

# Water quality standards and Regulation in Saudi Arabia

Presented By

Hatem ALMotairi

Director of Water quality Standards  
Department. (PME)

# Regulating Agency In Saudi Arabia

Presidency of Meteorology and Environment ■  
(PME). ■

Ministry of Water and Electricity. ■

Saudi Arabian Standards and Metrology (SASO). ■

Royal Commission for Jubail and Yanbu (RCJY). ■

Saudi Aramco. ■

# PME Water quality standards

Pretreatment guidelines for Discharge to central ■  
treatment facility.

Receiving water guidelines. ■

Performance Standards for Direct Discharge. ■

( these standards and guidelines is within ■

General Environmental Law and its  
implementation procedure)

# Ministry of Water and Electricity

Sewage treated waste water and its reuse regulation and ■  
its implementation procedure.

Include ■

Reuse for Agriculture Purposes ■

Reuse for industrial purposes ■

Reuse for Aquefer Injection ■

Reuse for Municiple use ■

Reuse for Recreation purposes ■

Reuse for Fish aquaculture. ■

# SASO Water quality standards

Standards for Bottled Drinking water.

Nonbottled Drinking water.

( This include standards for Physical ,Biological and Microbial Characteristics )

# RCJY Water quality regulation

Ambient Water quality Standards for Receiving Waters in Coastal Area. ■

Effluent Standards for Direct Discharge. ■

Standards for Pretreatment Discharge of Pollutants from Regulated Industrial waste water Source.

Standards for Discharge to irrigation System. ■

# RCJY Water quality regulation

Ballast Water Discharge standards ■

Potable Water Quality Standards ■

# The Most Important Regulation

General Environmental Law and its implementation procedure( Presidency of Meteorology and Environment)

Municipal Waste water and its reuse regulation ( Ministry of water and electricity)



# Water source in industrial cities

Ground Water.

Desalination through water network in industrial cities.

