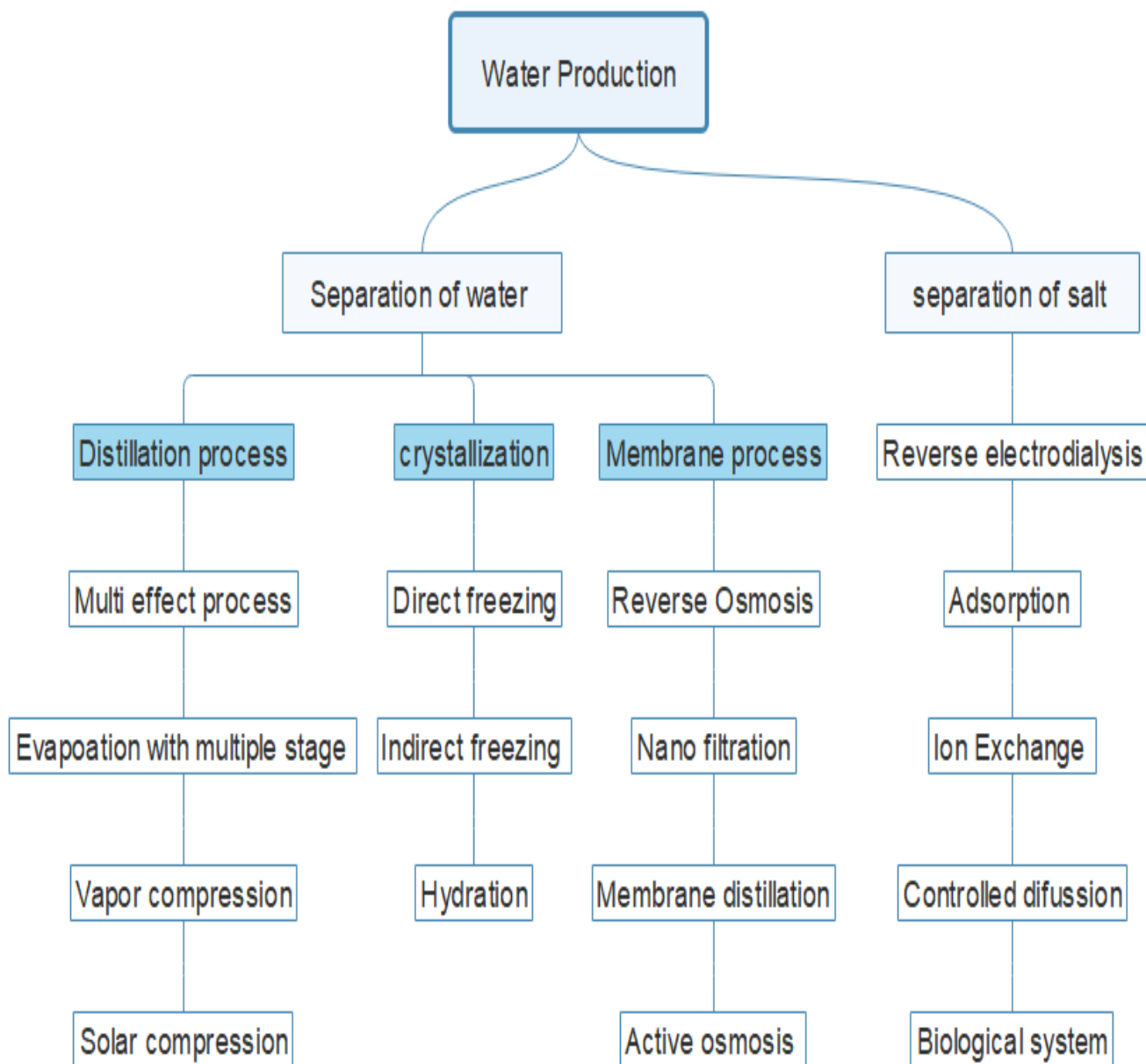
Clear water systems Egypt for extraordinary water solutions

Sea water desalination has been a topic of high interest within the last decade.

