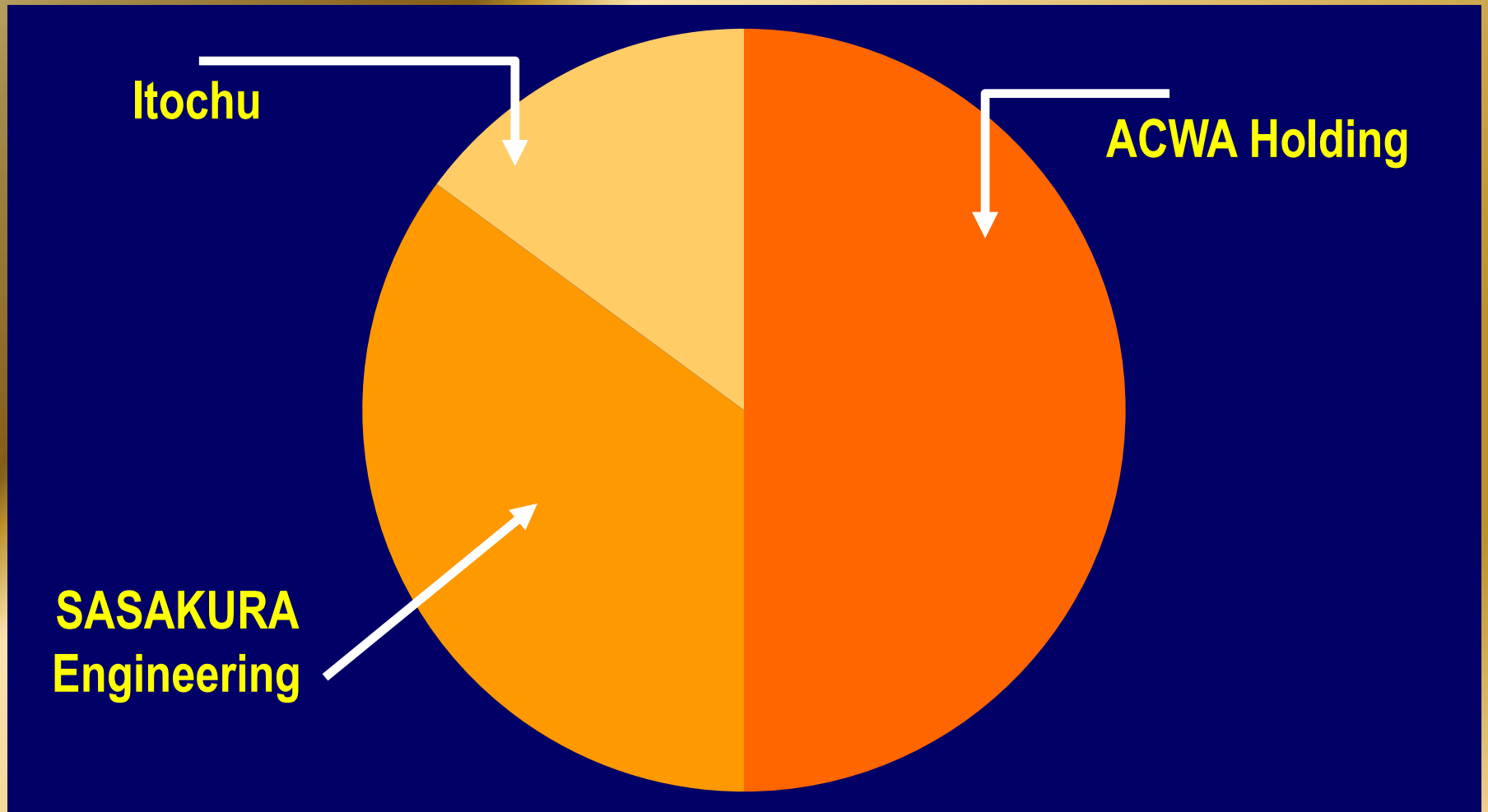


**A**CWA **Power** SASAKURA

الشركة العربية وساساكورا للمياه والطاقة

# **A** CWA Power SASAKURA

Established 2003





أكوا القابضة  
ACWA HOLDING

ACWA POWER

الطوسي AIToukhi  
شركة الطوسي للمقاولات والمقاولات  
Al Souhbi Company for Industry, Trading & Contracting

multiforms  
architectural façade specialist

يو مينا UMIC  
United Mining Investment Co.  
شركة الاستثمارات المعدنية

TOLEDO ARABIA  
تليطلنة العربية

شركة العربية لمشاريع البنية التحتية  
Arabia Pipeline Projects Company

CDM  
ARABIA

Arabian Gudra  
قهدرة العهرية

OSCI  
شركة الحلول البنية التحتية الكيميائية  
OSCI SOLUTIONS FOR CHEMICAL INDUSTRIES

ACWA Pipe  
ARABIAN COMPANY FOR WATER PIPES

شركة النقل المتكامل  
Integrated Transportation Co.

التنمية للنقل  
TANMAH TRANSPORTATION

جدة لخدمات المياه  
JEDDAH WATER SERVICES

ACWA Power  
SASAKURA

AJMC  
ARABIAN JAWHAR MANAGEMENT COMPANY

WELSPUN  
MIDDLE EAST

EMCOR  
Facilities Services

بيئة الجزيرة  
Jazzirah Environment

Miaona  
ميامنا

Sun & Life

بيئتنا  
Beatonä

zero waste  
Arabia  
شركة زيرو ويست العربية

icdoc

لبريد السعودية  
Saudi Labreed



أكوا القابضة  
ACWA HOLDING



**Power & Water**



**Utilities & Services**



**Industrial Manufacturing**



**Construction & Contracting**



**Transportation**



**Environment**

Established in 2002 to capitalize on initiatives taken by the Saudi Government in water and power infrastructure development sectors.

