



partner for prosperity

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Vienna, 28/11/2014



Information and Capacity Building for EE in SMEs



Outline

1. UNIDO Global Programme on EnMS & SO
 - Geographical Coverage

2. Programme Scope
 - Training Methodology
 - Tools & guidance material
 - Case studies

3. Results and Impacts
 - Programme results
 - Country results – South Africa



UNIDO Program on Energy Management System

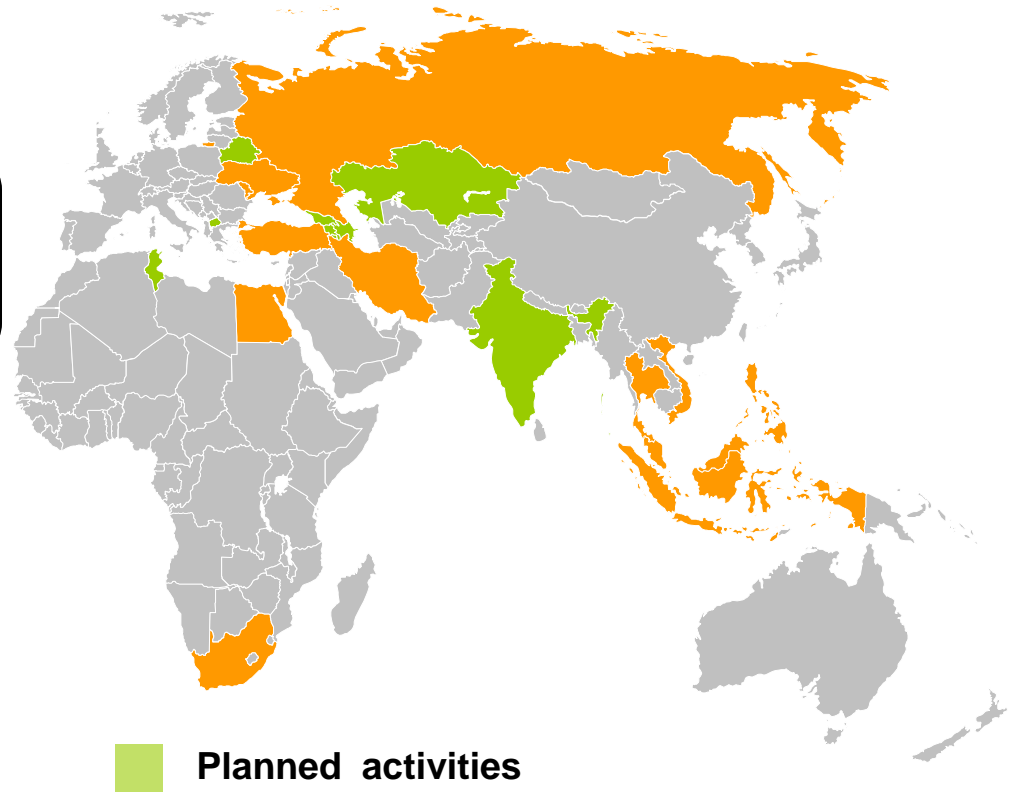
As of June 2014



Operational in 14 countries
Planned activities in 10 countries

Operational

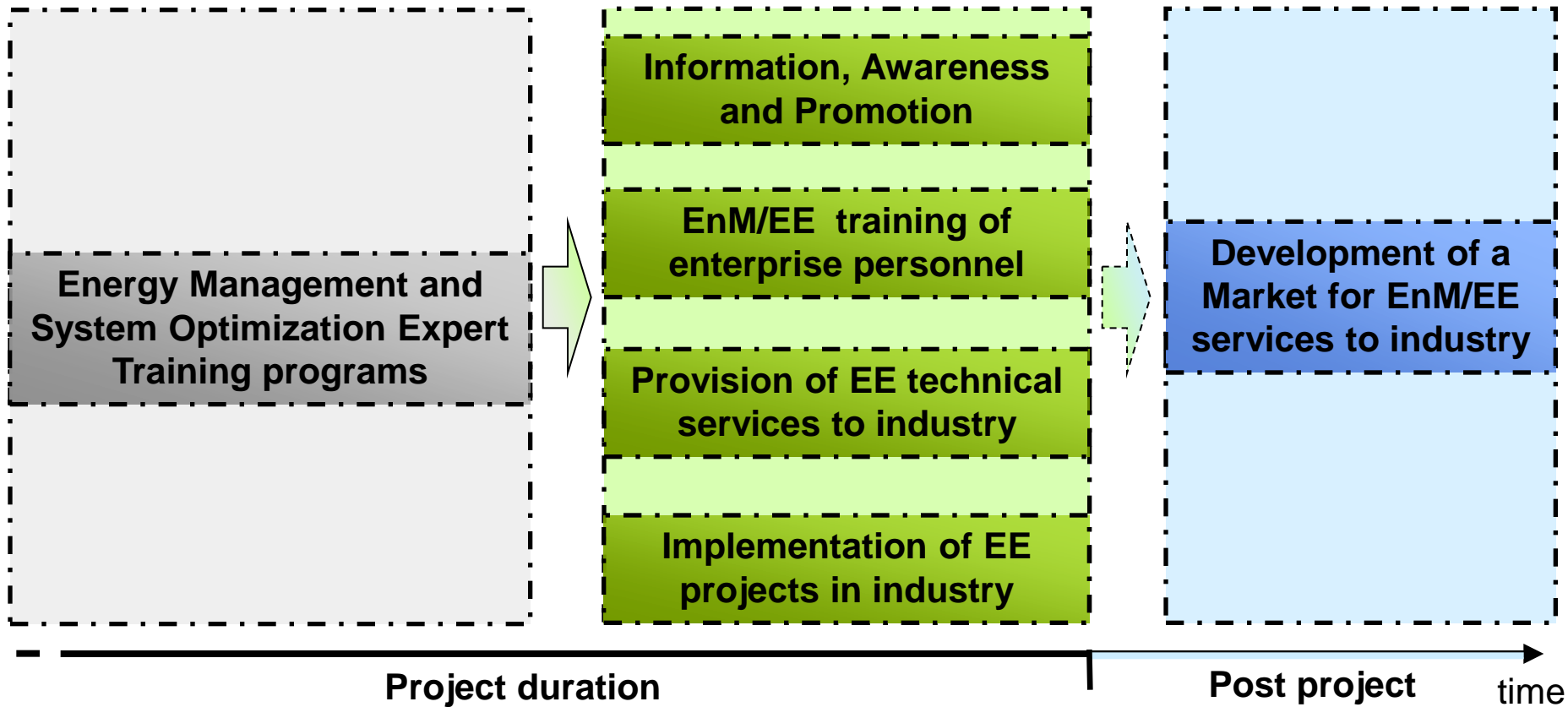
- South Africa
- Moldova
- Russia
- Turkey
- Ecuador
- Malaysia
- Thailand
- Viet Nam
- Philippines
- Egypt
- Indonesia
- Iran
- Ukraine
- Colombia





UNIDO EnMS & SO Capacity Building programme

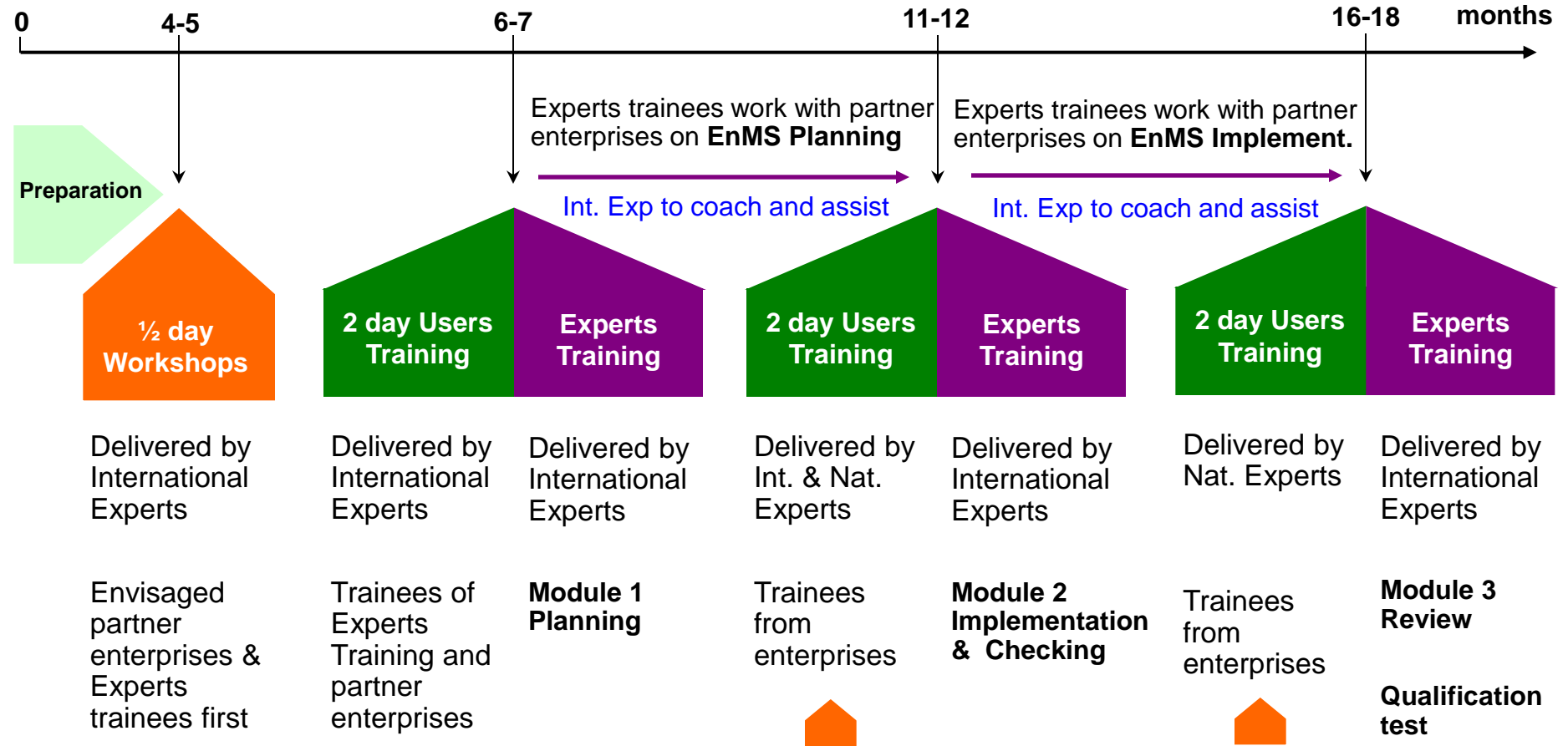
Creating market opportunities for energy efficiency





