

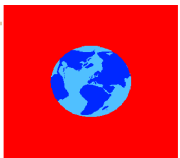


Scope of the CEN/CENELEC Sector Forum "Energy Management" (SFEM)

by

Bernard GINDROZ, PhD
ADEME, (SFEM Chairman)

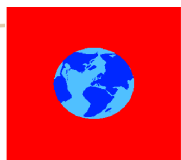
ADEME



afnor
NORMALISATION



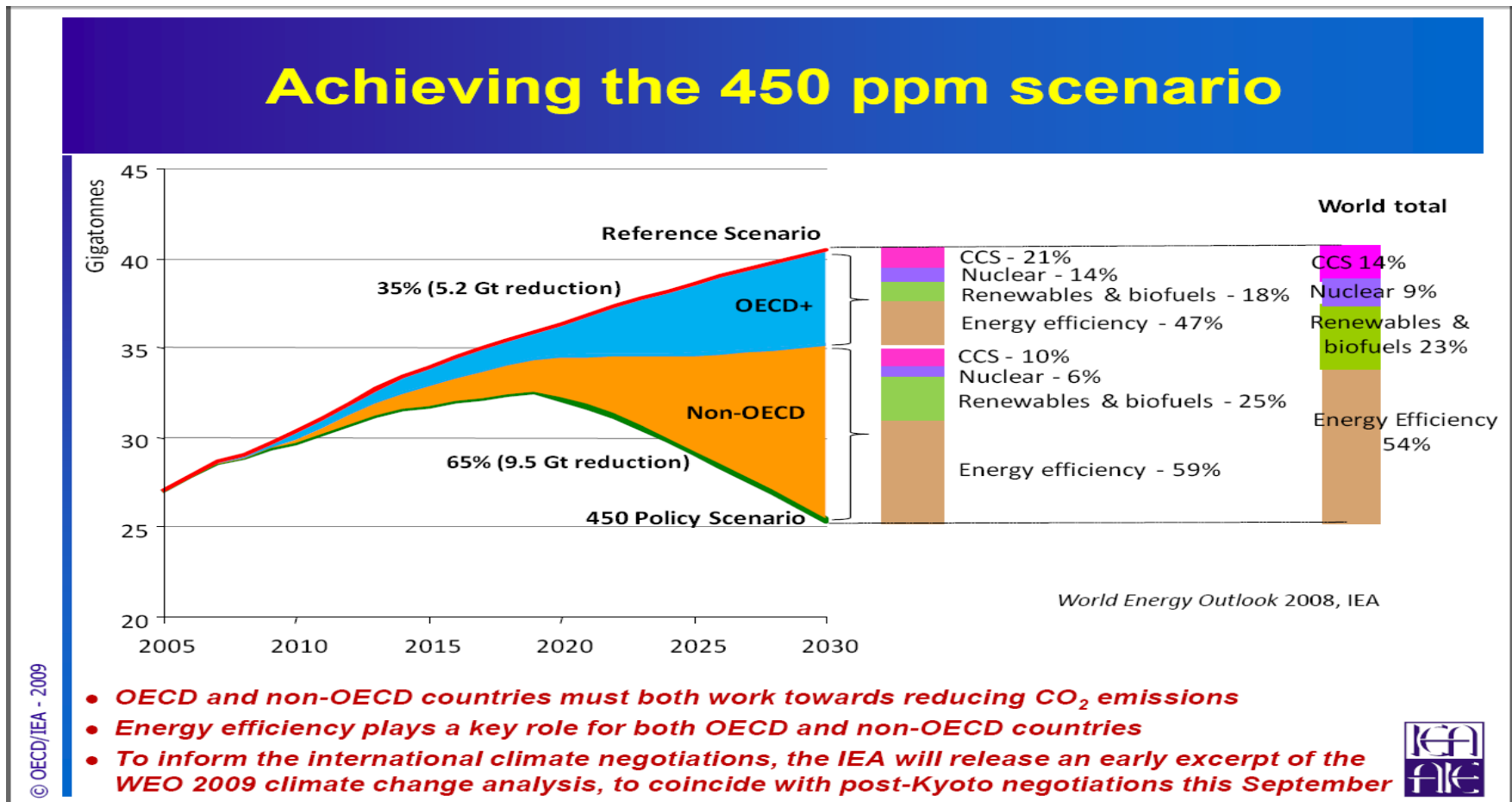
- **Since 2006, major development of European Energy standards motivated by an ambitious European policy:** Reducing energy consumption and increasing energy efficiency are among the main goals of the European Union. In March 2007, the European Council endorsed three ambitious targets for 2020: cutting greenhouse gases by 20%, reaching 20% of energy from renewable sources, and increasing energy efficiency by 20%.
- Important European standardization program in relation with :
 - ➔ **Directive 2006/32/EC on energy efficiency and services**
- Several standards developments consistent with :
 - ➔ **Directive 2002/91/EC on energy performance of buildings**
 - ➔ **Directive 2005/32/EC on energy using products (EuP)**
 - ➔ **Directive 2009/28/EC on Renewable Energy Sources**
- ISO and IEC standardization program on energy efficiency and Renewables launched in 2008



