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THE WATER SITUATION IN CYPRUS

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The Touristic Sector in Cyprus

- **Tourism: major pillar of Cyprus' economy**
- **Contribution to GDP: higher than 22% (2017)**
- **Supports other sectors: agriculture, food industry, etc**
- **Number of arrivals in 2018: record figure of 4 million**

Major Challenges of the Sector

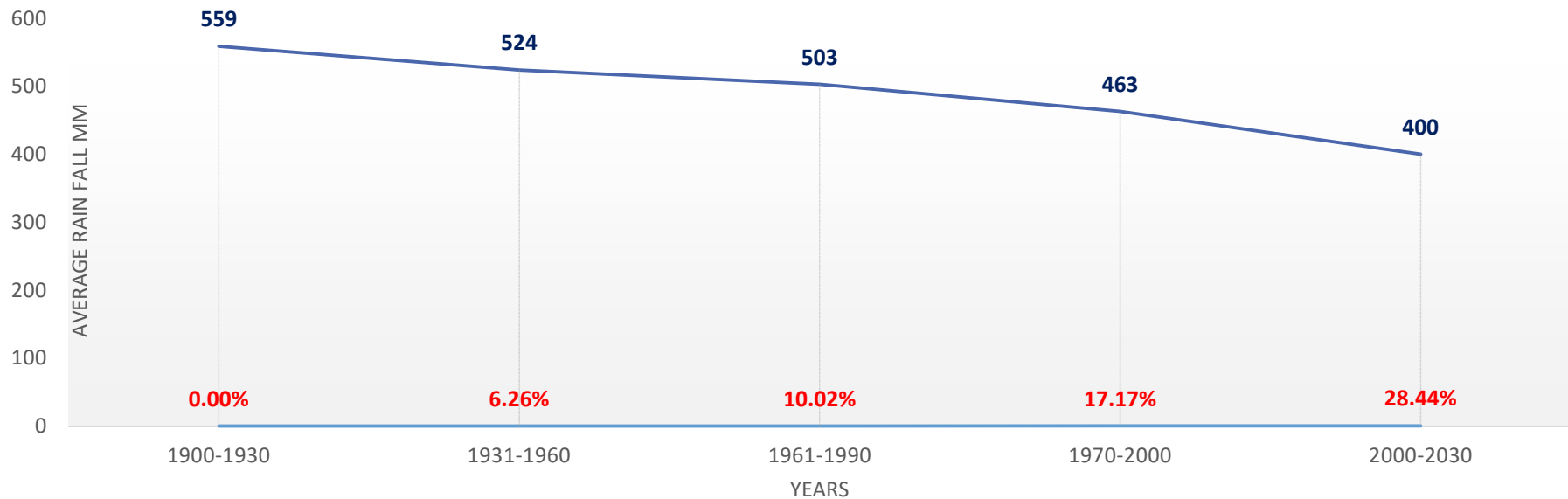
- **Seasonality**
- **Employability**
- **High Energy Cost**
- **Scarcity of Water and**
- **High Water Cost**

Water situation over the past 30 year

- **Cyprus is suffering from water scarcity**
- **Rainfall gradually has been decreased by 100 mm (20%-1900)**
- **Projection for further decrease of rainfall until 2030**
- **Long periods of droughts (2004, 05, 08, 11, 13, 15, 16, 17, 18)**

Water situation over the past 30 year

Rainfall in Cyprus 20th - 21st century



Water situation over the past 30 year

- **Cyprus is facing an acute water crisis**
- **Aggravated by several periodic years of drought (9 of last 14 years)**
- **An increased need for water for domestic use and touristic purposes**
- **Touristic arrivals increased by 66% compared to 2013, approaching the record figure of 4 million.**

