



POWERING THE PIVOT

Curacao's energy transition in motion

Presentation to Dutch Caribbean Economists

Date: April 9, 2025

Place: Avila Beach Hotel – La Belle Alliance

Content



- Setting the stage: Where we stand today
- The road ahead: What the future holds
- The economic impact: Catalyzing transformation
- Leading the change: our commitment
- A vision worth building together

The background of the slide is a topographic map with light gray contour lines and small green and yellow dots scattered across the surface.

SETTING THE STAGE

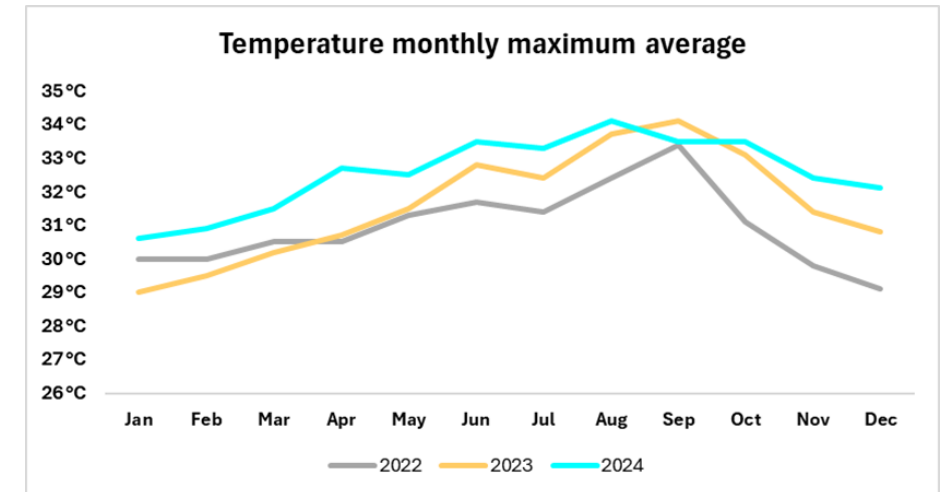
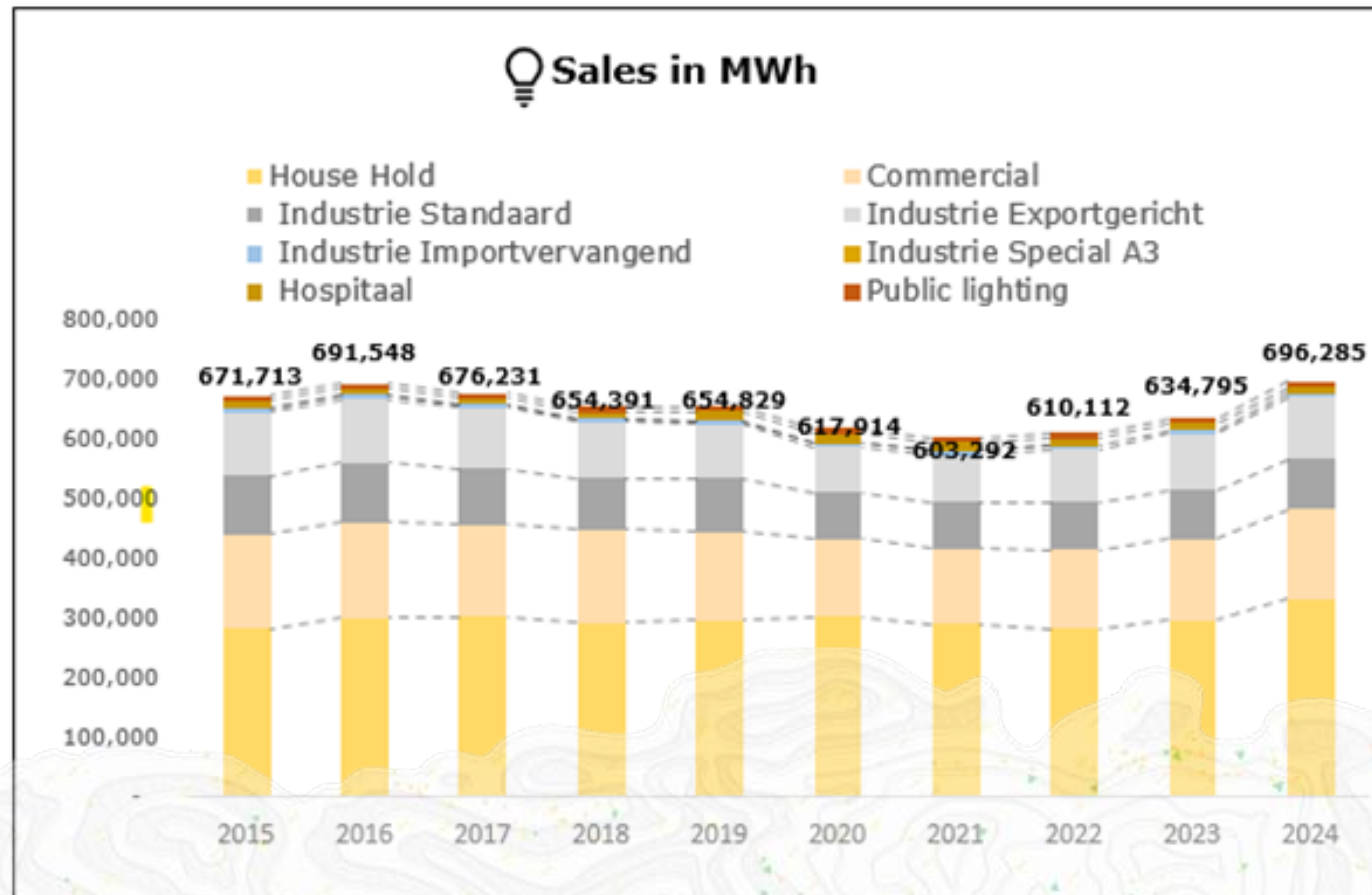
Where we stand today