UNIDO EnMS Capacity Building programme

Envisaged timing



Training material

- Practical Guide for Implementing Energy Management Systems
- Training material for SO





ISO 50001 EnMS – UNIDO Pilot Results

LACTIS J.S.C

- Open joint stock dairy company (about 10% on Moldovan market)
- 185 employees
- Management started to look into EE in 2009 to reduce production costs and impact of increased energy prices



Value of EnMS/EE investments planned in 2012 for 2013-2014 was 410,000 USD



70% implemented so far

LACTIS improvements 2011-2012

Energy Management System Implemented

No. of Measures/Projects	11
Total Capital Investment (USD)	6,900
Gross Monetary Savings (USD)	22,000
Overall Payback Period (in months)	4
Annual Energy Savings (MWh)	328
2011 GHG Reductions (tons CO ₂)	160



ISO 50001 EnMS – UNIDO Pilot Results

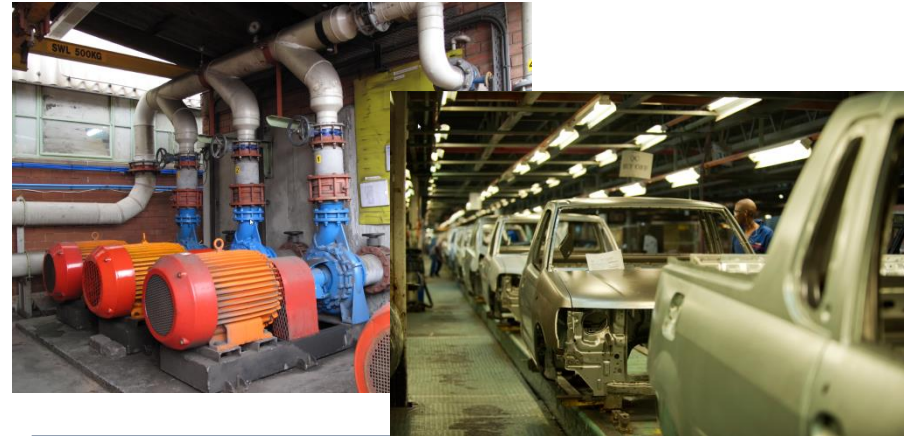
Toyota South Africa

- 14 plants, exporting all over Africa, largest portion of the SA market
- 7500 employees
- Management started to look into EE in August 2010 to reduce production costs and impact of increased energy prices, implement measures < 2 yrs

20 more projects planned until the end of 2014



Moved from 2nd worst to 2nd best in terms of Energy intensity in the world-wide Toyota Group



TOYOTA SA improvements 2010-2013

EnMS & SO Implemented	
No. of Measures/Projects	80
Total Capital Investment (USD)	531,000
Gross Monetary Savings (USD)	642,000
Overall Payback Period (in months)	12
Annual Energy Savings (MWh)	9346
GHG Reductions (tons CO₂)	7804

