



## About WEB Aruba N.V.

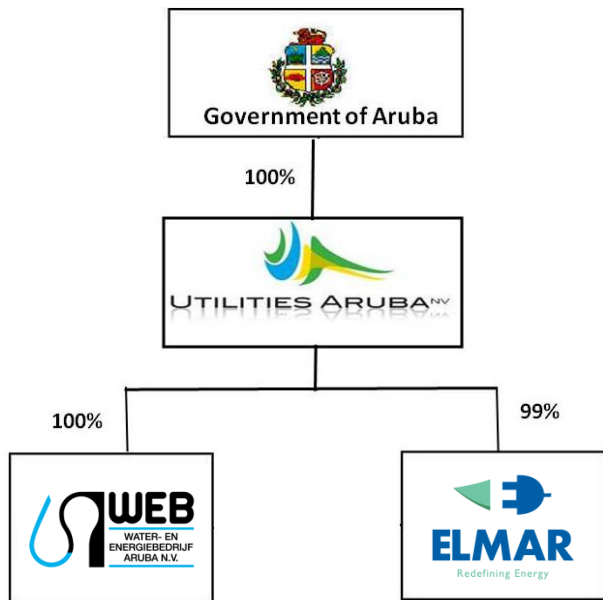
WEB Aruba N.V. (WEB), is a limited liability company and was established in 1932.

WEB is the only water and power producer on the island of Aruba.

WEB is also the only water distributor on the island. Power is sold to N.V. ELMAR, the power distributor.

The company has approximately 310 employees.

## Ownership



## Map of the Caribbean



## Map of Aruba



### Power Production Capacity

Power is produced at WEB's power plant at Balashi and at the wind farm at Vader Piet. The total generating capacity at WEB's power plant is 232 MW. The wind park, operated by an independent power producer, has a capacity of 30 MW.

By 2016 the wind power capacity will be doubled to 60 MW.

About 40% of the generating capacity at Balashi is provided by modern, years of installation 2006-2011, fuel efficient reciprocating engines, RECIPS. The remaining capacity is provided by steam boilers. In 2013 the RECIPS generated almost 55% of all the power at Balashi.

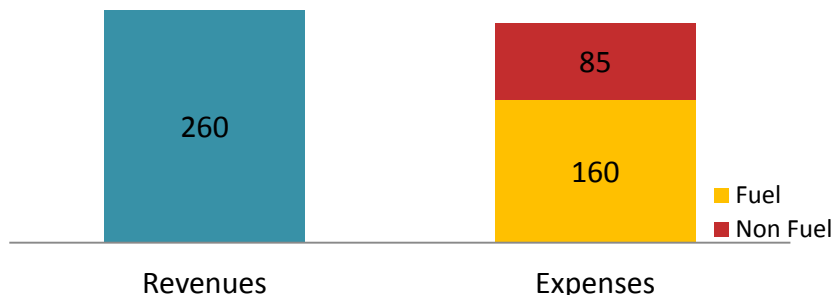
### Reliability

The reliability of power supply is +99%.

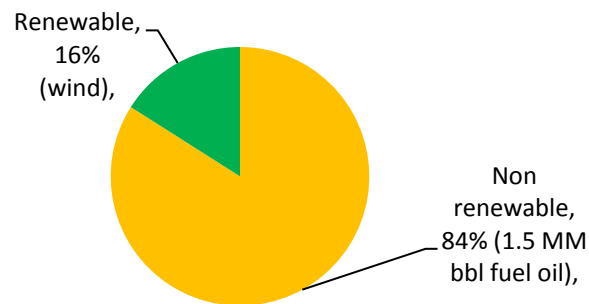
In 2013 there were 6 power interruptions, of which only one affected the entire island. The average duration of power interruptions was 3.5 hour.

Critical locations, like the hospital, get preferential supply of power and will be, if possible, the last to get disconnected, and the first to be reconnected with power.