Current energy mix | Pain points | Recent progress | Economic context

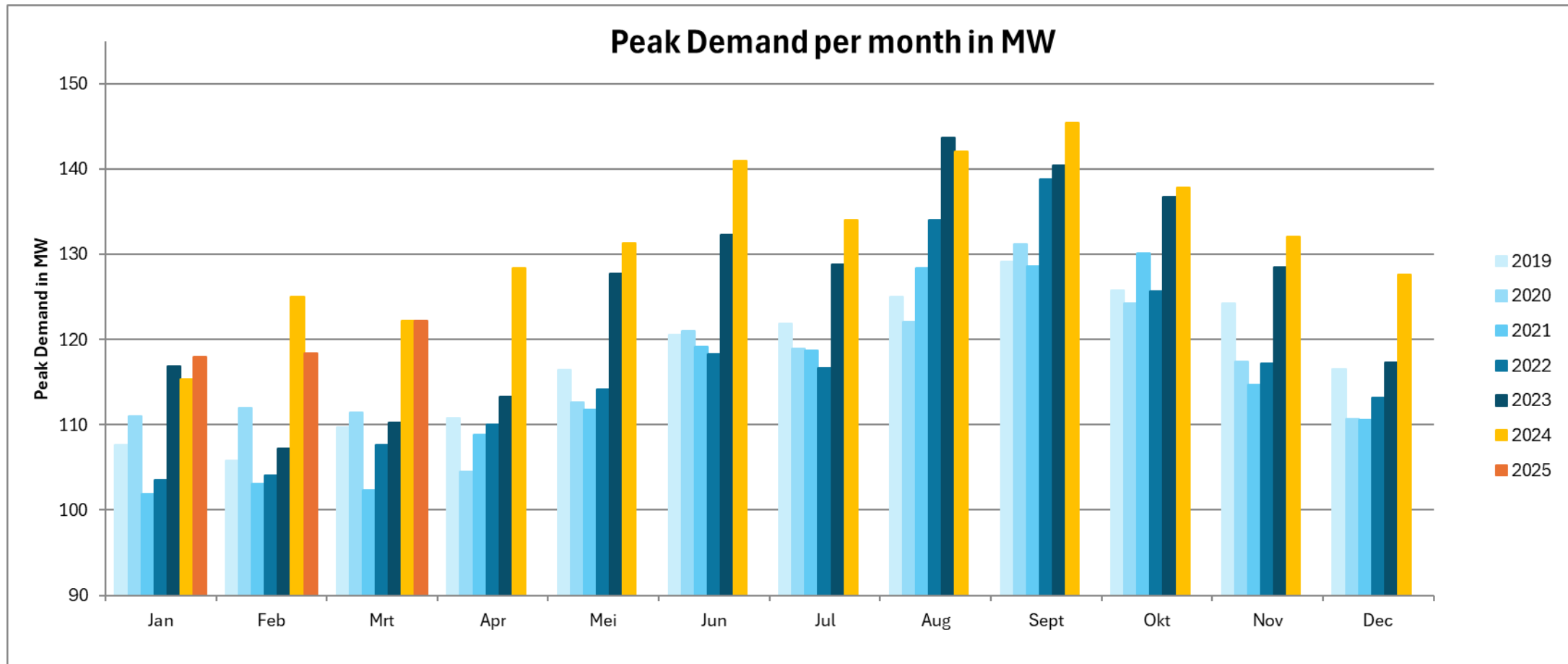
The background is a solid blue color with a repeating pattern of yellow and green geometric shapes, including lines, dots, and small triangles, creating a textured, circuit-like appearance.

**THE ENERGY FUTURE OF
CURAÇAO IS NO LONGER
ON THE HORIZON,
IT'S AT OUR DOORSTEP.**

Demand growth



Peak demand



A topographic map with contour lines and small green and yellow dots scattered across the landscape, serving as a background for the slide.

Pain points

- ▶ Cost of electricity
- ▶ Changing grid dynamics
- ▶ Aging infrastructure
- ▶ Lack of policy development

PIVOTING WITH PURPOSE

RELIABILITY

AFFORDABILITY

SUSTAINABILITY

Recent progress

- ▶ Focused on maintenance of plants to increase availability
- ▶ Changed fuel type to Marine Fuel Oil
- ▶ Increased wind capacity with 22MW to reach 50% renewable energy penetration
- ▶ Conducted capacity, grid stability, grid structure and grid protection studies to increase reliability
- ▶ Ongoing investment projects to increase production and grid capacity

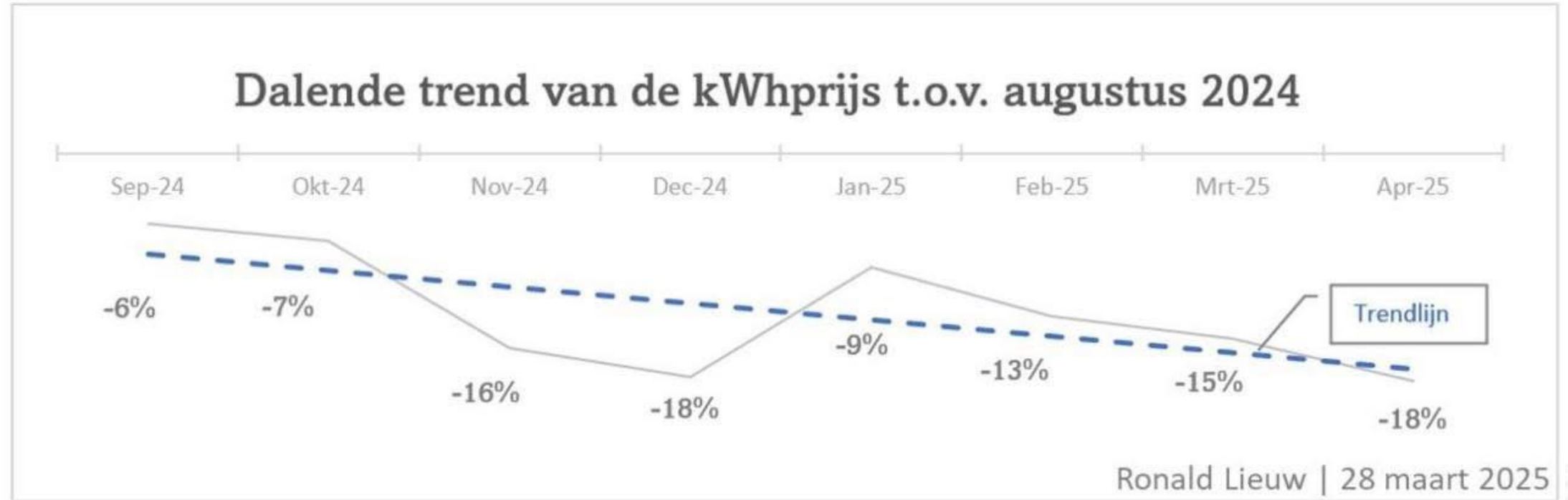
Tangible progress

	2024 (Projected/unaudited)	2023 (Audited)	% of change
Sales electricity (in MWh)	696,377	634,795	+9%
Sales water (in m3 x 1,000)	10,554	10,145	+4%
Average tariff Electricity (in ANG/kWh)	0.66	0.70	-6%
Average tariff Water (in ANG/m3)	11.38	11.70	-3%
EBITDA (in ANG x 1,000)	97,807	91,898	+6%
Accounts Receivable (net - in ANG x 1,000)	195,685	190,622	+3%
Days Sales Outstanding	88	105	-17%
CAPEX (in ANG x 1,000)	177,254	69,322	+156%
Non-Revenue Electricity (in %)	16.51%	19.45%	-15%
Non-Revenue Water (in %)	28.7%	29.2%	-2%
Number of employees	564	584	-3%

