

EEDAL'03 Concurrent Session Programme

Wednesday 1 October 14:00 – 15:30

Session 1: Water Heaters

Chair: Matthew Kestner, European Commission DG TREN

- Performance of domestic water heating systems and appliances
Bruce Young, Building Research Establishment, UK
- Towards a Better Use of Solar Energy in Domestic Hot-Water Systems
Tomas Matuska, Czech Technical University, Czech Republic
- Electric Storage Water Heaters Energy Label
Mohammad Reza Kargahi, National Energy Conservation Laboratory, Iran
- The Potential of Energy Efficiency and Load Management Activities at South African Tertiary Institutions for Sustainable Usage of Electrical Energy
OD Dintchev, Technikon Northern Gauteng, South Africa

Session 2: Policies Strategies

Chair: Brenda Boardman , University of Oxford, UK

- Efficient Appliances as Keystone Strategy in long-term Energy Policies – a Policy Oriented Scenario Approach
Stefan Lechtenböhrer, Wuppertal Institut für Klima Umwelt Energie GmbH, Germany
- Eco-efficiency Analyses for Domestic Appliances
Ina Rüdener, Oeko-Institute e.V., Germany
- Co-ordination of Energy Standards In A Strategic International Context – Development of a Roadmap to the Future (or “How Do We Get From Here to There and Who are We and Where is There”)
Frank Pool, Consultant, New Zealand
German National Campaign to reduce CO₂ due to standby, white goods and lighting
Jörg Zöllner, German Energy Agency: HEA e.V. with VDEW, Germany

Session 3: Power supplies

Chair: Alain Meier, IEA, France

- Benefits of high efficient power supplies
Christoph Jehle, Universität Witten / Herdecke GmbH, Germany
- The EU Code of Conduct for External Power Supplies, could it

- *Paolo Bertoldi, European Commission JRC*
- Technological solution for low power modes
Ben Sutherland, Power Integrations (Europe) Ltd, UK
- The US and the international programmes for efficient power supplies
Speaker to be confirmed

Session 4: Consumer Behaviour 1

Chair: Rene Kemna, VHK, the Netherlands

- Energy labelling of laundering appliances; setting the future standards
P.M.J. Terpstra, Wageningen University; the Netherlands
- A Method for the Estimation of Households Energy Saving According to the Social Profile
Casado J.C., Universidad Nacional de Tucumán, Argentina
- A European Comparison of Cleaning Dishes by Hand
Rainer Stamminger, University of Bonn Section Household and Appliance Technology, Germany
- Greenhouse Gas Emissions by Cooking With Different Fuels in Developing and Industrialised Countries
Michael Grupp, Synopsis, France

Wednesday 1 October 16:00 – 18:00

Session 5: Lighting 1

Chair: Roberto Borsani, CELMA, Italy

- Mass Deliveries of CFLs as a Response to the Energy Crisis: Evaluation of California's 2001 CFL Programs
Tami Rasmussen, KEMA-XENERGY, USA
- Promotion of Energy Efficient Lighting
Gerald Strickland, European Lighting Companies Federation, Belgium
- Partnering for a National Lighting Fixture Design Competition; The United States Experience
Mark Hoffman & Rebecca Foster, Consortium for Energy Efficiency, USA
- Transforming the market for residential lighting: why is it so difficult?
Paolo Bertoldi, European Commission DG JRC
- Residential Lighting efficiency developments in the UK
Keven Verdun, The Lighting Association, UK

- Techniques to Accelerate Acceptance of Energy Efficient Lighting in Residential Applications
Patricia Rizzo, Lighting Research Centre, USA

Session 6: Motor Technology

Chair: Francesco Parasiliti, University of l'Aquila, Italy

- Low – Cost Redesign Criteria for the Efficiency Improvement of Universal Motors used in Domestic Appliances,
A. Di Gerlando, Politecnico di Milano, Italy
- Energy Efficiency Potential and its Implementation for Inverter Controlled Refrigerators/Freezers,
Wen-Ruey Chang, Energy and Resource Laboratories, Taiwan
- Experimental Development of Inverter-fed DC Compressor Drivers for Residential Refrigerator,
Yen-Chang Chen, Industrial Technology Research Institute, Taiwan
- Energy Consumption of Domestic Refrigerators Using Electronic Energy Saving Equipment,
J. Van den Keybus, Katholieke Universiteit Leuven, Belgium
- A novel digital Controller for Energy Saving Motor Drives in Particular for Refrigeration and Air Conditioning Applications,
Tarinderjit Singh Lehal, Savawatt UK
- Energy Efficiency Improvements for Small Motor in the Household Appliances: Draft Study on the Italian Market (part I) & (part II),
Norma Anglani, University of Pavia, Italy

