

Revolutionizing energy management for Curação

Presentation 'Sociaal Economische Raad Nederland'

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CONTENT

- Introduction to Aqualectra
- Current landscape
- Revolutionizing energy management
- Final remarks and questions





What we do

Aqualectra is the sole producer and distributer of water and electricity on the island of Curação.

100% Government owned and cognizant of the responsibility we carry, we are in constant search to increase our reliability, affordability and sustainability for the benefit of the people of Curação.



COMPANY PROFILE



PRODUCTION

983 GWh 14.5 million m³



PRODUCTION FACILITIES

- 4 Diesel plants
- 4 Wind parks
- 2 Water plants



EMPLOYEES

600 Employees Average age: 47

Average tenure: 15



CUSTOMERS

88.855 Electricity customers (36.963 prepaid) 1062 PV customers 96.338 customers



QUALITY AND CREDIT

ISO 9001

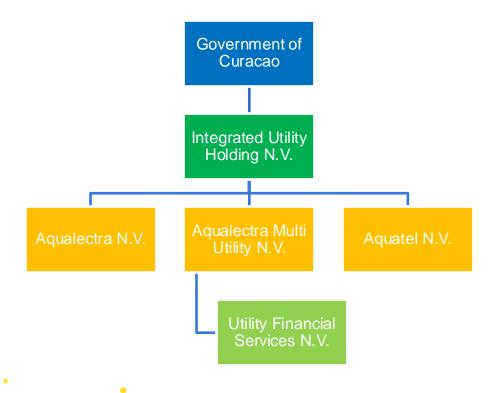
ISO 14001

ISO 17025

S&P rating: BBB- / stable outlook



Company Structure

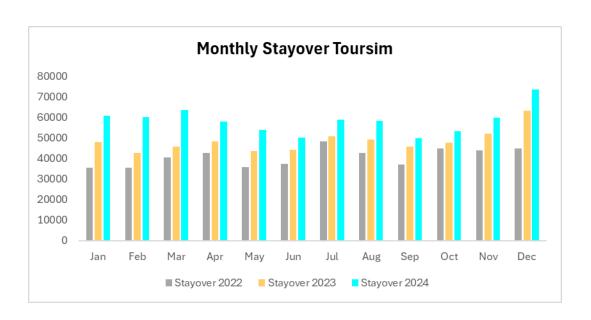


AQUALECTRA



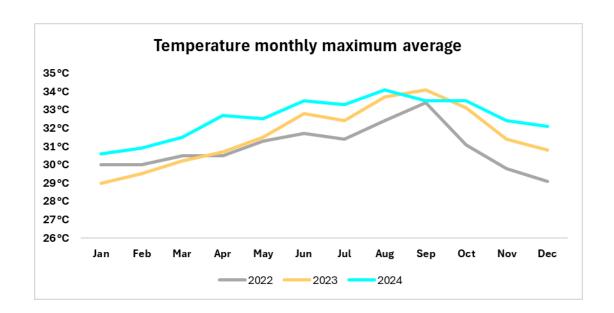


Economic changes



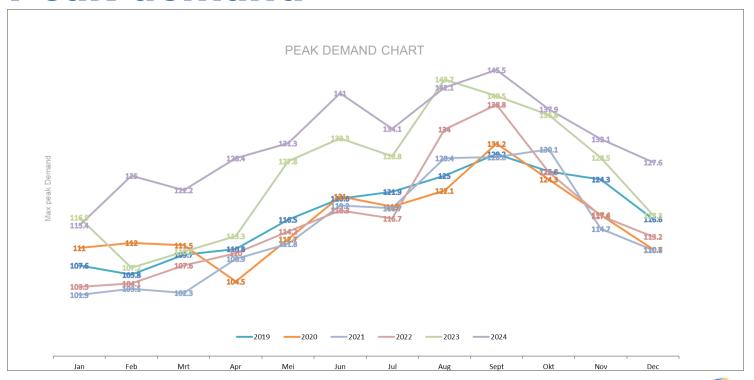


Climate changes





Peak demand





Peak demand

	Jan	Feb	Mrt	Apr	Mei	Jun	Jul	Aug	Sept	Okt	Nov	Dec
2013	107.8	108.6	110.3	114.8	118.2	119.1	115.6	129.4	126.1	124.2	113.2	117.5
2014	111.6	113.9	116.8	114.9	121.4	124.1	118.7	127.2	125.3	124	116.2	120.3
2015	111.8	116	110.3	116.4	116.7	118.8	115.2	124.9	130	132.1	121.9	124.9
2016	110.4	109.6	116.3	121.5	123.7	119.2	120.8	126.3	125.7	133.4	126.8	117.1
2017	109.8	109	111.9	118.5	121.5	119.4	118.1	122.8	132.2	129	124.9	119.4
2018	110	105.3	107.7	114.9	113.8	117.8	117.1	120.8	125.1	119.5	118.4	111.1
2019	107.6	105.8	109.7	110.8	116.5	120.6	121.9	125	129.2	125.8	124.3	116.6
2020	111	112	111.5	104.5	112.7	121	119	122.1	131.2	124.3	117.4	110.7
2021	101.9	103.1	102.3	108.9	111.8	119.2	118.7	128.4	128.6	130.1	114.7	110.6
2022	103.5	104.1	107.6	110	114.2	118.3	116.7	134	138.8	125.7	117.2	113.2
2023	116.9	107.2	110.3	113.3	127.8	132.3	128.8	143.7	140.5	136.8	128.5	117.3