Tangible progress

	2024 (Projected/unaudited)	2023 (Audited)	% of change
Power Supply Chain			
Number of interruptions - Grid	12,054	11,250	+7%
Average duration of interruptions - Grid (in minutes)	28	32	-12.5%
Number of interruptions - Plants	25	35	-29%
Average duration of interruptions - Plants (in minutes)	59	111	-47%
Overall plant availability (in %)	88.60%	84.50%	+5%
Renewable Energy Penetration (annual average)	29%	28%	+4%
Fuel Usage (in Metric Tons)	155,379	146,401	+6%
Water Supply Chain			
Number of interruptions - Grid	5986	6063	+1%
Average duration of interruptions - Grid (in minutes)	1386	1052	+32%
Number of interruptions - Plants	6	17	-65%
Average duration of interruptions - Plants (in minutes)	470	1002	-53%
Overall plant availability (in %)	94.3%	90.5%	+4%
Commercial Affairs			
Number of customers handled	39,099	37,428	+4%
Number of phone calls answered	132,432	143,814	-8%
Number of disconnections	20,919	15,923	+31%
Number of reconnections	15,161	14,472	+5%
Total bills issued	1,123,465	1,090,375	+3%
Number of RPI inspections	4,855	4,442	+9%
Total fines imposed (in ANG)	5,787,500	1,053,000	+450%

Tariff developments



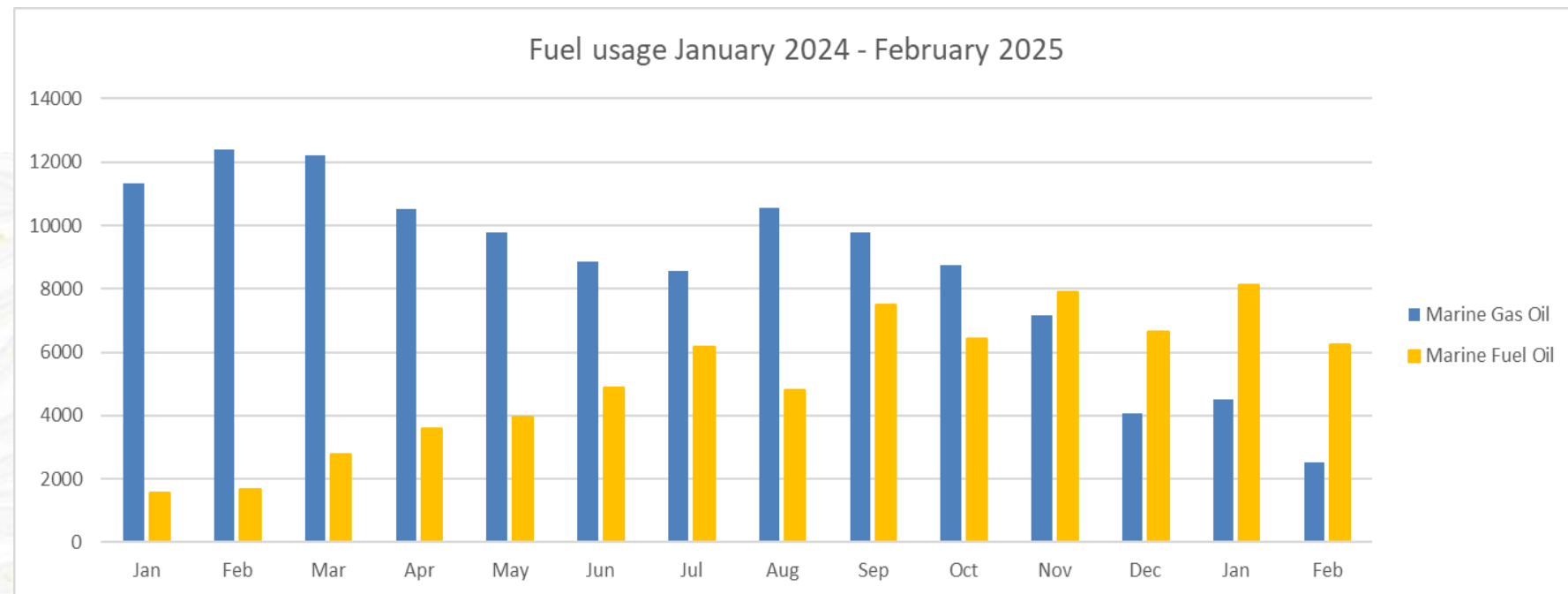
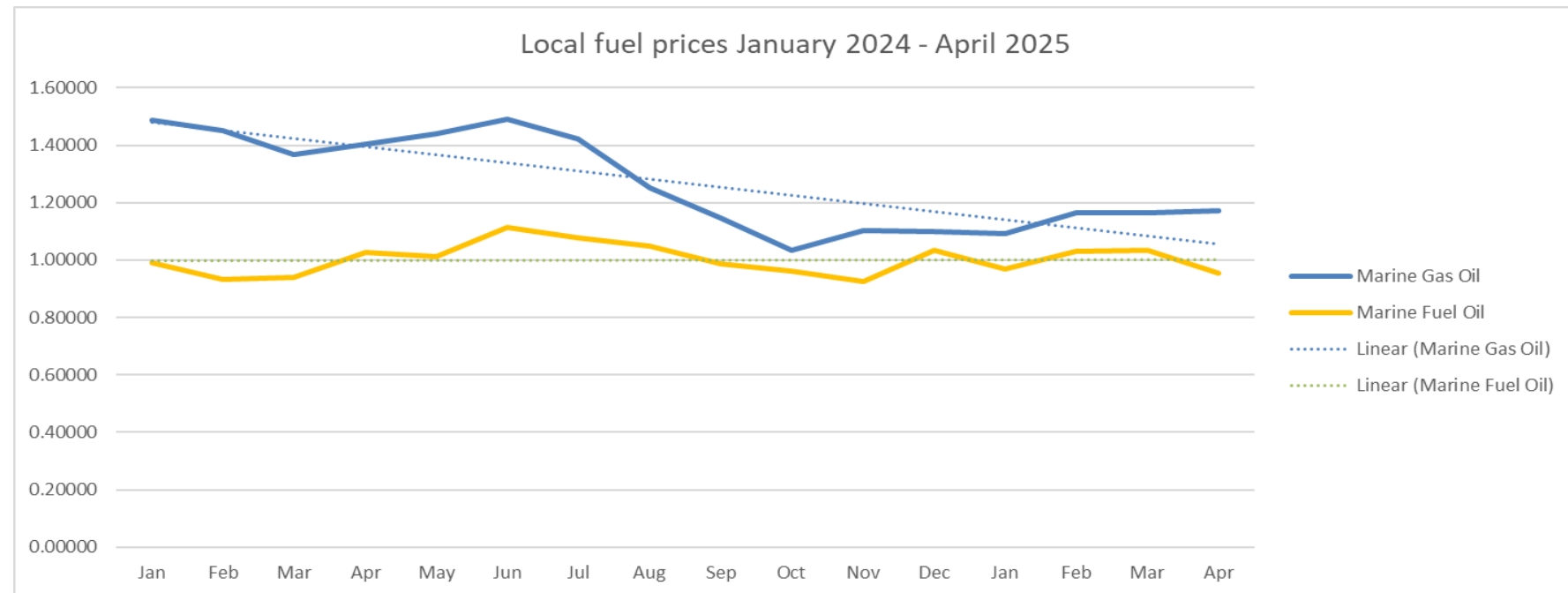
Reasons mentioned by the author:

- New windpark
- Lower fuel prices

What really happened:

- Higher availability of plants
- Change to MFO
- After January 2025: new windpark