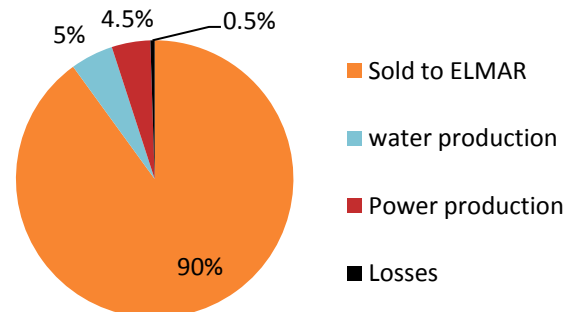
### Total Revenues And Expenses (MM USD)



### 2013 Power Production: 925 GWh



### Uses Of Generated Power

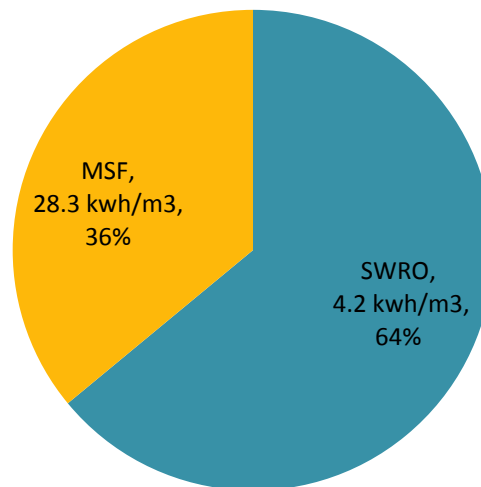


### Potable water

Potable water is produced at the Balashi water plant. The potable water of Aruba is safe for consumption directly from the tap. Apart from serving approximately 41,000 homes and businesses, WEB also provides ships with water. As Aruba has no rivers or lakes and extremely limited groundwater reserves, potable water is made through desalination of seawater.

A total water storage capacity of approximately 170,000 m<sup>3</sup> (app. 45 million US gallons) guarantees the continuous supply of potable water.

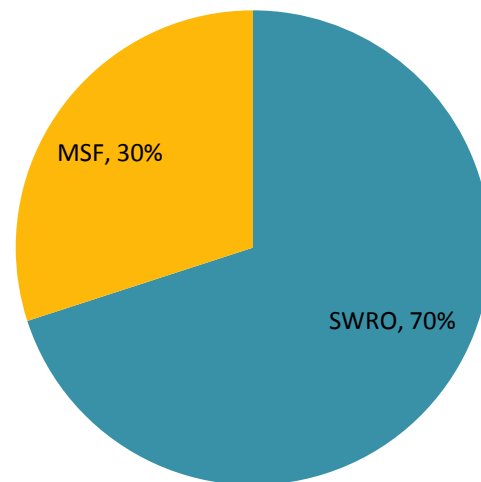
### Capacity 41,000 m<sup>3</sup> /day ( MM 11 US g/d)



### Potable Water Production Methods

Seawater Reverse Osmosis (SWRO)	Multistage Flash (MSF)
Installations date from 2006 and 2012	Traditional production method (present installations date from 1992 to 1998)
Seawater is filtered through very fine membranes (less energy intensive than MSF)	Sea water is brought to steam and subsequently condensed (energy intensive)

### Yearly production MM 12 m<sup>3</sup> (app 3.2 billion US gallons)





# ELMAR

Redefining Energy

## About N.V. ELMAR

N.V. ELMAR (ELMAR), is a limited liability company and was established in 1950.

N.V. ELMAR is the only power distributor on the island of Aruba. At the moment all power is bought from the power company WEB Aruba. N.V. By 2015 a fraction of the power will be bought from the future solar park near Airport Reina Beatrix, this solar park will be owned and operated by an Independent Power Producer.

ELMAR has approximately 42,000 customers and 165 employees.