GHG reduction (energy emissions) (IEA, G8 Energy, May 2009)



Energy Efficiency = 54 % of GHG reduction potential by 2030



- **OECD and non-OECD countries must both work towards reducing CO₂ emissions**
- **Energy efficiency plays a key role for both OECD and non-OECD countries**
- **To inform the international climate negotiations, the IEA will release an early excerpt of the WEO 2009 climate change analysis, to coincide with post-Kyoto negotiations this September**



© OECD/IEA - 2009

ADEME



afnor
NORMALISATION



CENELEC

Standards and Energy Management : a major challenge in the energy efficiency market

ADEME

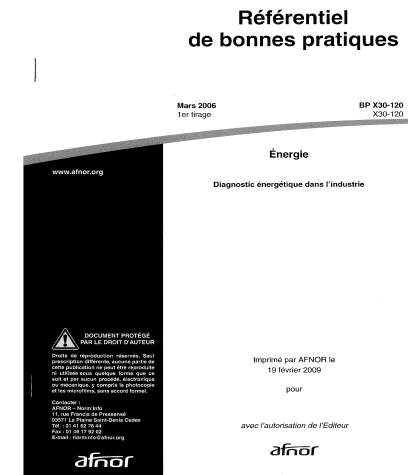
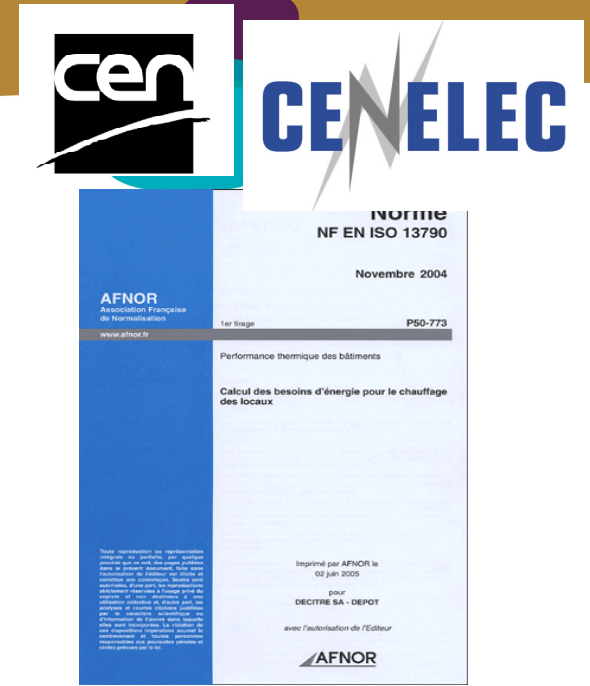


afnor
NORMALISATION

What's a standard ?

● A reference document :

- Elaboration : consensus
- Application : voluntary
- Added value : solutions to repetitive technical, commercial and societal questions
- Domains/sectors : all