ACWA Holding focus on:-  
Power & Water  
Utilities & Services  
Industrial Manufacturing  
Construction & Contracting  
Transportation  
and Environment

Projects under execution through various subsidiaries is around SAR26.3bln.

Apart from significant presence in Saudi Arabia, subsidiaries have footprints in 6 countries across Middle East, Africa and Europe.



Established in 1949, more than 65 years of experience in the field of desalination.

More than 10% of the total installed capacity of thermal desalination Plants in the world has been supplied or Licensed by SASAKURA.

SASAKURA Plants in KSA is more than 1,000,000 m<sup>3</sup>/day:-

- |                |                                   |
|----------------|-----------------------------------|
| 1. Jeddah-2    | <u>50,000 m<sup>3</sup>/day,</u>  |
| 2. Jubail-2 C2 | <u>220,000 m<sup>3</sup>/day,</u> |
| 3. Jubail-2 C3 | <u>220,000 m<sup>3</sup>/day,</u> |
| 4. Yanbu-1     | <u>110,000 m<sup>3</sup>/day,</u> |
| 5. Shoaibah-1  | <u>223,000 m<sup>3</sup>/day,</u> |



ITOCHU Corporation

**Established in 1858.**

Has approximately 130 bases in 66 countries.

ITOCHU Corporation **engages in** domestic trading, import/export, **overseas trading of various products** such as textile, machinery, metals, minerals, **energy**, chemicals, food, information and communications technology, general products, insurance, **logistics services, construction**, and finance, as well as business investment in Japan and overseas.





**Established in  
2003**

**APS is Pioneer in  
Rehabilitation &  
Life Extension of  
Desalination  
Plants.**

**APS is EPC  
contractor for  
MED, MSF and RO  
Desalination  
Plants.**





## VISION

REGIONAL LEADER AS SEAWATER  
DESALINATION SOLUTION PROVIDER





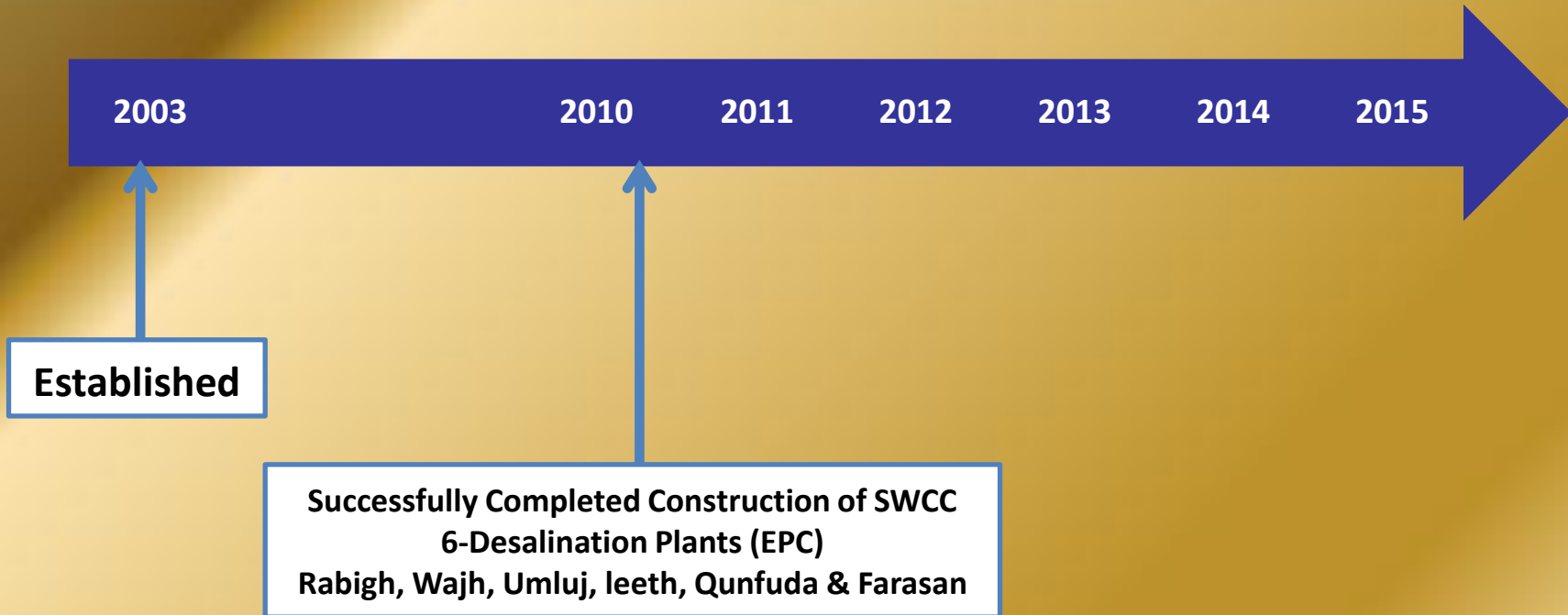
## **MISSION**

**TO BE THE PREFERRED EPC CONTRACTOR IN MIDDLE EAST FOR DESALINATION PROJECTS.**

**PROVEN LEADER IN REHABILITATION & EXTENSION OF SERVICE LIFE FOR EXISTING DESALINATION PLANTS.**



## APS Business milestones (2010 ~ 2015)



Locations of Completed SWCC MED  
6-Desalination Plants (EPC)  
Rabigh, Wajh, Umluj, leeth, Qunfuda & Farasan