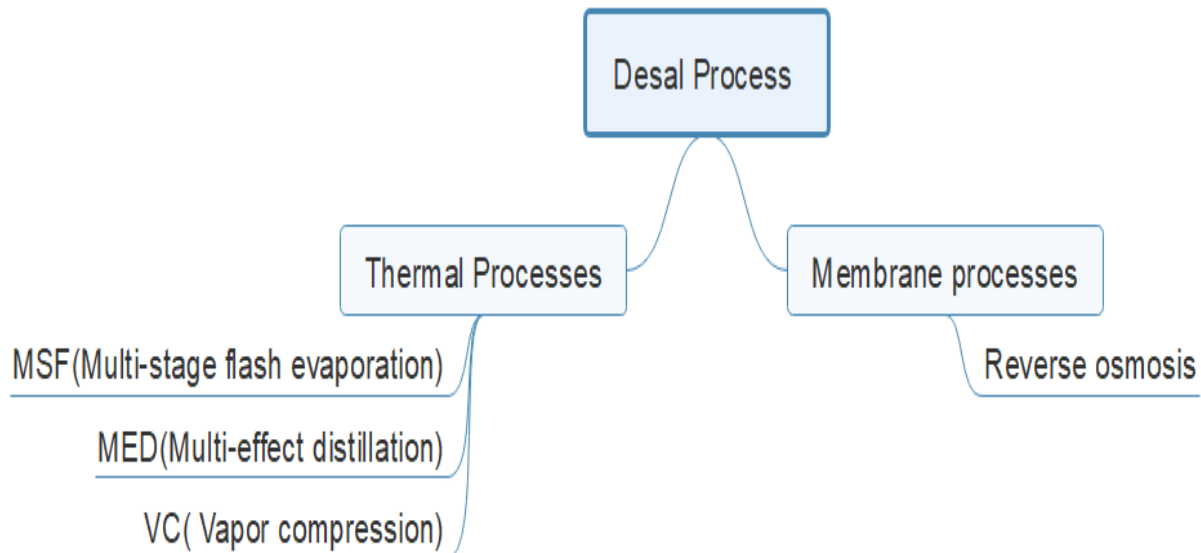
Water scarcity, droughts and pollution have been the main concerns that pushed people to dig in the field of desalination.

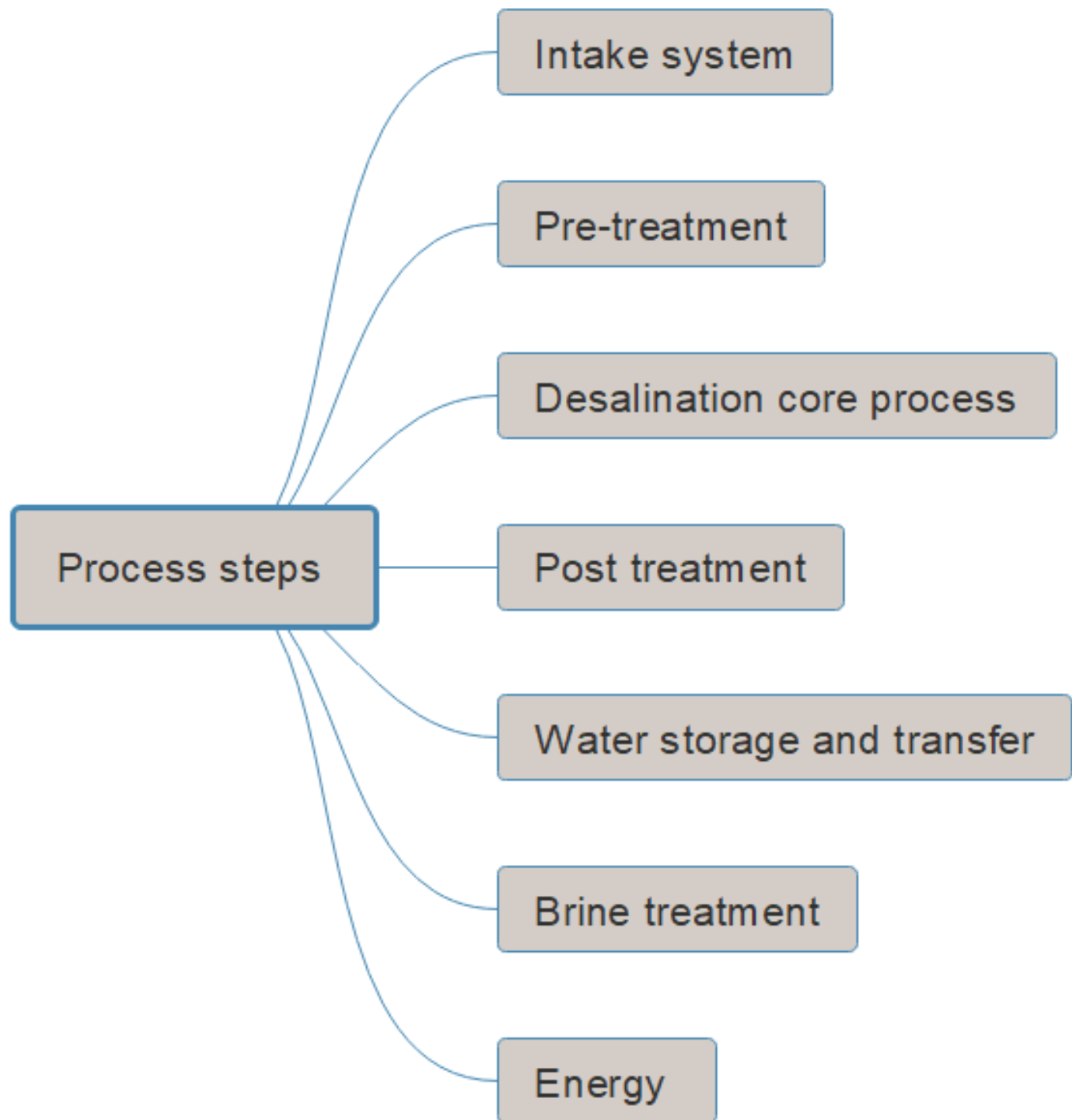
Seawater desalination process has passed through several phases of development and major evolutions over the past decade.