Fuel prices



Economic context

Expenditure category	Category weight 2016	2024											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL	10000	-0.4	0.3	0.2	0.3	0.3	0.3	1.5	-0.2	0.0	-0.1	-0.6	-0.5
FOOD	1272	0.3	0.4	0.1	-0.1	0.1	0.8	1.8	0.0	-0.3	-0.2	0.0	-0.4
Cereal products	182	0.4	0.7	0.8	-0.1	0.7	1.3	3.6	0.0	-0.3	-0.1	-0.3	0.0
Meat and fish	247	0.0	0.1	-0.8	-1.2	-3.0	3.1	0.6	-0.6	-1.0	-0.5	0.1	-0.4
Fats and cooking oils	25	0.3	-0.2	-0.4	-0.4	0.2	0.2	1.1	0.1	0.0	-0.3	0.0	-0.5
Dairy products (except butter)	94	1.3	0.6	-0.3	-0.5	0.8	0.0	0.1	0.2	-0.3	0.6	-0.5	-0.7
Potatoes, vegetables and fruits	160	-0.5	1.2	0.7	0.0	0.7	-0.4	0.7	0.0	-0.5	-0.3	-0.2	-0.3
Sugar and chocolate	32	2.0	0.9	1.3	3.7	-3.7	0.6	1.8	0.2	1.1	-2.5	-2.1	1.0
Prepared food	60	1.0	-0.1	0.7	-0.1	0.7	0.0	2.2	1.2	0.0	-0.1	-0.2	0.4
Outdoor consumption	393	0.1	0.0	0.0	0.2	1.4	0.2	2.5	0.0	0.1	0.0	0.6	-0.7
Food n.e.s.	79	0.1	1.6	0.4	0.2	0.2	0.5	1.2	0.1	-1.2	-0.4	-0.3	0.3
BEVERAGES AND TOBACCO	140	0.6	0.5	0.3	-0.4	0.8	0.3	0.3	0.2	0.3	-0.2	-0.1	0.0
Beverages	128	0.6	0.5	0.3	-0.5	0.8	0.3	0.3	0.2	0.4	-0.2	0.0	-0.1
Tobacco	12	0.4	0.0	0.5	0.0	0.6	0.2	0.0	0.0	-1.2	-0.2	-0.9	1.3
CLOTHING AND FOOTWEAR	317	1.3	0.5	0.6	-2.0	-0.5	-0.1	0.7	0.1	-0.3	-0.1	-0.1	0.3
Clothing	267	1.2	0.6	0.7	-2.1	-0.3	-0.1	1.0	0.2	-0.3	-0.1	-0.2	0.4
Footwear	50	2.0	0.0	0.0	-1.5	-1.7	0.0	-0.6	0.0	0.0	0.0	0.9	0.0
HOUSING	2488	-1.5	0.1	-0.1	-0.4	-0.6	1.6	1.3	-0.5	-1.1	0.2	-1.5	-0.5
Dwelling costs	1459	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Energy expenses	474	-5.7	-2.5	0.9	-2.3	-3.7	8.1	1.4	-2.2	-5.1	-1.2	-7.0	-1.9
Maintenance of dwelling	208	-0.6	0.0	0.0	2.5	0.0	0.0	5.4	-0.1	-0.2	0.0	0.0	0.0
Garden maintenance	73	-0.3	0.0	0.0	-6.1	0.3	0.0	4.8	-1.0	-2.0	-0.4	-0.2	-0.9
Water	274	-4.0	4.6	-3.6	-1.4	-0.1	0.9	3.3	-2.0	-2.2	2.9	-4.2	-2.6
HOUSEHOLD FURNISHING AND APPLIANCES	1072	-0.3	0.9	-0.2	1.9	1.5	0.3	3.6	0.0	-0.1	0.0	-1.3	-0.8
Furniture and illumination	194	-0.6	0.0	0.0	11.0	2.3	-0.4	2.6	-0.2	-1.5	0.0	0.2	-1.0
Upholstery and dwelling textile	116	-1.2	-0.2	-2.8	-0.7	7.5	0.0	18.2	0.0	0.0	0.0	-8.3	-0.3
Household appliances and tools	148	-1.3	-1.0	0.3	-0.5	0.9	3.0	-0.3	0.2	1.6	0.1	-1.8	-0.4
Household articles	92	0.2	0.3	0.7	0.2	0.9	-0.2	0.7	-0.2	-0.1	0.2	-0.5	-5.3
Household expenses n.e.s.	122	-0.3	0.2	-0.2	1.1	1.2	-0.3	1.6	0.1	-0.1	-0.3	-0.8	-0.4
Domestic services	188	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household furnishing n.e.s.	212	-0.4	-0.2	0.1	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0
MEDICAL CARE	180	-0.4	0.2	0.3	0.3	0.0	0.1	0.9	0.0	-0.3	-0.3	-0.5	-0.3
Medical care	180	-0.4	0.2	0.3	0.3	0.0	0.1	0.9	0.0	-0.3	-0.3	-0.5	-0.3
TRANSPORTATION AND COMMUNICATION	1988	-1.0	0.6	1.0	1.3	0.8	-0.9	1.2	0.0	1.3	-0.5	0.1	-1.5
Transport vehicles in ownership ¹⁾	417	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Expenses for own transport vehicles ¹⁾	533	-1.9	2.3	2.2	4.5	-0.5	-2.0	4.5	-0.1	0.3	-1.7	0.5	-0.4
Transport services	369	-0.5	0.0	0.1	-0.1	0.0	-2.3	0.0	0.0	8.1	0.0	0.0	-14.7
Communication	669	-0.4	0.0	1.1	0.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RECREATION AND EDUCATION	1250	0.3	-0.1	0.0	-0.2	-0.1	0.0	1.7	-0.1	0.6	-0.2	-0.3	-0.1
Recreation	841	0.4	-0.1	0.0	-0.5	-0.9	0.0	0.6	0.0	0.8	-0.2	-0.2	0.0
Entertainment and culture	145	0.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Books etc.	134	0.7	0.0	0.0	0.8	0.7	0.0	5.7	-0.7	-1.4	0.0	-1.0	0.0
Education	100	0.0	0.0	-0.3	-0.6	2.9	-0.1	6.5	0.1	3.3	-0.3	-0.9	-0.3
Hobby articles	30	-1.1	0.0	0.8	3.1	1.3	0.0	5.4	-0.8	-2.7	0.0	0.8	0.0
MISCELLANEOUS	1293	1.1	0.2	0.2	0.0	1.1	-0.3	0.1	0.0	-0.1	0.0	-0.1	0.3
Personal body care	361	3.0	0.4	0.5	-0.4	4.2	-1.0	0.1	0.1	-0.5	0.1	-0.4	-0.4
Insurances	478	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Commodities and services n.e.s.	454	0.7	0.2	0.2	0.5	-0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0