AL WAJH

UMLUJ

RABIGH

Jeddah

AI-LEETH

AI-QUNFUDHAH

FARASAN





**Pictures for Completed SWCC MED  
6-Desalination Plants (EPC)  
Rabigh, Wajh, Umluj, leeth, Qunfuda & Farasan**





**Pictures for Completed SWCC MED  
6-Desalination Plants (EPC)  
Rabigh, Wajh, Umluj, leeth, Qunfuda & Farasan**

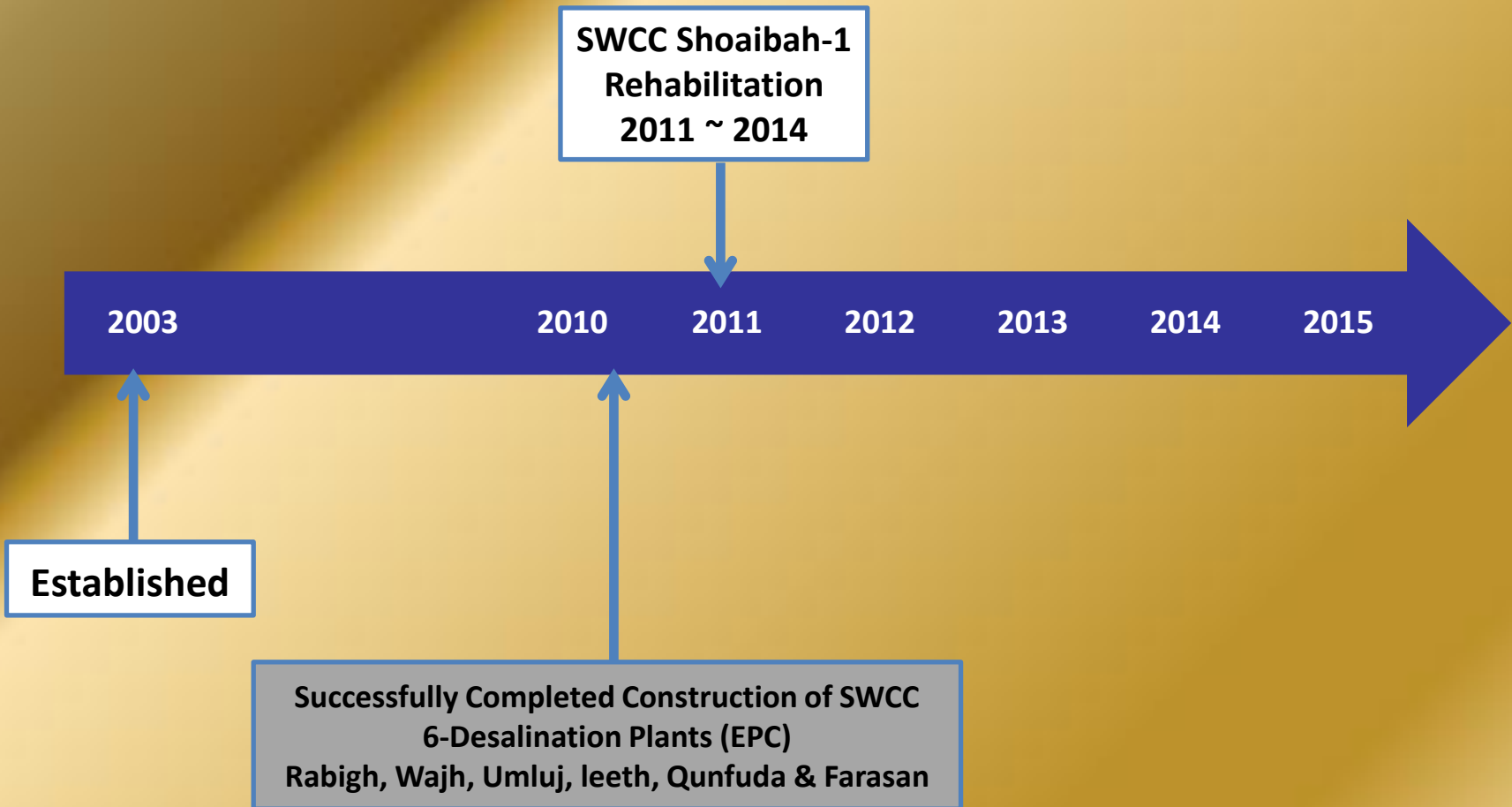