Several technologies started from being primitive to reaching absolute complexity along to hybridization. In this report, most of these technologies are covered and discussed.



There are different types of seawater desalination technologies





CWSE mainly use Reverse osmosis technique.

What is osmosis?

➤ Nature always tends to the state of balance

➤ Osmosis

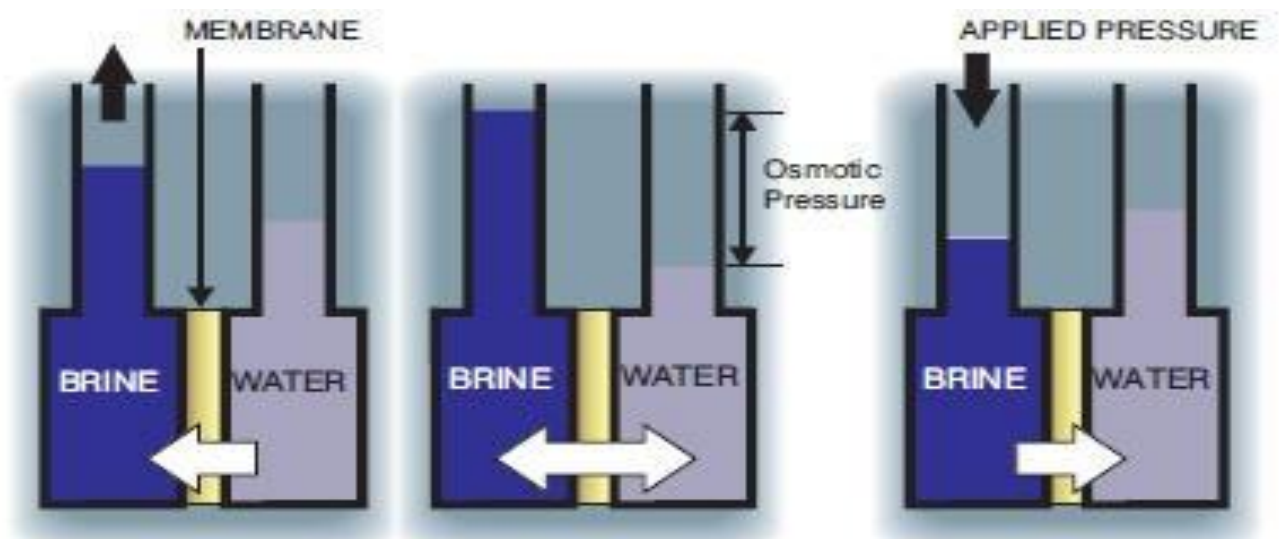
Water flows from low concentration of salts to high concentration

➤ Equilibrium

Osmotic pressure
Is the pressure required to stop water flow and reach equilibrium

➤ Reverse osmosis

By applying pressure greater than osmotic pressure, Flow of water is reversed water flows from higher concentration solution to lower



CWSE is very concerned about energy recovery and energy management. So, we have been dealing with all the energy recovery devices along with their evolution. We have a type of energy recovery device in each plant.

We have:

- The energy recovery turbines
- The turbo charger from ERI
- The PX from ERI
- The Isobarix pressure exchanger XPR
- The Salino from salinnova



Equipment Providers:

- ABB
- Siemens
- Dűchting Pumpen
- George fisher
- Selip
- ERI
- Toray
- Danfoss
- Grundfos
- Fluytec
- KSB