¹⁾ Not for business use

²⁾ Estimated values

2/27/2025

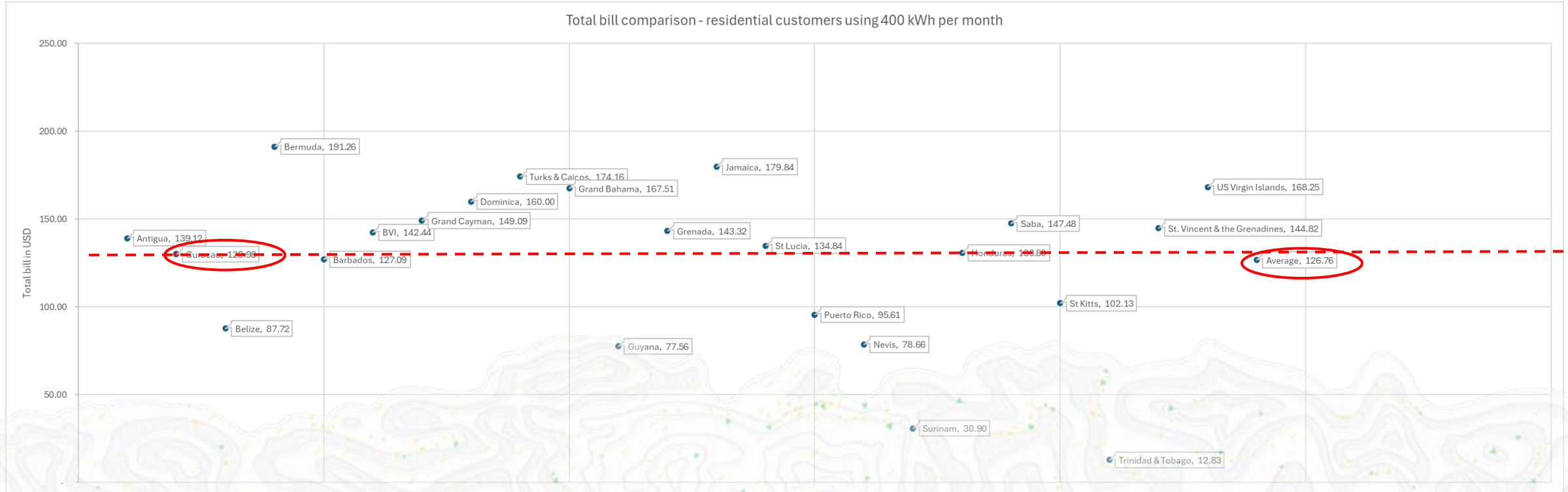
Economic context

- ▶ Total fuel expenses was ANG 20 million lower in 2024 compared to 2023, despite the 9% sales growth;
- ▶ Preliminary results of an economic impact study show that Aqualectra contributed to:
 - ▶ the GDP growth with approx. 2% of the growth;
 - ▶ Lowering the inflation rate with 0.13 points;
 - ▶ ANG 35 million in additional tax revenue
- ▶ More than 350 jobs were created during 2025 as a result of Aqualectra's investments

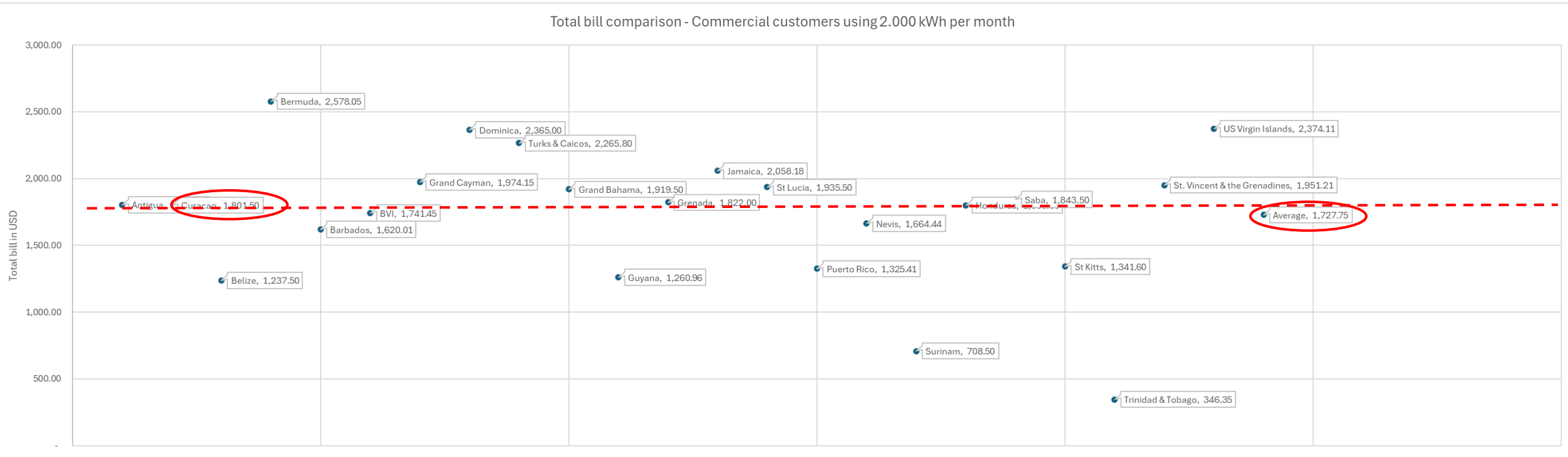
Comparison with the region

- ▶ Our infrastructure is more complicated than other islands;
- ▶ Number of inhabitants per square kilometers an important input;
- ▶ Past urban planning choices crucial;
- ▶ Geographical conditions
- ▶ Correlation total energy use and peak load