**Pictures for Completed SWCC MED  
6-Desalination Plants (EPC)  
Rabigh, Wajh, Umluj, leeth, Qunfuda & Farasan**





**Rehabilitation Project for  
SWCC Shoaibah-1  
2011 ~ 2014**





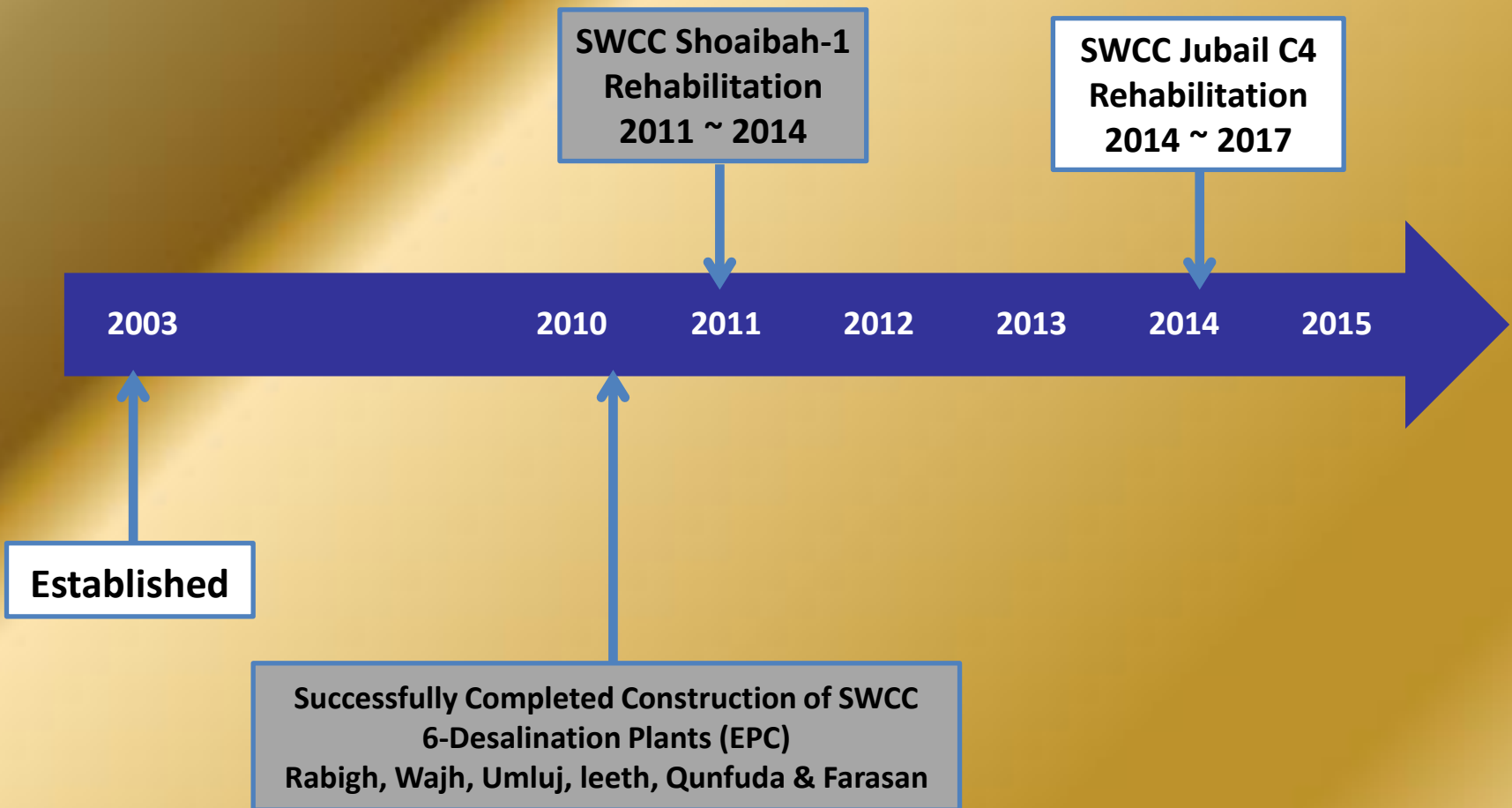
**Rehabilitation Project for  
SWCC Shoaibah-1  
2011 ~ 2014**





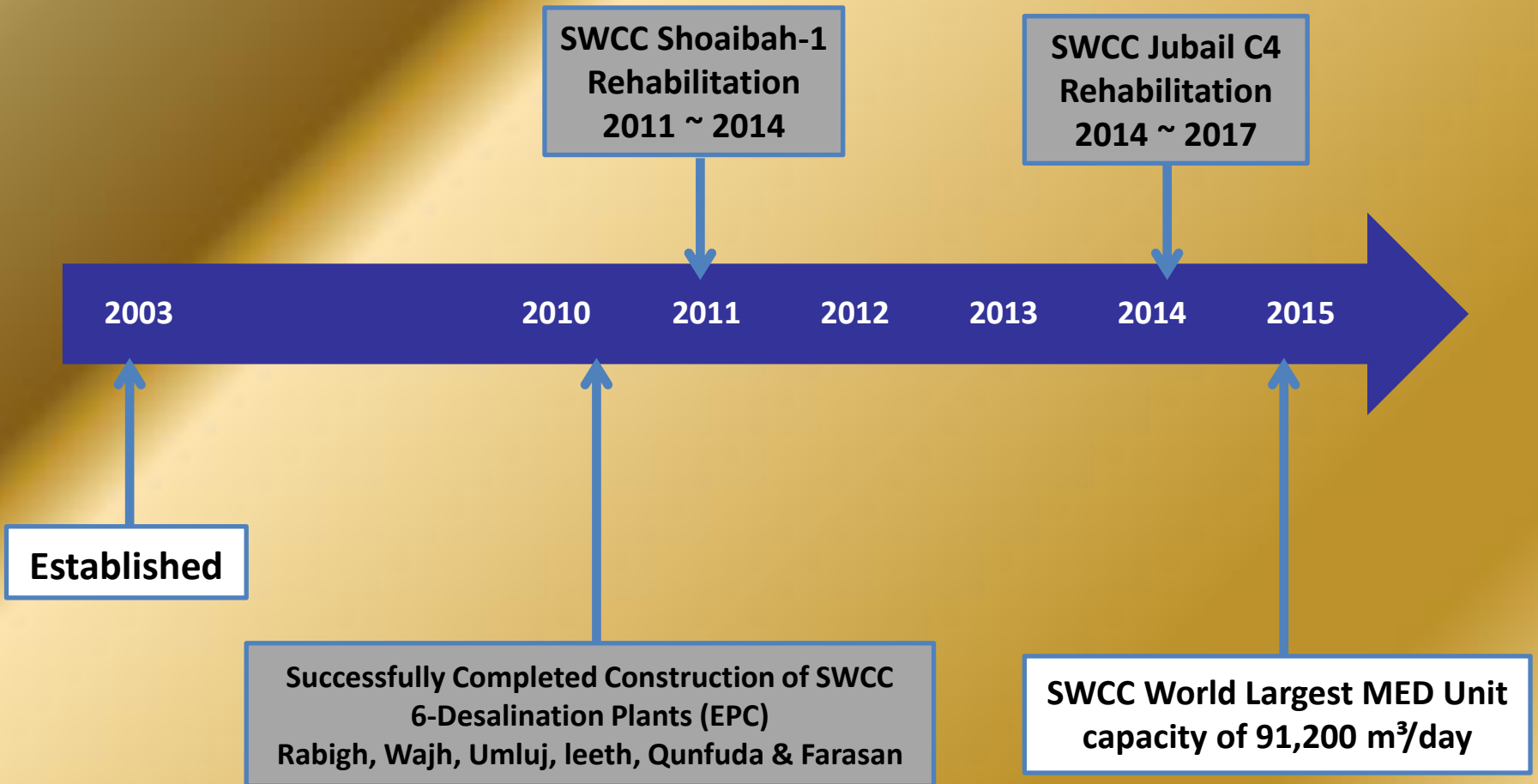
Rehabilitation Project for  
SWCC Shoaibah-1  
2011 ~ 2014