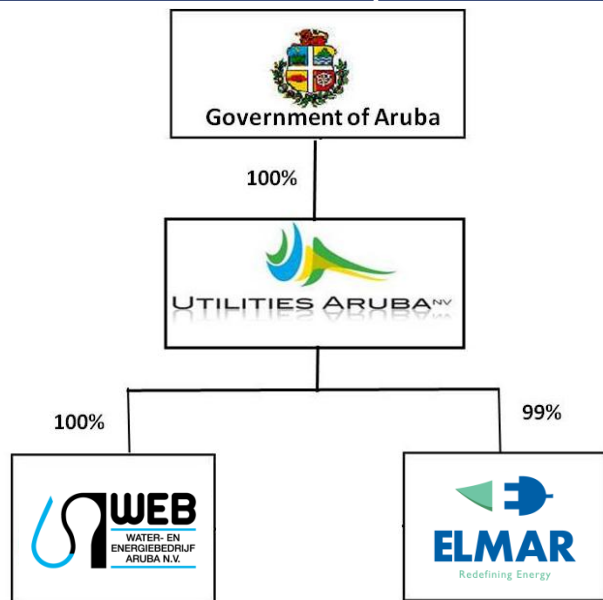
## Map of the Caribbean



## Map of Aruba



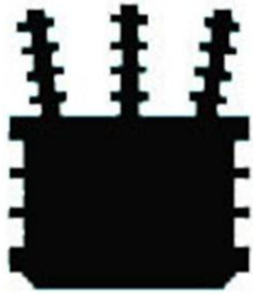
## Ownership



### Infrastructure



**Power Lines**  
 •above the ground 965 km  
 •below the ground 1170 km

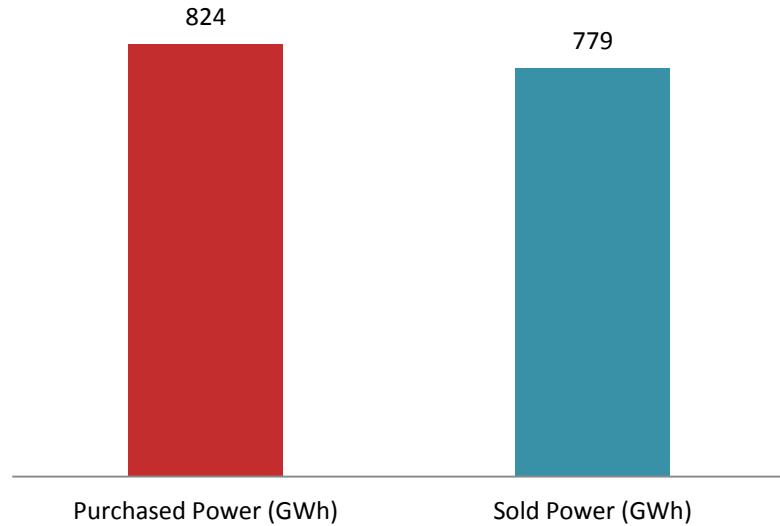


**Power station and transformers**  
 •app 1900

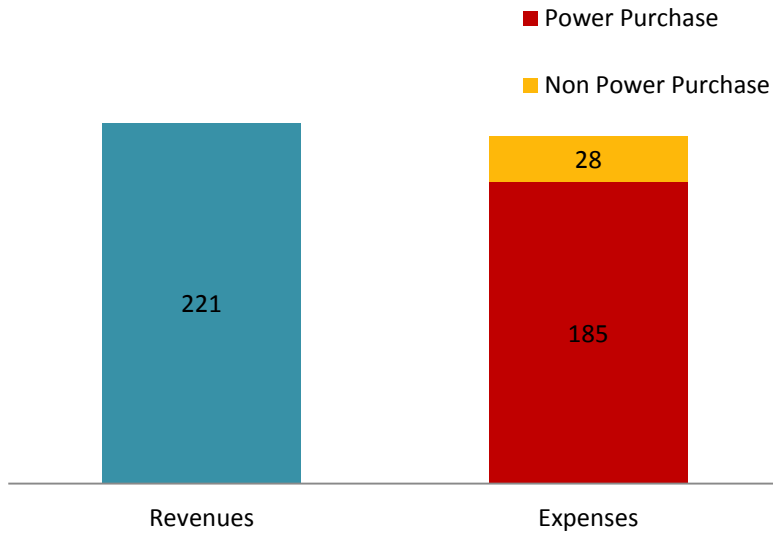


**Street lights**  
 •app 10,200

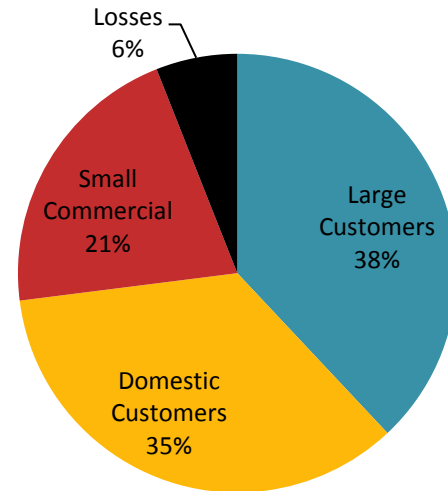
### 2013 Purchased and Sold Power (GWh)



### Total Revenues And Expenses (MM USD)



### Distribution Of Purchased Power



## Continuous improvement

In the last years ELMAR has been continuously improving its product and services to the client. While in the past focus has been mostly on cables, transformers and switch stations, the pending projects will be more visible to the people of Aruba

## Solar park at Reina Beatrix Airport



## Installation of smart LED street lights



## Installation of smart electricity meters





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