



The Tunisian experience

BSI a success story in the MENA region

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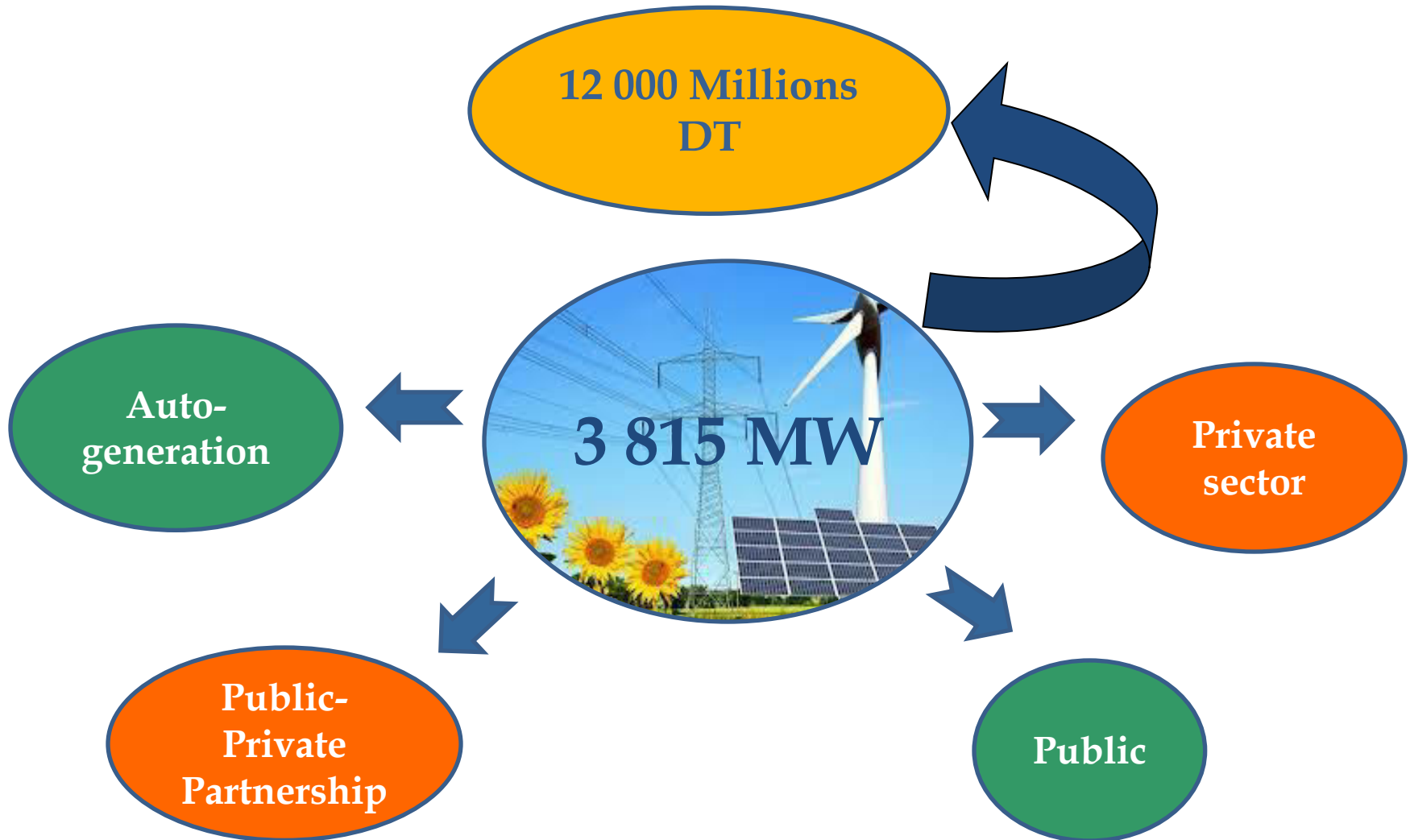
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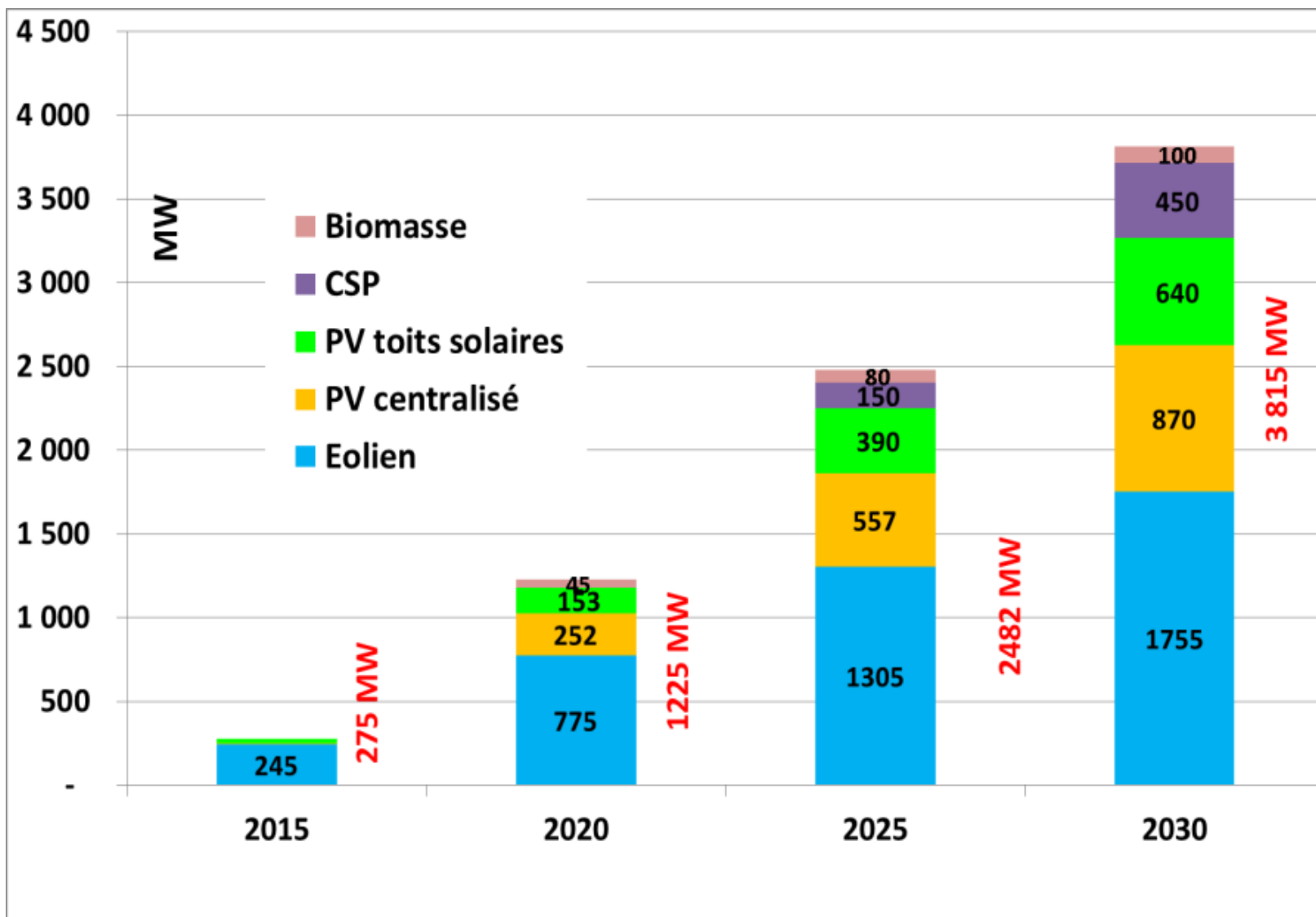
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- ❖ RE Strategy for 2030
- ❖ The PROSOL Mechanism
- ❖ Results and outcomes
- ❖ BSI presentation and Strategy
- ❖ Lessens learnt
- ❖ Conclusion