**A** CWA *Power*  
SASAKURA

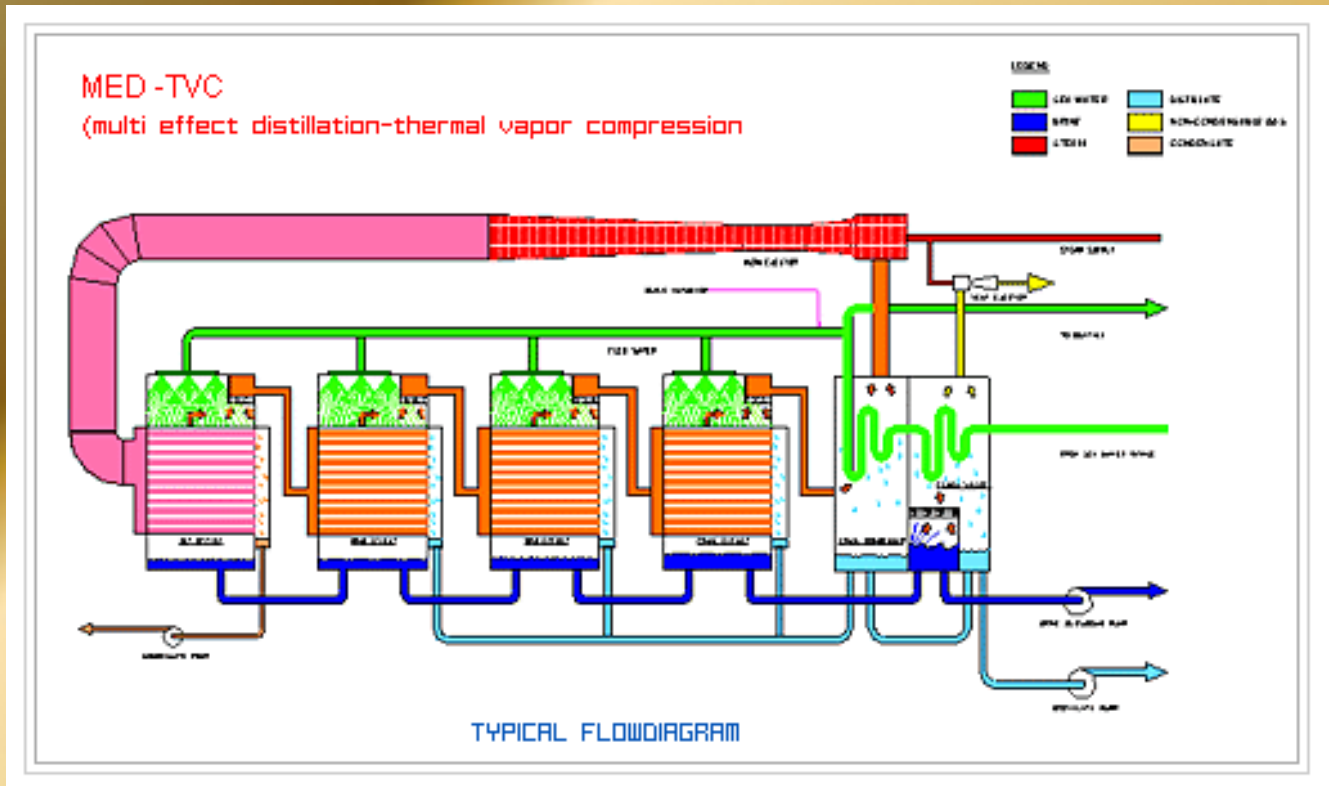
## Competitive Edges

# **1. ACWA Power Sasakura is a Leader in MED Desalination Technology**

Through history of completed MED Desalination Projects,

The recently Award of World Largest MED unit.