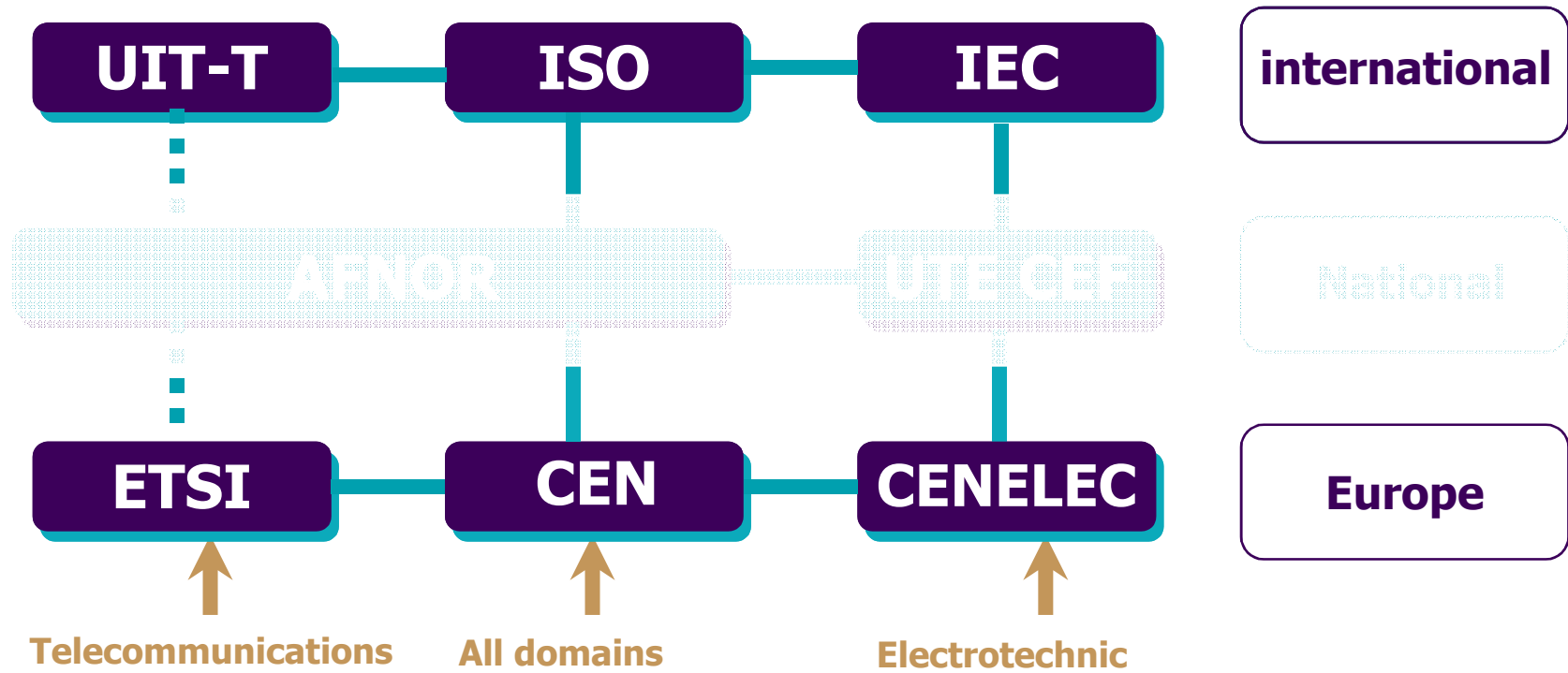


ADEME



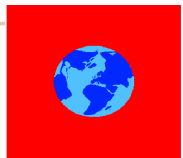
afnor
NORMALISATION

How is standardization organized ?



Ex. AFNOR is the French member of the international standards organisations (84% of the French standards come from European and/or International ones).

ADEME



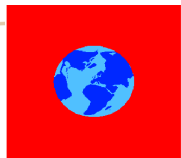
afnor
NORMALISATION



● How the story started ...

- **2002 - 2005 : CEN CENELEC BT Joint Working Group “Energy Management”**
 - Identified 21 standardization priorities on energy management
 - Recommended to create a new horizontal strategic body on energy management
 - Promotion of energy management and efficiency, Information exchange, standardisation needs, TCs coordination ...
- **In 2006, CEN and CENELEC Technical Boards**
 - created a joint **CEN/CENELEC Sector Forum (SFEM), AFNOR secretariat**
 - created two joint CEN/CENELEC Task Forces on
 - TF 189 “Energy Management and related services”, secretariat UNI**
 - TF 190 “Energy efficiency and savings calculations”, secretariat NEN**

A D E M E



afnor
NORMALISATION

Sector Forum « Energy Management »



● How SFEM works ...

- Sector Forum SFEM meets twice a year
- Around 40 experts at each meeting
 - 18 CEN and CENELEC members with new members starting to participate (Cyprus, Slovakia, Slovenia)
 - European organisations :
 - European Commission : **DG TREN, DG ENTR, DG ENV,**
 - Main professional organisms : **IEA, CECED, CONCAWE, EHI, EURELECTRIC, MARCOGAZ, NORMAPME, PU Europe ...**
 - Consumers and citizens : **ANEC, ECOS**
 - **CEN and CLC TCs** on energy, buildings, environment, transport, products/equipment (pumps, ...) ...
- Liaison/coordination with
 - **ISO/SAG E and IEC/SG1** on energy efficiency and renewable energy
 - **CEN/ SABE** : CEN BT Strategic Advisory Body on Environment
 - CEN/CENELEC/ETSI **Smart meters coordination group SMCG**

A D E M E



afnor
NORMALISATION



● How SFEM works ...