RE development strategy in Tunisia

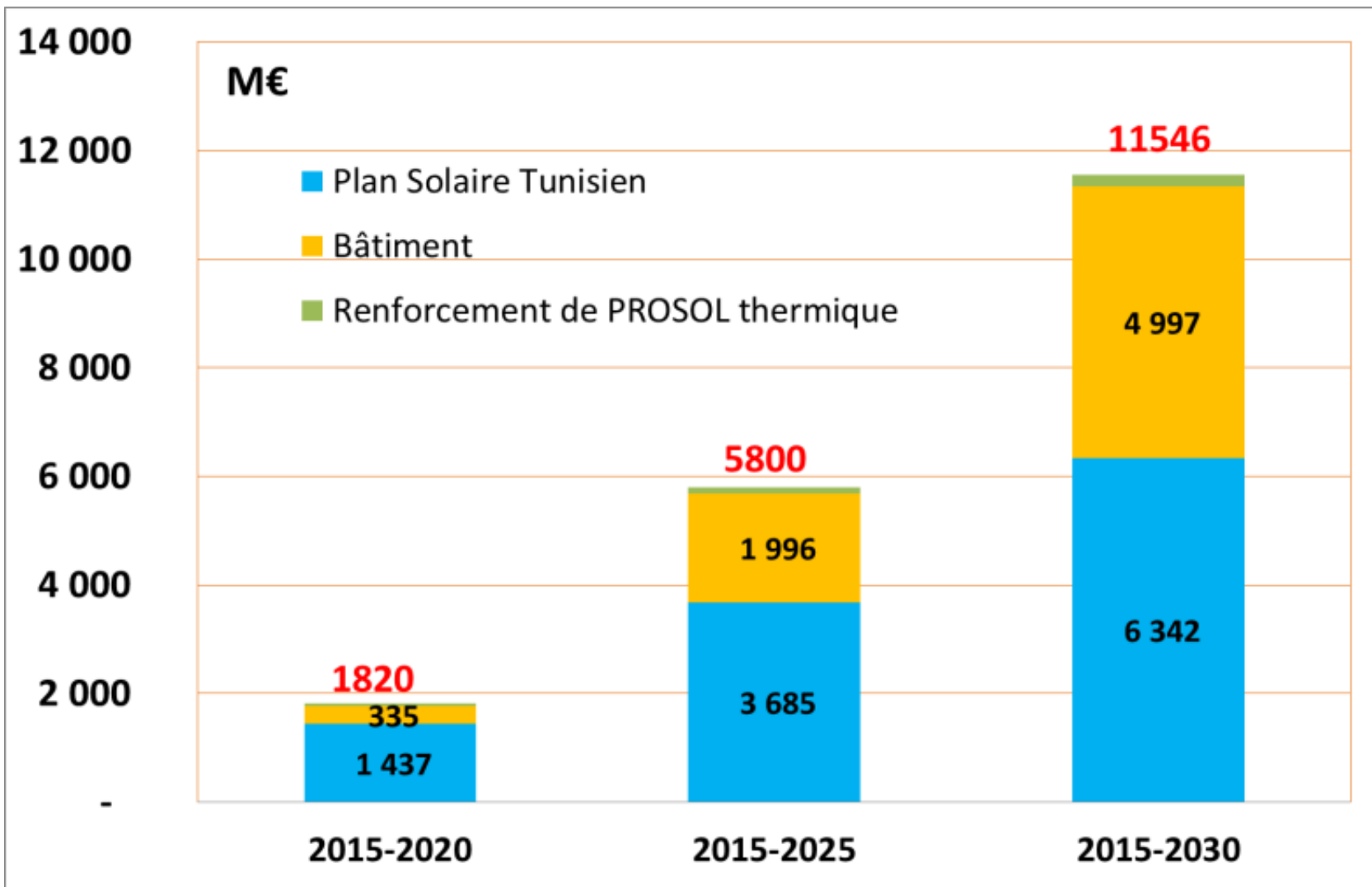


The Tunisian Solar Plan (Intended Nationality Determined Contribution)



Objective for SWH is to reach 220 m² of collectors per 1000 inhabitants, in 2030, against 73 in 2015 (2,7 to 3 millions m²)

Required financial support for 2030 strategy



PROSOL SWH : 445 Million Euros

Market Analysis-Barriers to investment for stakeholders

Development of PROSOL: Why??