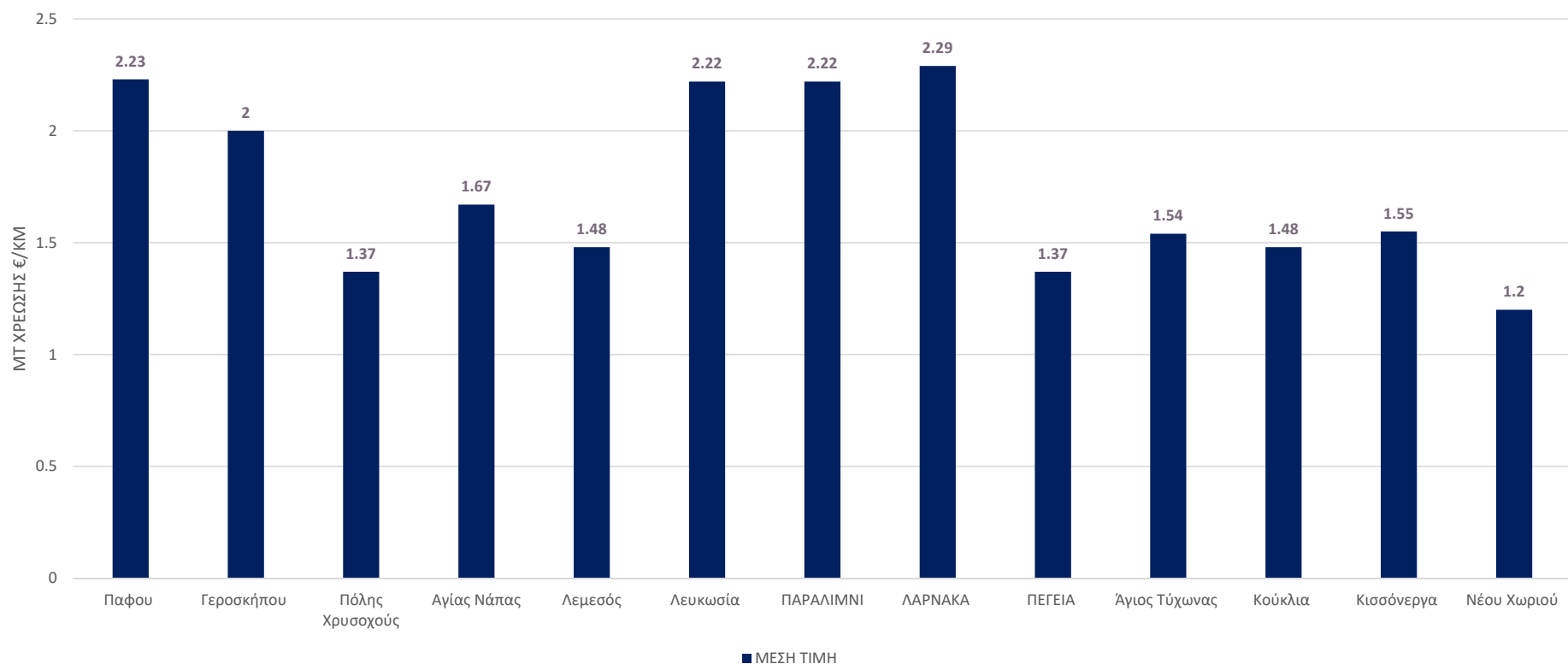
Water Costs – Local Authorities

- **Operator of the Water Market is WDD**
 - 18 Reservoirs & 4 Desalination Plants
 - Cost from desalination - 0.90 €/M³
- **Provides water to Water Boards and Local Authorities**
 - Paphos – 0.64 €/M³
 - Pissouri – 0.65 €/M³
 - Rest – 0.82 €/M³ (Nicosia, Limassol, Larnaca, Famagusta)
- **Prices include 0.05 €/M³ environmental fee**