# ACWA Power Sasakura World Largest MED unit.



Capacity

91,200 m<sup>3</sup>/day

Performance Ratio

14.60

World Existing is 68,190 m<sup>3</sup>/day

at PR = 7.8

## 2. Tri-Hybrid Desalination Technology

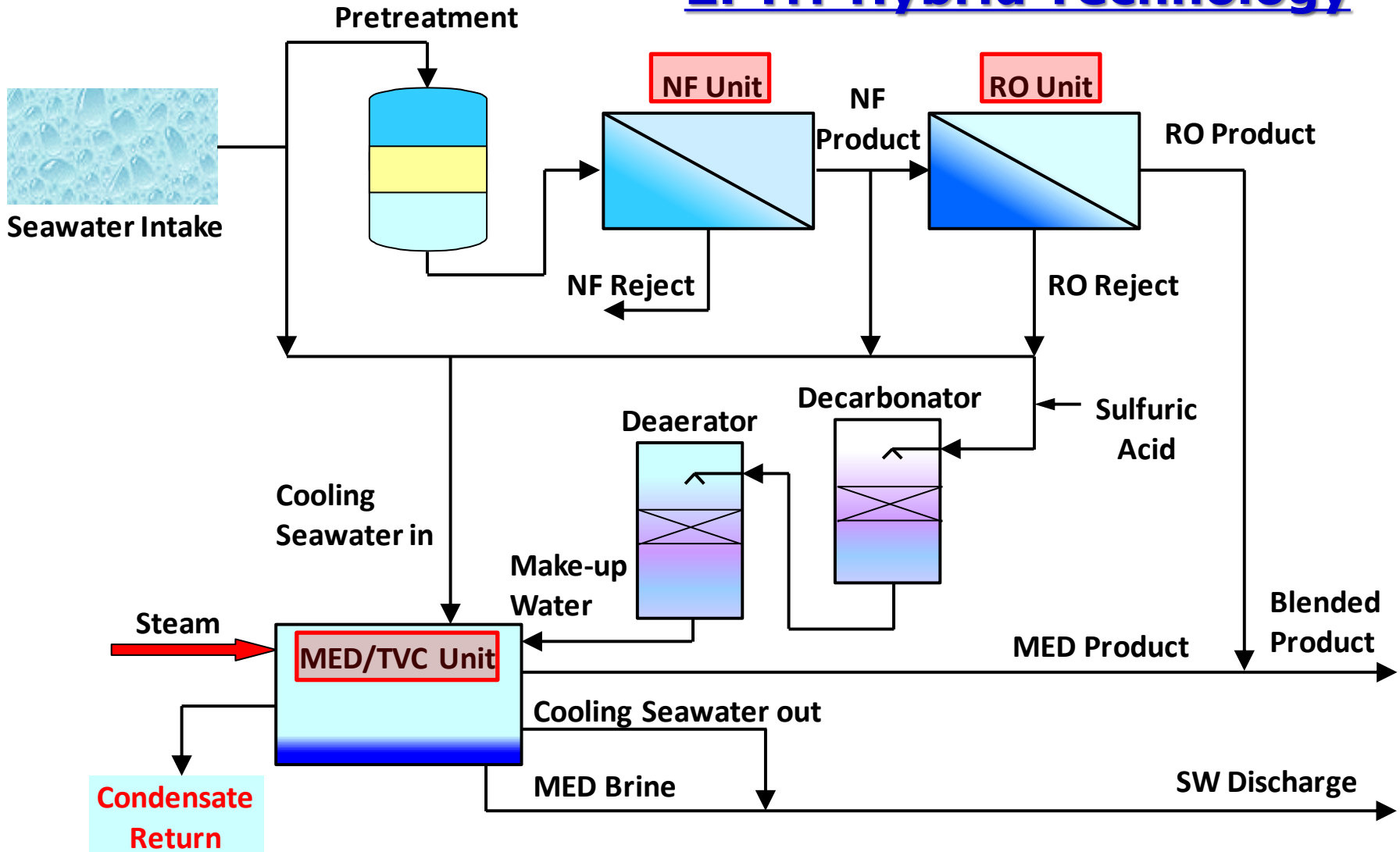
**Tri-Hybrid Technology developed between SWCC, Water Reuse Promotion Center and Sasakura:-**