2024	115.4	125	122.2	128.4	131.3	141	134.1	142.1	145.5	137.9	132.1	127.6



Recent technical challenges

- ▶ 10 blackouts in the past 5 years (2019 2023) due to grid protection system
- Insufficient capacity due to sudden demand growth and climatological changes
- Challenges with aging infrastructure
- Cyber attack in November 2023
- Non-Revenue





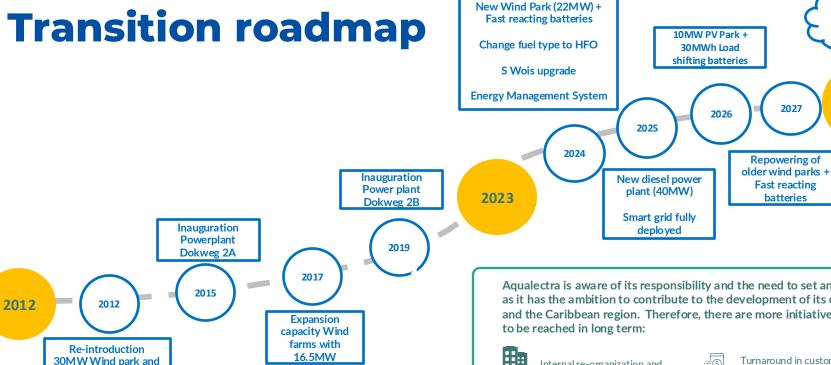


Our strategies

- Investing in renewable energy
- Modernizing our grid
- Empowering consumers
- Championing energy efficiency
- Fostering innovation and partnerships







discontinuation of

steam turbines

Agualectra is aware of its responsibility and the need to set an example as it has the ambition to contribute to the development of its community and the Caribbean region. Therefore, there are more initiatives pending



Internal re-organization and construction of new head quarters



Turnaround in customer service concepts

Future?

2030

2027

batteries



Smart LED streetlights



Advanced Metering Infrastructure and the introduction of a Telecom company



New Water plant and water grid expansion



Various grid adjustments to prepare for increased renewable energy penetration

2012

2023

2027

ELECTRICITY PRODUCTION:

Total demand: 715 GWh

Penetration green energy: 9%

Total imported fuel for electricity production:

244,911 MT

Total imported fuel for mobility: 167,540 MT

ELECTRICITY PRODUCTION:

Total demand: 722 GWh

Penetration Green energy: +/- 30%

Total imported fuel for electricity production:

177,172 MT

Total imported fuel for mobility:

149,296 MT

ELECTRICITY PRODUCTION:

Total demand: 796 GWh

Penetration Green energy: >70%

Total imported fuel for electricity production:

109,687 MT

Total imported fuel for mobility:

111,972 MT



In 15 years' time we will have...

increased our renewable penetration from 9% to 70%

lowered our fuel intake with 55%, despite a growth in sales of 11%

Structurally lowered our tariffs by 10-20%



Fundamentally contribute to the wellbeing of the citizens of Curacao

Through reliable, affordable and sustainable services