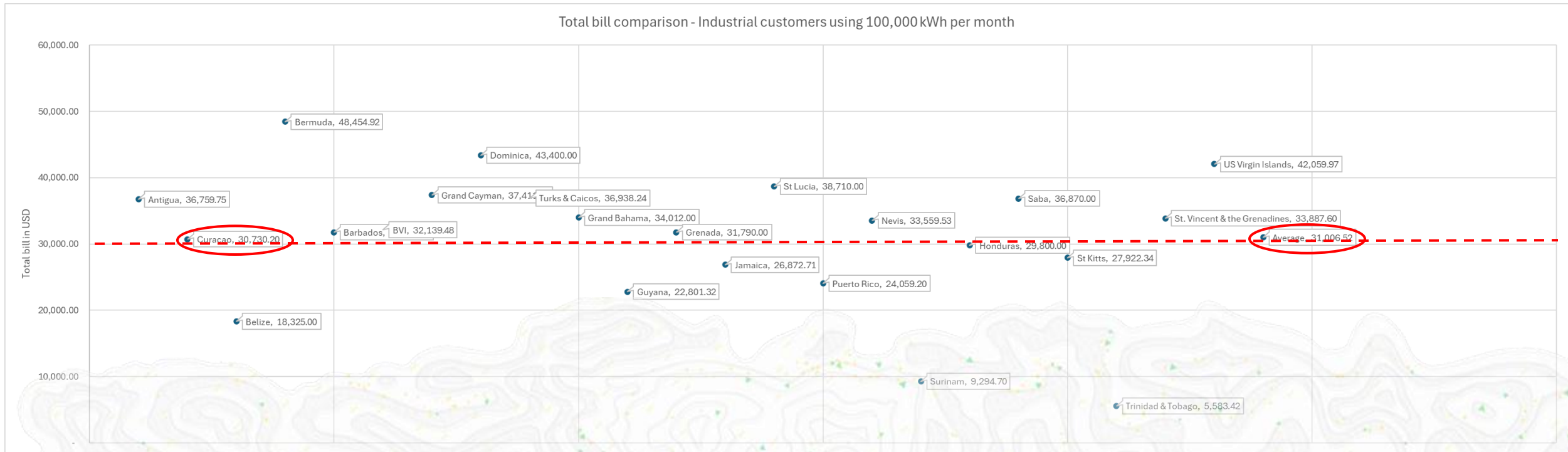
Comparison with the region



Comparison with the region



Comparison with the region



Comparison with the Netherlands

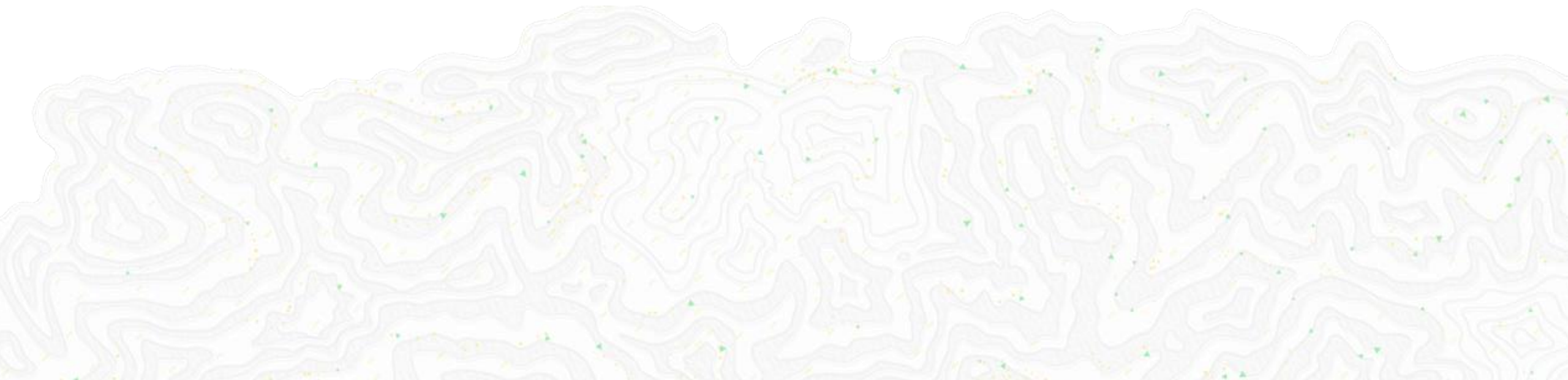
Average tariff per kWh in 2024

CUR: ANG 0.66

NL: EUR 0.30 (ANG 0.57)



+16%



Comparison with the Netherlands

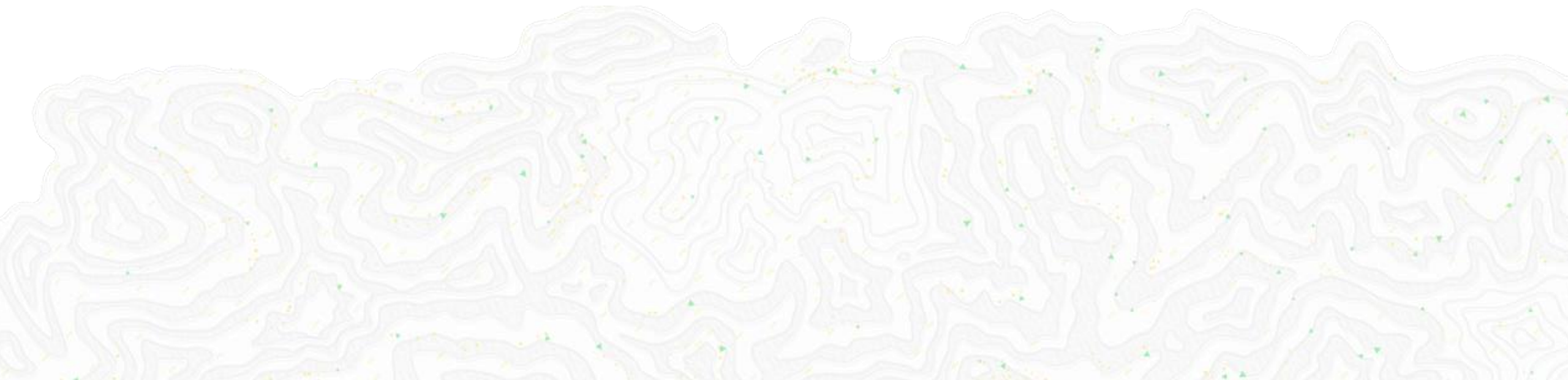
Average tariff per kWh April 2025

CUR: ANG 0.56

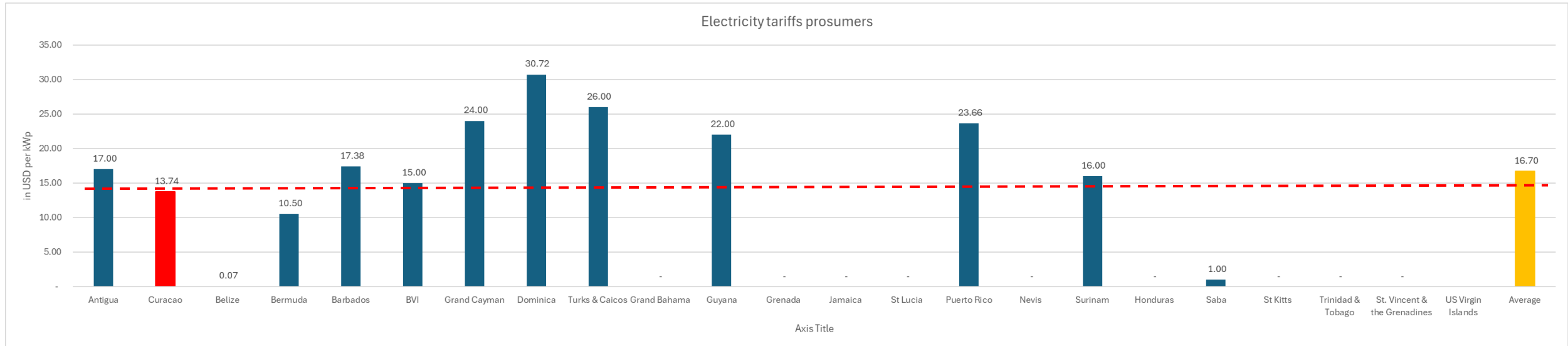
NL: EUR 0.32 (ANG 0.60)



-7%



Comparison with the region



The background of the slide is a light gray topographic map with white contour lines. Scattered across the map are numerous small, colorful dots in shades of green, yellow, and orange, representing various geographical features or data points.