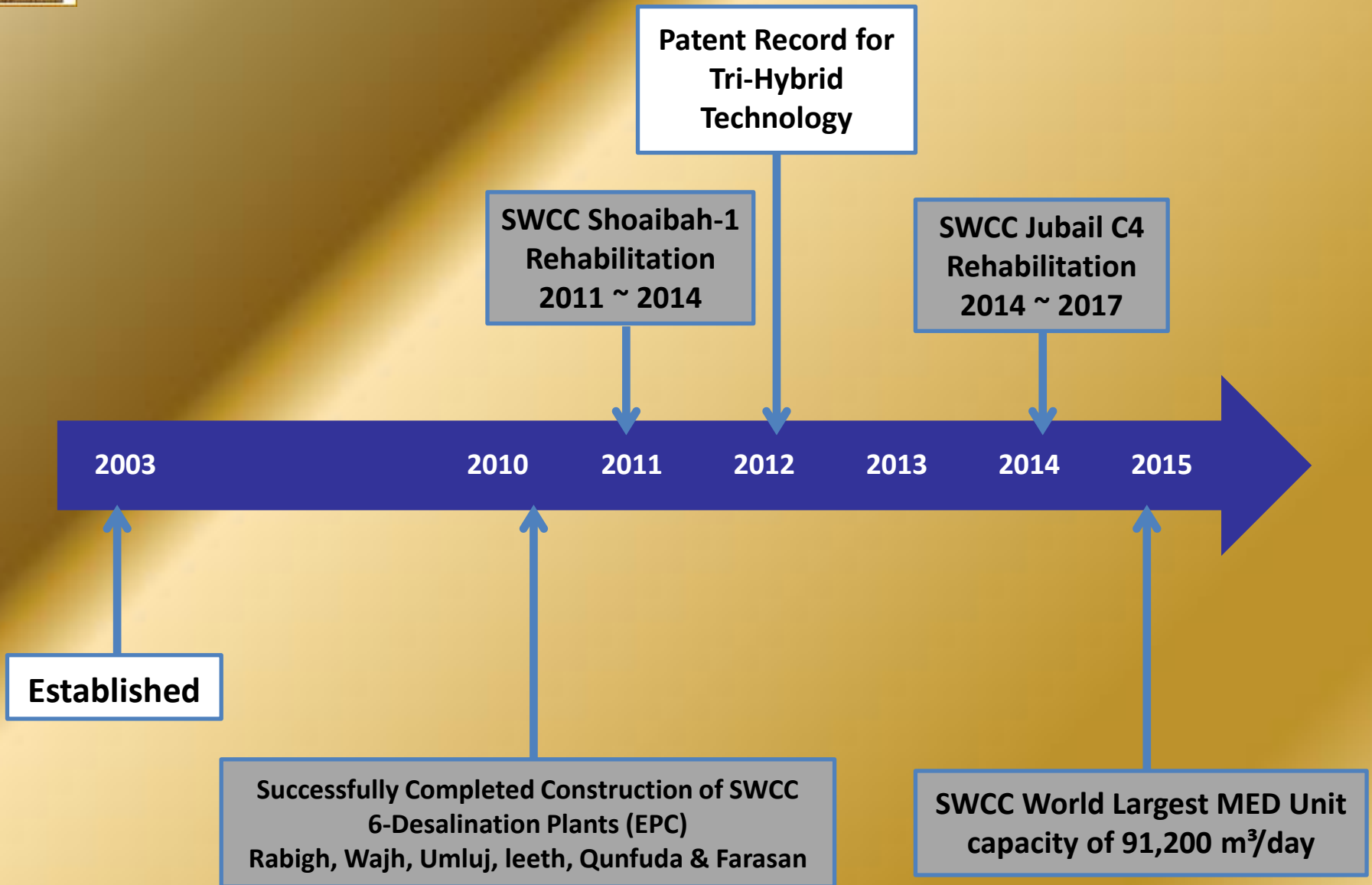
April 2008	Started of operation of Pilot Plant
May 2008	Succeeded TBT125°C operation
Jan. 2009	Completed Phase 1 Testing Operation for Conceptual Design
Jan. 2010	Completed Phase 2 Long Term Operation at TBT125°C
Dec. 2011	Completed Phase 3 Emergency Operational Testing (NF-Bypass)
Jan. 2012	Completed Material Corrosion Testing to settle the Eva. Materials

### Results:-

- 1. Steam & Seawater Consumption reduced to almost 50% of Conventional MED & MSF.**
- 2. Electric power consumption of Tri-Hybrid reduced to 78% of the conventional RO Plant.**
- 2. Consequently, Life Cycle Cost (CAPEX + OPEX) of Tri-Hybrid system is lower than the conventional MED or RO Plants.**

## 2. Tri-Hybrid Technology





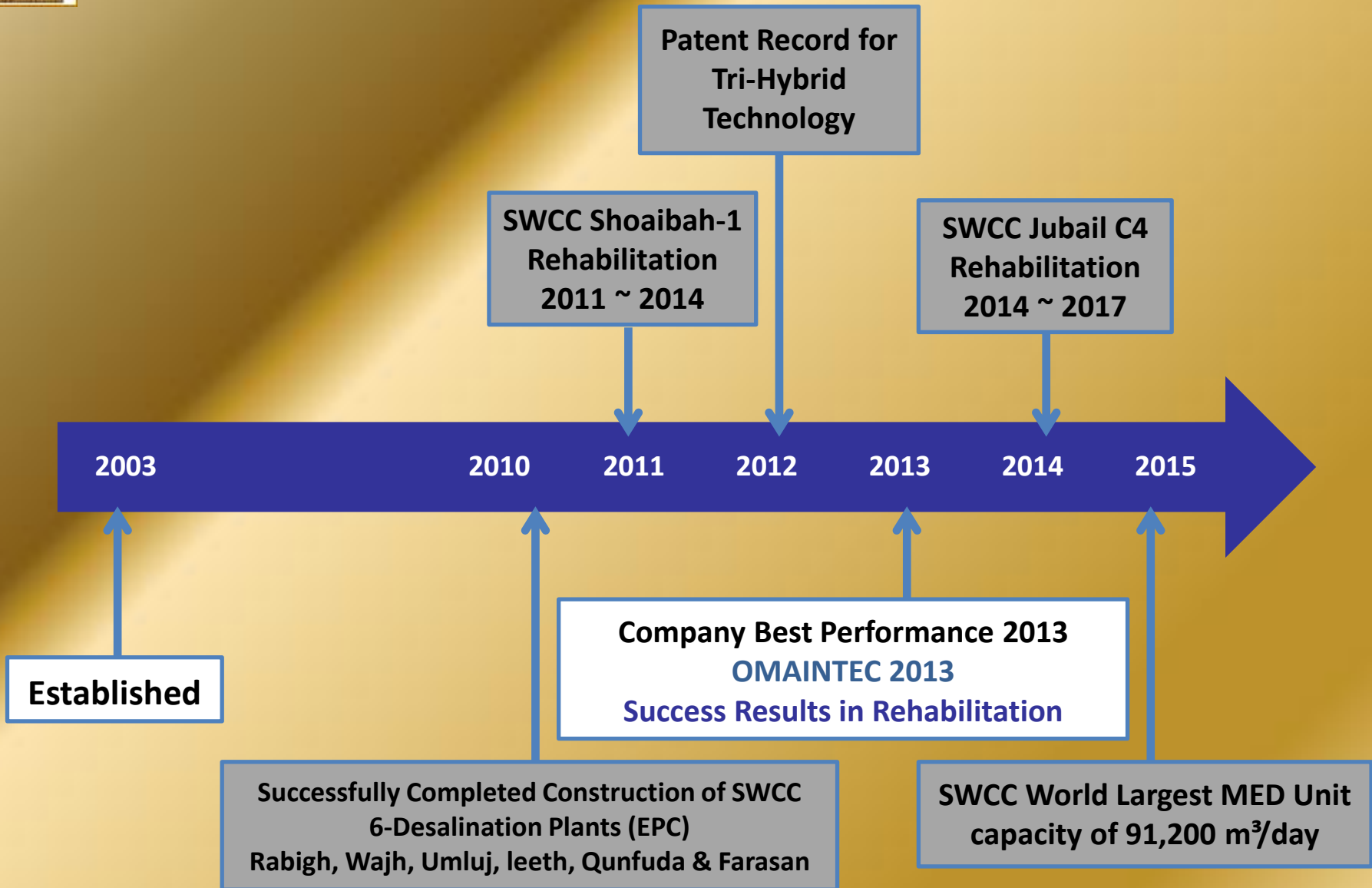
### **3. Leaders in Rehabilitation & Life Extension of Existing MSF & MED Desalination Plants.**