Pricing of 13 Water Boards at 20 Hotel Units

WATER BOARD	MINIMUM CHARGE €/M ³	INTERMEDIATE CHARGE €/M ³	MAXIMUM CHARGE €/M ³	AVERAGE CHARGE €/M ³	FIXED CHARGE €	FREE QUANTITIES M ³
PAPHOS	1.47	1.95	2.27	2.23	600	0
GEROSKIPOU	1.4	1.94	2.2	2	600	0
POLIS	0.94	1.13	1.32	1.37	25.63	50
AYIA NAPA	1.22	1.44	1.68	1.67	60.67	0
LIMASSOL	1.15	1.48	1.45	1.48	130	0
NICOSIA	1.55	2.05	2.55	2.22	700	0
PARALIMNI	1.45	1.96	2.3	2.22	650	500
LARNACA	1.68	2.27	2.53	2.29	420	0
PEGEIA	1.47	1.95	2.27	1.37	600	0
AYIOS TYCHONAS	1.11	1.35	1.35	1.54	250	0
KOUKLIA	1.2	1.3	1.5	1.48	250	0
KISSONERGA	0.68	1.28	2	1.55	170	0
NEO CHORIO	0.83	1.03	1.2	1.2	25.63	80

AVERAGE PRICING PER M³ OF 13 WATER BOARDS/LOCAL AUTHORITIES





AVERAGE COST PER M³ FOR 20 HOTELS



Water Boards Pricing Findings

- **PRICING OF 13 WATER BOARDS AT 20 HOTEL UNITS:**
 - **Fixed charges with no free quantities (most water boards)**
 - **Fixed charges with free quantities (50 – 80 – 500 M³)**
 - **Huge Variation in fixed charges (26 € - 700 €) (Avg. Price 345 €)**

Water Boards Pricing Findings

- **Major Deviation on charges:**
 - **Low Charge 0.68 – 1.68 €/M³**
 - **Intermediate charge 1.03 – 2.27 €/M³**
 - **High Charge 1.20 – 2.55 €/M³**
- **Major Deviation in Average Charges Geographically 1.20 – 2.30 €/M³**
- **All charges converge to the High Pricing**

Conclusions

- **Besides water scarcity threat, hotels face a pricing system that is:**
- **Unregulated/ Uncontrollable**
- **Non Uniform**
- **Unfair**
- **High water charges – (in combination with high energy cost)**
- **Renders touristic product expensive and non competitive**
- **At the expense of the hotel owner**

POSSIBLE SOLUTION – Individual Private Desalination Plants

- **Current regulations allow private plants of capacity < 1500 M³/day**
- **Not viable for hotels under 600 beds**
- **Non feasible for hotels located at a distance from the coast**
- **The seasonality of the consumption (24h /365d operation to be viable)**
- **Joined plants are not feasible due to the absence of private networks**
- **Only a small number of hotels can deploy/benefit form private plants**

OBLIGATION of Cyprus Hotel Association

- **To face the challenges**
 - **Water scarcity, increased demand, high water cost**
- **To secure**
 - **Adequate quantities**
 - **At good prices**
 - **Creating fair competition among the hotel owners**
- **To protect**
 - **the business of its members and**
 - **the touristic product from the high costs**



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OPTIMUM SOLUTION:

- **A Common Private Desalination Plant For Hotel Owners**
- **Capacity 10,000 – 20,000 M³/Day**
- **Water Production 3,500,000 – 7,000,000 M³/Year**
- **Achieve Low Cost of Water Production**
- **Secure Lower Pricing for Hotels - target ≈ 1 €/M³**

WHY A PRIVATE DESALINATION PLANT

- 1. Economy of Scale – Better prices of produced water**
- 2. Can service all hotels in Cyprus – coastal and in land**
- 3. Environmental Reasons - Avoid multiple infrastructures**
- 4. Beneficial for the State**
 - **Not subsidize the price (cost 0.90€/M³ - Sale 0.39-0.82€/M³)**
 - **Keep sufficient security quantities in reservoirs**
 - **Provide more quantities for agricultural purposes**
- 5. Will not burden the Hotel Owners**
- 6. Water quantities will be dedicated to hotel owners**



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State of Play

1. Preliminary decision by the Association
2. Concluded discussions with Government and MOA
3. Secured Positive opinion from the above
4. Expecting policy approval from the Council of Ministers
5. Entering into Negotiation with WDD on operational details

TARGET – HOTEL OWNERS PLANT BY SUMMER 2020

THANKS FOR THE ATTENTION



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