Strategies for development and diffusion of energy efficient distribution transformers

**SEEDT**

Contract number: EIE-05-056

http://seedt.ntua.gr/

- Co-ordinator: National Technical University of Athens - Greece
- Project duration: January 2006-June 2008
- Duration: 30 months
Aim of the project:
- to promote the use of energy efficient Distribution Transformers (DT)
- to propose and apply strategies for reducing energy losses in DTs

Strategies to achieve the aims:
- Dissemination of information and best practices
- Promotion of the economic benefits of energy efficient DTs
- Information and support for users when buying DTs
- Economic instrument
- Legislation
UK regulator OFGEM: Consultation on distribution network losses

CENELEC: Efficiency standards HD428 and HD538, EN 50464 1

International Energy Agency: Energy efficient distribution transformers: a hidden opportunity for large scale energy savings

THERMIE projects on DTs: a) Demonstration of energy saving in distribution transformers with amorphous metal cores, b) The scope of energy saving in the EU through the use of energy-efficient electricity distribution transformers

3rd international workshop on DT efficiency (2002)

SUPERTRAFO project: Loss measurements, on site comparisons and demonstration of energy saving potential

LEONARDO ENERGY initiative: Promotion partnership for high efficiency transformers (PROPHET)
Achieved results (1)

- Identification of problems related to the promotion of energy efficient DTs
- Dissemination of SEEDT objectives in round table discussions, national & international workshops and conferences
- Publication of 4 biannual newsletters
- Development of the web based interactive tool TLCalc for optimum techno economic choice of DT
- Publication of the guide “Selecting energy efficient distribution transformers: A guide for achieving least-cost solutions”
Achieved results (2)

- Proposal of intensive mechanisms & changes in the regulation schemes of the EU countries
- Proposal of a minimum efficiency mandatory standard
- 3 models for energy classification (labelling) of DTs
- Development of a calculation model:
  - 12 TWh/year energy savings
  - 4 million tons/year reduction in CO2 emissions
- Inclusion of DTs in the list of products of the Eco Design Directive
Partners & Contact

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