● Information from EC on progress on the implementation of main EU directives

- Energy using products (2005/32/EC)
- Energy efficiency and services (2006/32/EC)
- Renewable Energy Sources (2009/28/EC)

● Working groups to analyse thoroughly priority subjects for standardisation

- **Benchmarking methodology on energy uses** (NEN)
- **Calculation method for energy efficiency in transport services** (AFNOR)
- **Energy audits** in industry, transport and buildings (BSI)
- **Terminology** (AFNOR)
- **Guarantees of origin and energy certificates** (SIS)

● Information from TCs or TF (TF189 and 190) on the progress of their work

ADEME



afnor
NORMALISATION

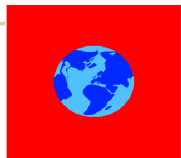


● The results ...

Standards published or under way

- **EN 16001 on Energy Management Systems**, publication **1st of July 2009** (SIS-Sweden)
- **EN 15900 on Energy Efficiency Services**, CEN/CLC Enquiry until June 2009, **publication Q4 2010** (TF189 PT EES, UNI-Italy)
- **Working drafts on Top down and Bottom up** energy efficiency and savings calculations, **Q3 2009**, (TF190, NEN-Netherlands)
- **CEN/ CLC Technical report on Terminology** on energy management and energy efficiency, **publication Q4 2009** (SFEM WG, AFNOR-France)

A D E M E



afnor
NORMALISATION



● The results ...

New standardisation work

- CEN/TC320/WG10 on **Energy consumption and GHG emissions in relation to transport services** : started December 2008, AFNOR-France
- CEN/CLC/TF189/PT **Benchmarking methodologies for energy uses** : started March 2009, NEN-Netherlands

What is next

- CEN/CLC/WG on **Energy Audits**, BSI (started June 2009)
- CEN/CLC/ WG on **Guarantees of Origin**, SIS.

ADEME



afnor
NORMALISATION

Sector Forum « Energy Management »



- ❖ **CEN/CENELEC Sector Forum on Energy management** is of good support to facilitate the outcome and then the acceptance by Members of **new subjects related to EU legislation and to sector needs** within CEN and CENELEC work programmes;
- ❖ It allows **a community of experts** to meet and exchange, to be informed of stakes and available best practices and then **to decide of the main European standardisation priorities** dealing with energy management, energy efficiency and renewable energies.

ADEME



afnor
NORMALISATION

ISO : Energy Efficiency and Renewables



CENELEC

- **Strategy Advisory Group ISO/SAG E “Energy Efficiency and Renewables” started in 2008**
 - 20 international experts, co-chair Carole Le GALL (France, ADEME/CSTB) and YANG Zeshi (China, SAC)
- **Missions of SAG E :**
 - Identify priority topics for normalization
 - Coordination with IEC
- **Collaboration with international structures IEA, WEC, ...**
- **Joint IEA/ISO/IEC workshop on “International Standards to promote Energy Efficiency to reduce GHG Emissions” Paris, March 2009 (300 participants)**

ADEME



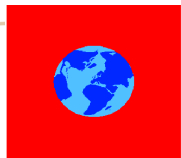
afnor
NORMALISATION



New ISO topics...

- **Energy Management Systems (Standard ISO 50001)**
 - PC launched September 2008
 - **Leadership : USA/Brazil/UK, and support from China**
 - First project **ISO 50001** circulated June 2009
 - Publication by end 2010
- **International Terminology on Energy Efficiency and Renewables (joint committee ISO/IEC)**
 - New project launched Q4 2009
 - **Leadership : France (ADEME/AFNOR)**
- **Energy Efficiency and savings calculation methods**
 - New ISO proposition from **China** in preparation

ADEME

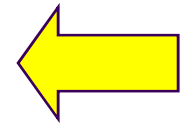


afnor
NORMALISATION

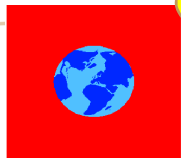
Conclusion



- Main standardization activity at both European and international levels to define **transversal tools** needed to implement legislation and answer market
 - Terminology and Metrics
 - Management and organization
 - Practices and procédures
 - Qualifications
- **EN 16001** – is the first European standard to be published on energy management
- Next steps for the CEN CENELEC Sector Forum :
 - Follow up of the implementation of the EN16001 standard by organisms
 - Organize the European inputs to the future international standard ISO 50001
 - Analyze the needs of European stakeholders for standards on energy management and energy efficiency



ADEME



OCDE - 82 % of GHG emissions are related to energy use
Outside OECD - 59 %
Scénario + 2°C: EE potential to reduce GHG emissions 54%

NORMALISATION

Sector Forum « Energy Management »

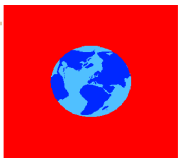


- Next meeting will take place in Brussels,

On December 10, 2009

Thank You For Your Attention

ADEME



afnor
NORMALISATION