Tunisian Government

- Budget constraint for public resource
- No previous pilot project that removed market barriers in a sustainable way
- Fossil fuel (LPG) subsidies distorted the economics of SWH

Households/end users

- Lack of confidence in the technology (previous bad experience)
- High Upfront cost barrier
- Not aware of the economic benefits

Commercial banks

- Risk aversion
- Lack of local bank expertise to tailor RE loans
- Bad perception of the market profitability

PROSOL SWH : What is it?

Tunisian SWH program, PROSOL

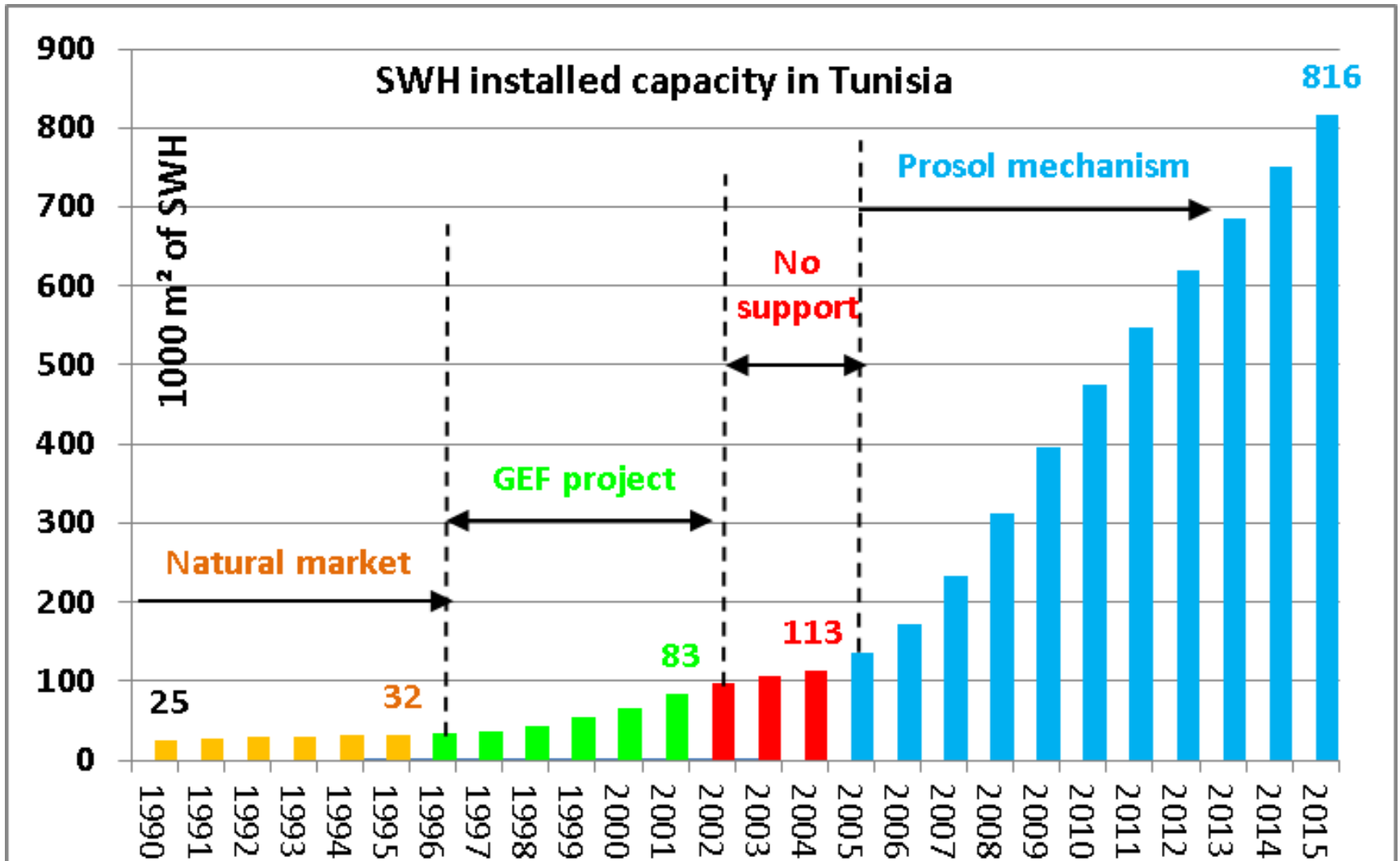
- Subsidy from FNME aiming to improve profitability for the end user
- Credit over 5 years distributed by STEG and recovered on the electricity bill (STEG)
- Credit line from private bank allocated to the utility (STEG) to finance the program
- ❖ A public system of quality inspection managed by ANME (accreditation of suppliers, products and installers)
- ❖ Information management system(IMS)