THE ROAD AHEAD

What the future holds

2030 Vision | Key milestones | Innovation and people | Partnerships | Enablers

STARTING WITH OUR WHY

RELIABLE | AFFORDABLE | SUSTAINABLE

OUR PURPOSE

To fundamentally contribute to the wellbeing of the citizens of Curacao

OUR VISION

To lead Curacao into the future by transforming its utilities

CORE
BUSINESS

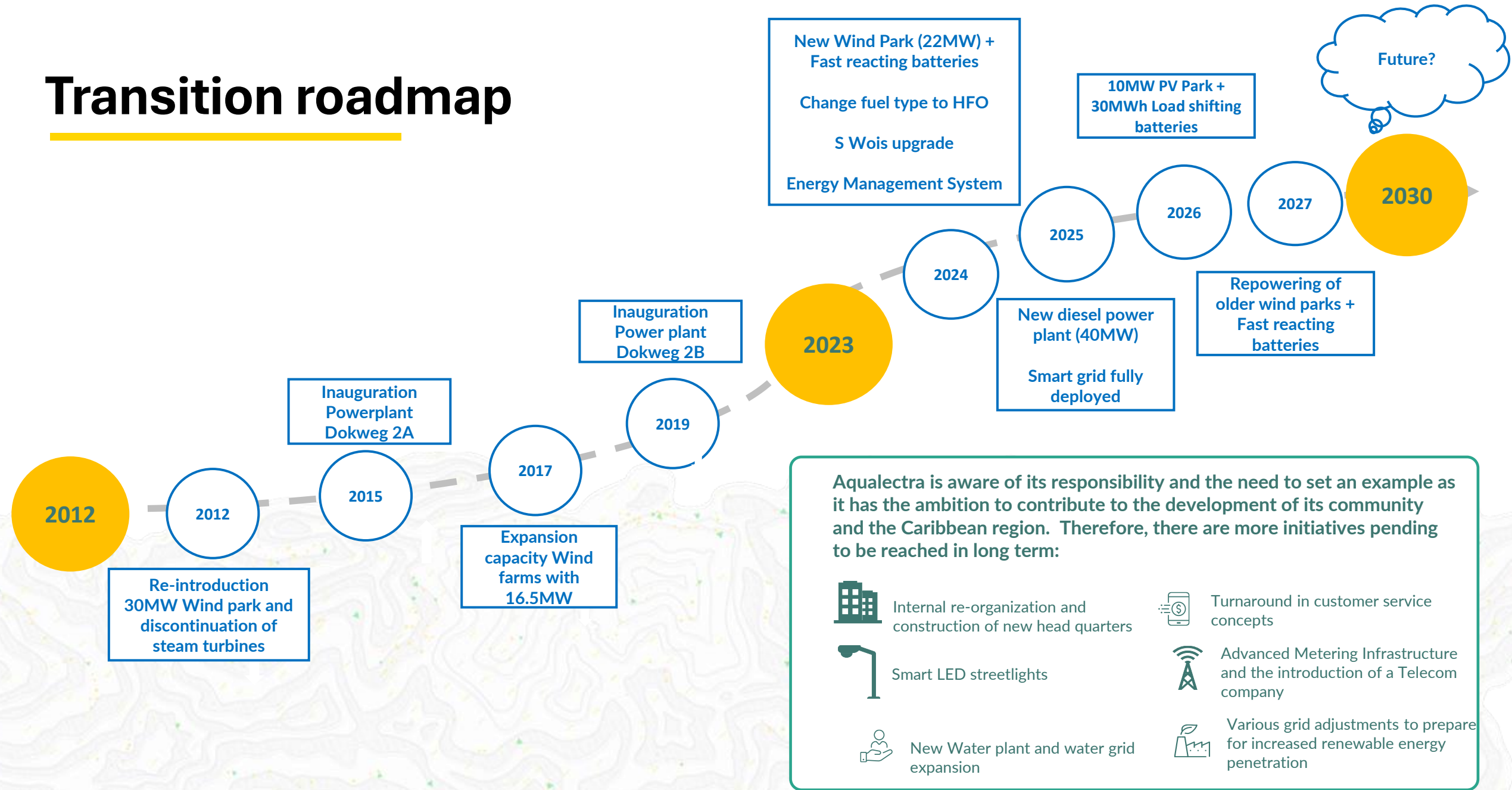
CUSTOMER
CENTRICITY

PEOPLE
LEADERSHIP

INNOVATION

CORPORATE
SOCIAL
RESPONSIBILITY

Transition roadmap





2012

ELECTRICITY PRODUCTION:

Total production: 715 GWh

Penetration green energy: 9%

Total imported fuel for electricity production:
244,911 MT

Total imported fuel for mobility:
167,540 MT

2024

ELECTRICITY PRODUCTION:

Total production: 823 GWh

Penetration Green energy: +/- 30%

Total imported fuel for electricity production:
177,172 MT

Total imported fuel for mobility:
149,296 MT

2030

ELECTRICITY PRODUCTION:

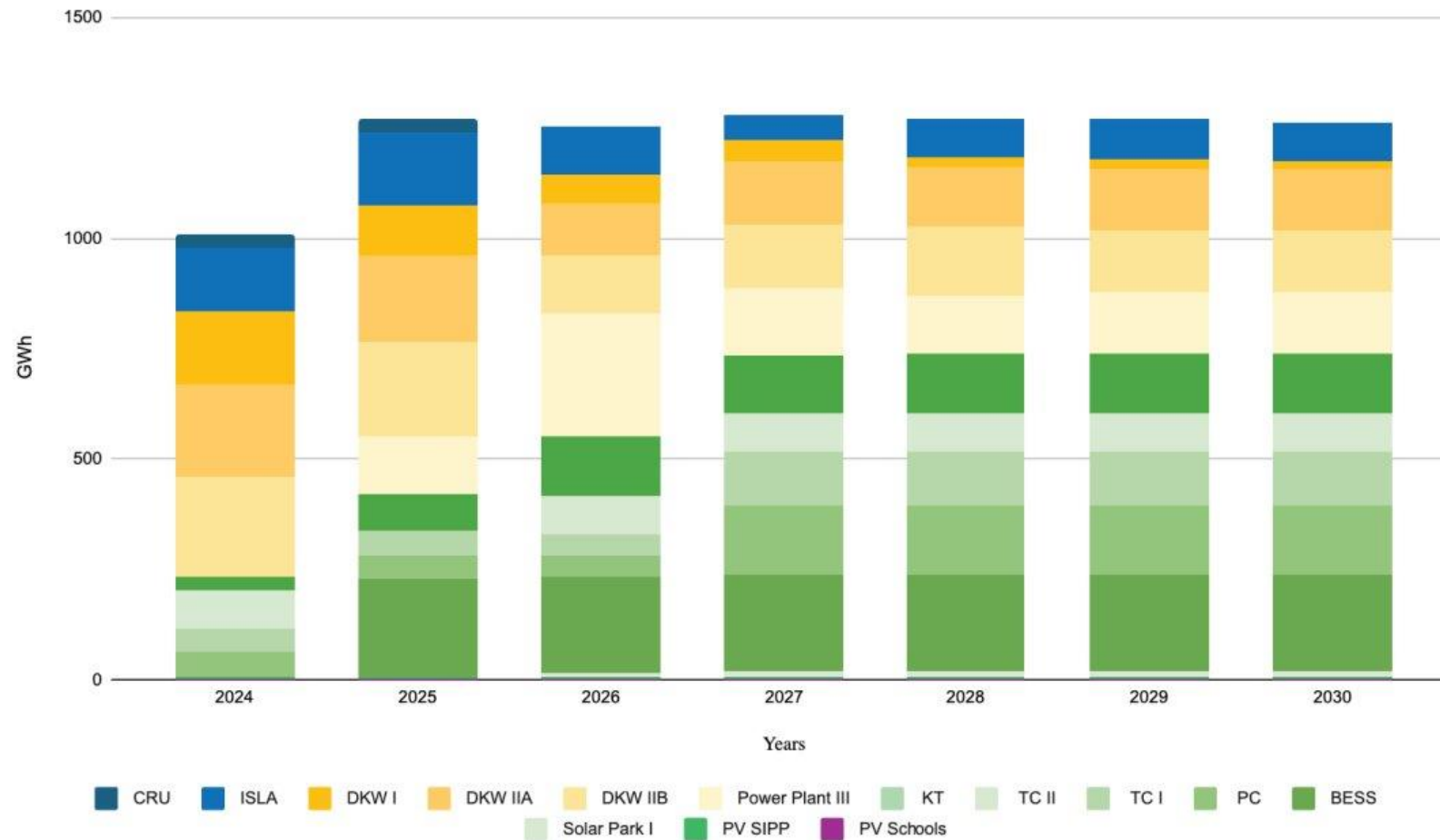
Total production: 974 GWh

Penetration Green energy: >70%

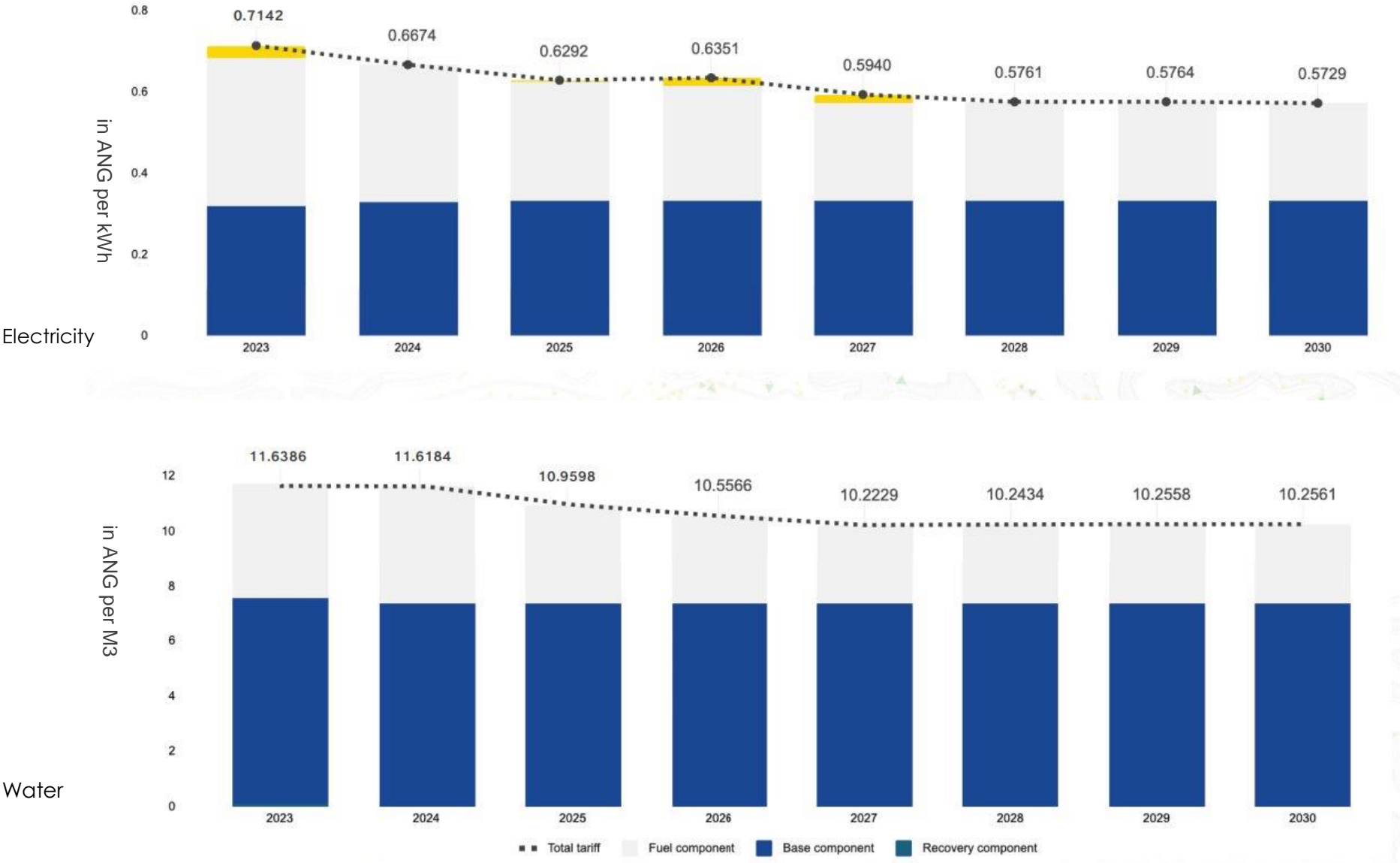
Total imported fuel for electricity production:
109,687 MT

Total imported fuel for mobility:
111,972 MT

PRODUCTION MIX



TARIFFS



In only 15 years' time (2012 – 2027), Aqualectra will have

**Increased our renewable energy penetration
from 9% to 70%**

**Lower our full consumption by 55%,
despite significant increases in sales**

Lower tariffs with more than 20%

Challenges ahead

- ▶ Workforce transformation
- ▶ Digital transformation and cyber risks
- ▶ Electrification and the lack of policies
- ▶ Economic developments and the lack of policies
- ▶ Energy poverty

A topographic map with contour lines and small green and yellow dots scattered across the landscape, serving as a background for the slide.

All hands on deck

- ▶ Regional collaboration
- ▶ Private sector involvement
- ▶ Regulator
- ▶ Community engagement

The background of the slide is a light gray topographic map with white contour lines and small green and yellow dots representing geographical features. The title text is centered on the map.

THE ECONOMIC IMPACT

Catalyzing transformation

Investment needs and job creation | Tariffs | resiliency and self sufficiency | New sectors and skills

The ripple effect and big picture value

- ▶ **Investment needs:** Over XCG 600 million
- ▶ **Job creation:** More than 150 per year
- ▶ **Lower energy costs:** negative inflatory effect year-on-year
- ▶ **Balance of payment and foreign exchange reserves:**
More than XCG 100 million less imports
- ▶ **Resiliency and self-sufficiency**
- ▶ **New sectors and skills**



LEADING THE CHANGE

Our commitment

Energy as catalyst | Pivoting | What we need from you



We are not just adapting, but actively leading.

Bold decisions were taken during the recent past years and bolder ones will be taken during the years to come.

We need YOU to keep us sharp, to help shape policies and become partners to accelerate the transition.

The background of the image is a topographic map with light gray contour lines and small green and yellow dots scattered across the surface. The text is centered horizontally and vertically.

**A VISION WORTH BUILDING
TOGETHER**