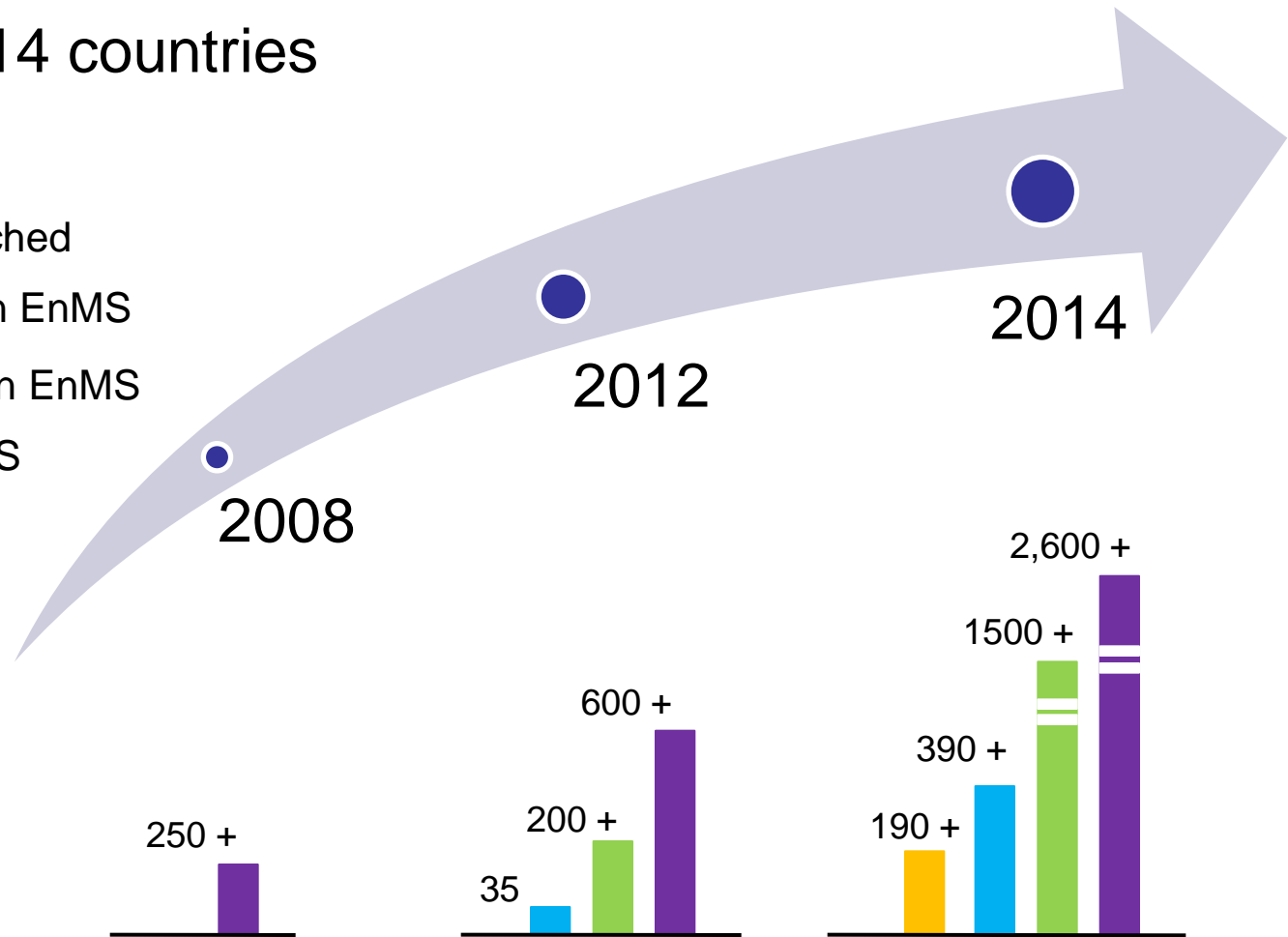




UNIDO Program on Energy Management System

➤ Operational in 14 countries
(as of June 2014)

- Decision-makers reached
- Enterprises trained on EnMS
- Consultants trained on EnMS
- Enterprises with EnMS





South Africa Programme Results

Industry Engagement Record

Participating large companies	153
SME general energy assessments conducted 227	
Companies Reporting Savings	62
Host Training Companies secured	22
Candidate Companies signed-up	90
Demonstration Plants	77
Case studies under development	54

* Some of the 54 Actively Reporting Companies has signed to be Demo Plant for more than 1 Discipline



South Africa Programme Results

Training Outcomes



- ✓ **150** Training Workshops Nationally.
- ✓ **+2 300** Engineers, Technicians and Managers trained.
- ✓ **112** EnMS/ESO National Experts Qualified.
- ✓ **32** National EnMS/ESO Certified Trainers.
- ✓ **29** ISO 50001 Lead Auditors accredited



South Africa Programme Results

Implementation Savings Reported

EnMS/ESO Implementation Savings

System	mWh	Tonnes CO ₂
EnMS	356 800	354 000
SMEs	1 200	1 200
Total	570 700	566 200

(Payback less than 2 years)

Thank you for your attention!



partner for prosperity

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