PROSOL- What it does?

A **Quick** and **Simplified** Procedure

- Customer contacts the SWH supplier
 - A list of eligible suppliers (products conform to a minimum quality requirements) is given by the main partner to the program, the National Agency for Energy Conservation (ANME)
 - A list of eligible installers (quality of service for installation and maintenance) labeled “Qualisol”
- Customer fills out the application form at **the SWH supplier office**, presents his latest STEG bill and ID
- The installation is **immediate** once the application form and engagement form are signed
- The access is guaranteed for 5 years.

PROSOL- What it does



Source: ANME, 2016

PROSOL Key Success Factors for sustainable SWH services access

- The **engagement** and strong **commitment** of national public **Authorities** evident in the credible and stable support that bolstered investors' confidence
- The involvement of the State utility **STEG as a debt enforcer**, which enhanced domestic financial institutions trust and resulted in lowered financing costs for residential end-user purchasers;
- An **appealing financial scheme** using soft interest rates and longer repayment terms;
- The implementation of appropriate and focused **awareness raising, communication and capacity building activities**;
- A **stakeholder-tailored approach** that involved all relevant actors in the development of the SWH market from national authorities to financial institutions, suppliers, installers and end-users .

BSI presentation

Status	SA
Activity	Manufacturing, commercialization, installation and maintenance of SWH
Date of legal creation	14 June 2006
Date of startup	17 Octobre 2007
Capital : 475 000 DT	61% : FOPRODI and SICAR 39% : shareholders (KBB and Tunisian shareholders)
Location :	Industrial area of Beja Nord
Total Investment	2 MDT
Capacity of production	20 000 SWH
Certification	ISO 9001, Solar key mark, Qualisol
Turn over (2015)	15 MDT, 6,5 M€
Market share	40% in local market, 25% of TO is from export market
BSI supports UNGC	CSR

BSI presentation

	Number of Employees	Engineers	Number of installers	Total production SWH
2010	28	5	25	3500
2011	35	6	36	4800
2012	55	8	42	6400
2013	65	14	56	8450
2014	95	22	95	9750
2015	120	25	115	13000
2016	130	29	125	14500

BSI Development

Concrete Tank production
from 2007 until April 2016
Exported to Morocco, Egypt,
Yemen and French islands



Introduction of Enameled tanks
Starting production : April 2016
Investment : 1,5 M€
Capacity : 35 000 tanks
Independent company: ETI



BSI Development



BSI TC presentation

PPP project

Total investment : 250 000 €

- GIZ : 100 000 €
- BSI : 150 000 €

Location : BSI factory

400 m² dedicated to practical
and theoretical courses

MoU with RENAC for training
certification and quality
insurance system

ToT: July 2016

Start up: September 2016



Vision of the BSI TC

The main purpose of the creation of the training center is to improve the reputation of renewable energy technologies throughout the installation chain

- Technical training in solar water heater installation
- Design and dimensioning of collective solar installations
- Screening of breakdowns and maintenance of solar water heaters
- Operating community facilities for heating water by solar energy in the service sector and industry
- Marketing and commercial training for suppliers, manufacturers and solar water heating installers



BSI partenaire du développement durable

web site : www.biome-solar.com



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