# No. of industrial cities in the kingdom

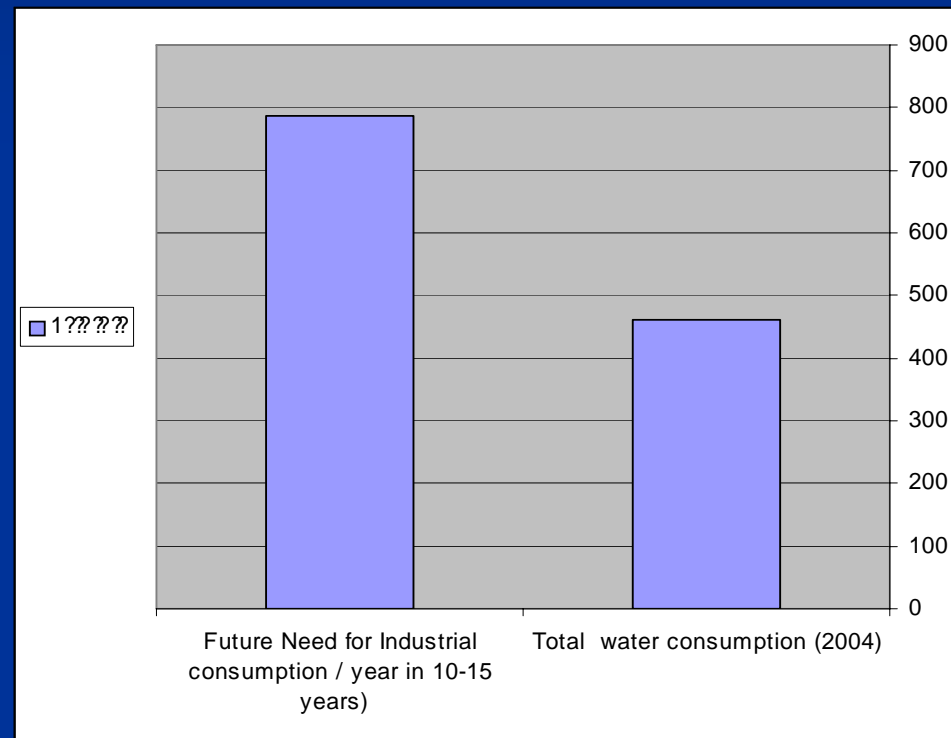
14 industrial cities

9 developed

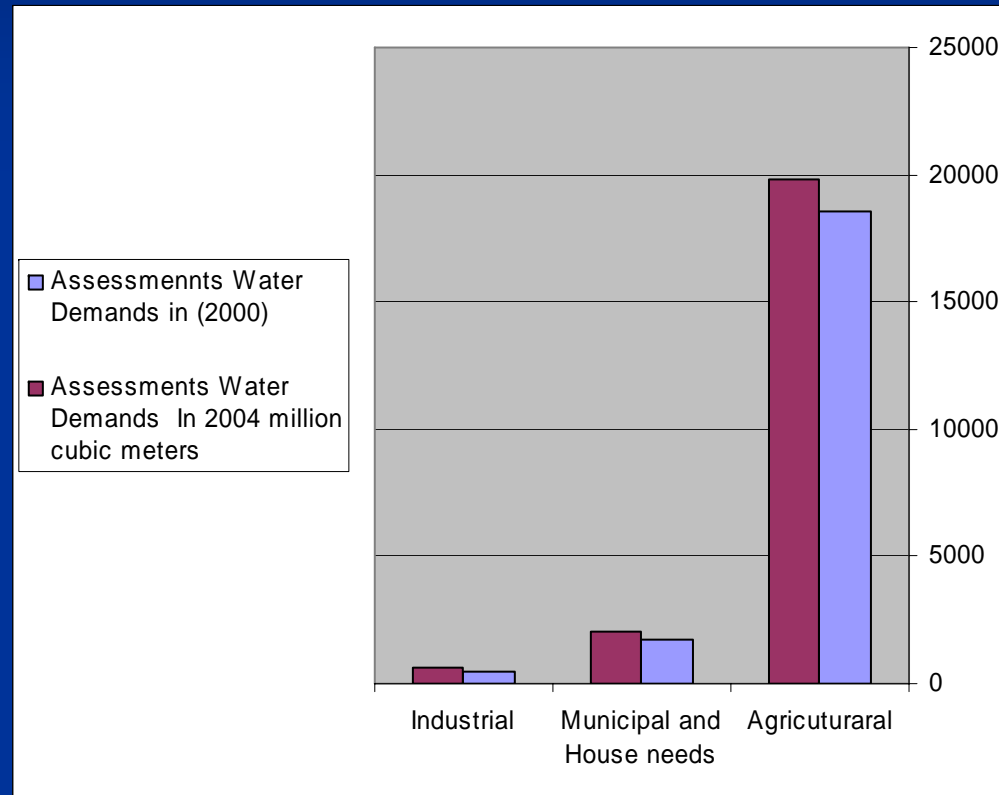
5 partially developed

2 Heavy industrial cities in Jubail and Yanbu

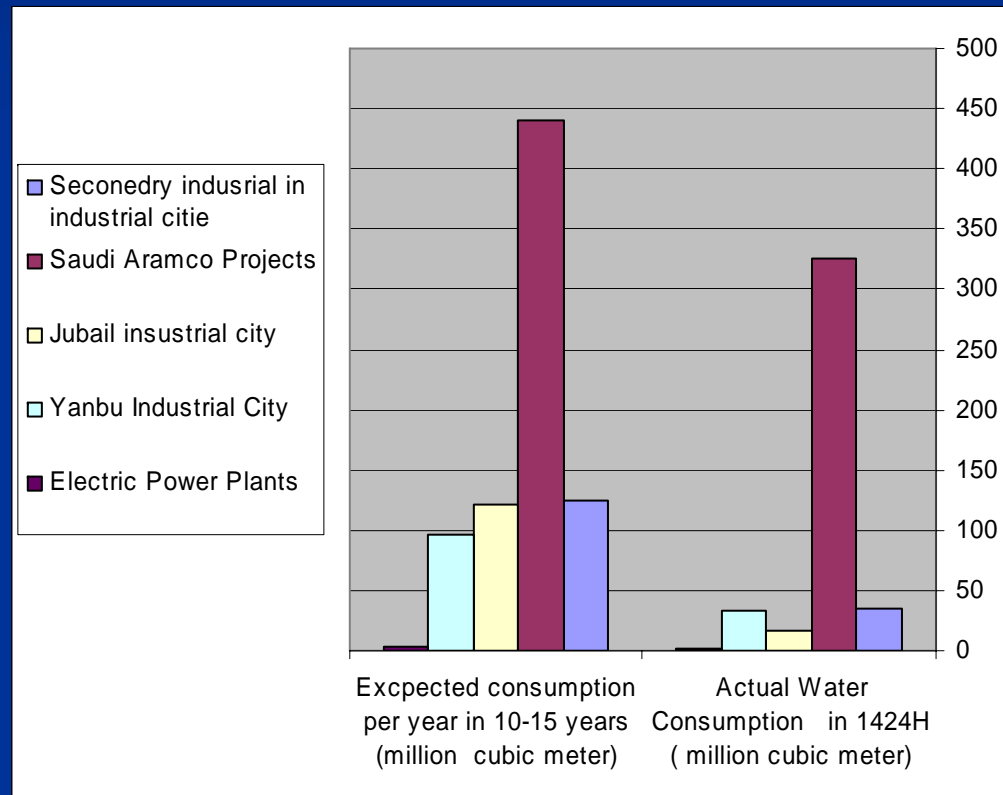
# Water Demand pattern change



# Water Demand in Different Sectors



# Industrial Water consumption in Major industries



# Environmental problems from untreated industrial waste water

Ground water pollution. ■

Soil contamination. ■

Waste of water. ■

Air pollution. ■



# Recommendations

Treatment of industrial waste in all industrial cities. ■

Reuse of industrial treated water. ■

Use of treated municipal waste water for industrial purposes. ■