**Redesigning Existing Desalination Plants to improve PR, increase Production and Eliminate Causes of Deteriorations.**

**Since 2004 APS awarded the Rehabilitation & life extension of largest SWCC Desalination Plants in Jeddah, Shoaibah & Jubail.**

**Cost of Rehabilitation is (15%~20%) of the cost for new plant and the life extension will be (15~25) years.**







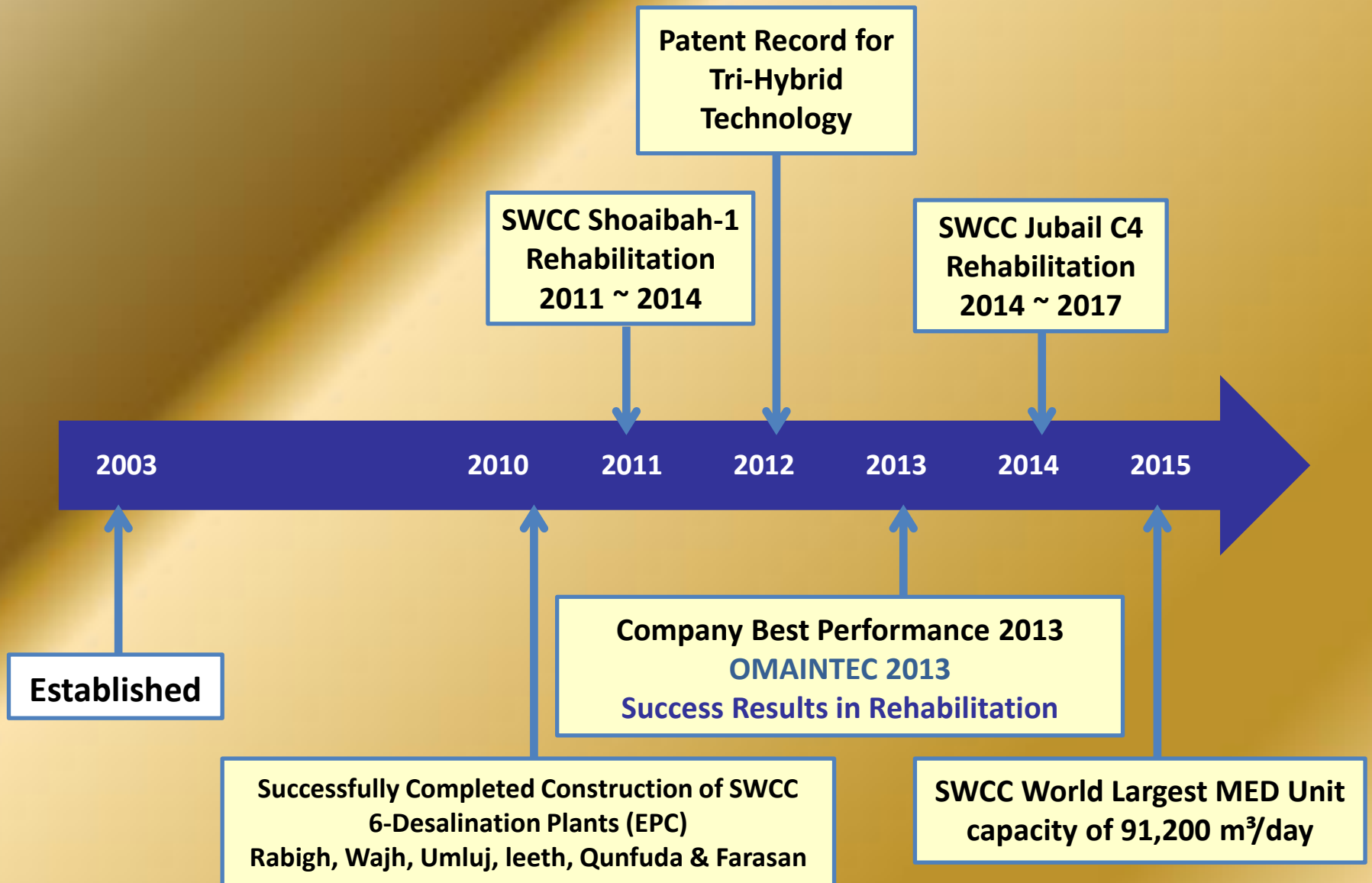
أفضل  
INTEC  
المعهد العربي للتكنولوجيا

و

و

و

و







**Thanks**