

# EU Energy Efficiency policies TAF Activities in Africa

EU SE4All Technical Assistance Facility  
Eastern and Southern Africa



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**ATKINS**

in Consortium with



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# Energy in the EU

## Milestones



## Achievements 20/20/20 targets

- **18 %** reduction of Greenhouse Gas Emissions (1990 – 2011)
- **15.5 %** Energy Efficiency Savings (2013)
- **15 %** Share of Renewable Energy (2013)

# EU Energy – The way Forward

## The Energy Union

Where the EU wants to go:

*A secure, sustainable, competitive, affordable energy for every European*

What this means:

- *Energy security, solidarity and trust*
- *A fully integrated internal energy market*
- *Energy efficiency first*
- *Transition to a long-lasting low-carbon society*
- *An Energy Union for Research, Innovation and Competiveness*

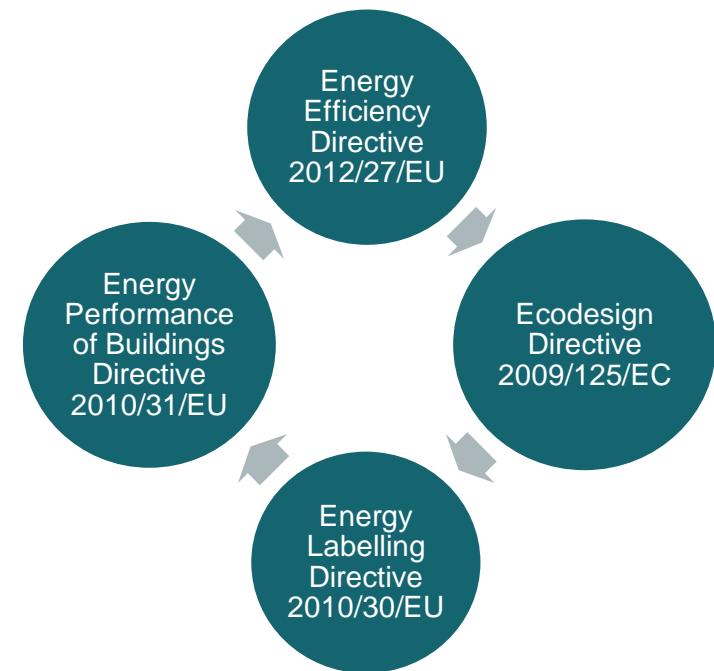
# Energy in EU & Growth



- Primary energy consumption 1995  $\approx$  2013 (~1570 Mtoe)
- GDP in 2013 ~3 trillion € higher than 1995.
- Economic growth is decoupled from energy consumption

# TAF EE Activities & EU EE Policies

- **AUC:** Development of Energy Harmonization Agenda and Action Plan at Continental
- **Covenant of Mayors**
- **COMESA:** Elaboration and implementation of regional (EA-SA-IO) energy sector policies and reforms
- **COMESA – ECOWAS - SADC:** Training, Study Tour, RES and EE Strategy
- **SADC:** RES and energy efficiency strategy and action plan



Energy Efficiency is an Energy Source in its own right

# EE - Transport

- **33 %** of final Energy Consumption
- **27%** decrease in the average consumption of new cars (2010 vs 1995)
- Directive 715/2007/EC - European Emission Standards / Euro 6 for both Diesel and Petrol from 2014
- Directive 94/2014, electric vehicles : target of 1 charging station per 10 vehicles by 31/12/2020, 38 000 electric vehicles were registered in the EU in 2014
- Directive 2009/28/EC, biofuels: target of 10% share of renewable energy in transport by 2020, biofuels contribution half EU Member at least 5%
- Labelling scheme for vehicle tires → Tires and tire pressure can lead to over 5% fuel efficiency increase
- Increased deployment of clean fuels
- Eco-driving promotion activities

# EE - Industry

- **26 %** of final Energy Consumption
- **25 %** Reduction of Final Energy Consumption across all industrial sectors (1990 vs 2014)
- **22 %** Technical potential to reduce energy consumption (**5 - 8 %** energy consumption reduction measures have only **2 years payback period**)
- **Energy audits every 4 years** for all Large Enterprises are required
- **National initiatives:** voluntary agreements, tax incentives etc
- **Horizon 2020:** Support Research and Innovation in Industry

## Ongoing EU TAF Activities in Africa

**Zambia:** Policy and regulatory framework - Energy Efficiency Quick Win Actions

**Ethiopia & Tanzania:** Least cost planning, pilot energy efficiency projects

**Mozambique:** Projects identification

# EE - Buildings

- **38 %** of the Final Energy Consumption (residential and tertiary sector)
- **4%** Reduction of Final Energy Consumption in the residential sector (1990 vs 2014)
- **Only 0.1 % per year demolition rate and 1.2 % per year refurbishment rate**
- **90%** of refrigerators meet the highest energy efficiency labelling classes (above A)
- **80 %** of the **economic potential** of EE in buildings **remains untapped**

## Ongoing EU TAF Activities in Africa

**Tanzania:** Paving the way towards Energy Performance Certification in Buildings

**Madagascar:** Promotion solar thermal for sanitary water

**Zambia:** Policy, Indicators Energy Efficiency

**Energy Performance of Buildings Directive 2010/31/EU** – Energy Performance Certification of Buildings, National Plans, Energy Performance

**Eco-design Directive (2009/125/EC and Energy Labeling Directive 2010/30/EU** – Energy performance of building products

**Energy Efficiency Directive 2012/27/EU** – 3% yearly renovation for central government, nearly-zero energy buildings, long term renovation roadmaps