Session 7: Developing Countries

Chair: Mohan Peck, UN

- Rural Empowerment through PV Solar,
Ernst A. Uken, Cape Technikon, South Africa
- Strategic Energy Policy for the 21st Century in Sudan and The Independent Role of the In-Leads,
Mrs. Suaad Badri, Ahfad University for Women, Sudan
- Problems and Prospects of Using Micro-hydro in Nepal as CDM Project,
Jiwan S. Acharya, Winrock International, Nepal
- Policies Options for Promoting Energy Efficiency and Curbing Stand-by Electricity Consumption Growth: Perspectives from Asia and the Pacific,
Ralph Wahnschafft, UNESCAP, Thailand
- An Enterprise-led Approach to Commercialization of Energy Efficient Products and Services: Lessons from the African Rural Energy Enterprise Development Initiative,
Agbemabiese Lawrence, UNEP, France

Session 8: Demand Response

Chair: Mike Jones, IEA, France

- A Case Study in Residential Demand Response Program Design and Evaluation: The Pilot Smart Thermostat Program,
Kathleen Gaffney, KEMA-XENERGY, USA
- Demand Response and the Need for Intelligent Appliances,
Malene Hein Nybroe, Elkraft System, Denmark
- Combining Tariffs Reform and Appliances Substitution: From the Case of Lebanon to the Design of Tariffs and Procedures for Sustainable Development at Homes,
Bernard Cornut, ADEME Intl Division, France
- Cost-Effectiveness of Price Response in the Residential Sector: Preliminary Findings from the California Experience,
Karen Herter, LBNL, USA
- Energy Price Reform: A Powerful Economic Tool to Increase Energy Efficiency,
Laszlo Molnar, Energy Centre Hungary, Hungary

Thursday 2 October 09:00 – 11:00,,

Session 9: Lighting 2

Chair: Jiang Lin, Lawrence Berkeley National Laboratory, USA

- Development of LED Lighting Module,
Li-Ling Lee, Industrial Technology Research Institute, Taiwan
- Energy Efficient Lighting – Strategic Policies and Measures in the IEA member countries
Satoshi Tanishima, International Energy Agency
- Performance Test Results of Compact Fluorescent Lamps Bearing the Efficient Lighting Initiative (ELI) Logo,
Kathryn M. Conway, ELI, USA
- MEPS, Certification and Improvements in Production Capacity Just for Starters! Where is China Greenlights Going next?,
Ms. Liu Hong, China Green Lights, China
- Increasing confidence in Compact Fluorescent Lamps: the European Quality Charter,
Vincent Berrutto, European Commission, DG JRC

Session 10: Boilers 1

Chair: Flavio Conti, Italy

- Technology Study of High Efficiency Circulation Pumps for Domestic Applications,

Thorsten Kettner, WILO AG, Germany

- Clever and Powerful CO₂-Prevention: Heat Pumps for Efficient Heating or even Heating and Cooling – one for two!,
Hansueli Bruderer, European Heat Pump Association EHPA, Switzerland
- Classification of Circulators,
Niels Bidstrup, Grundfos Management A/S, Denmark
- Less Oil for heating / Oil condensing boilers are becoming Standards,
Georg Benke, The Austrian Energy Agency, Austria

Session 11: Standards & Labels 1

Chair: Frank Pool, New Zealand

- Retrospective Analysis of Appliance Efficiency and Retail Price Trends
Larry Dale, Lawrence Berkeley National Laboratory, USA
- Coupling Market Transformation with Reasonable Appliance Standards (A Case Study),
Mike Thompson, Whirlpool Corporation Administrative Center, USA
- Regulating the Labelling of Household Appliances in Canada,
Ken Tiedemann, Habart & Associates Consulting, Canada
- Energy Efficiency Standards and Labelling of Household Appliances in the Andean Community – National Programmes and the Prospects of Regional Harmonisation,
W.F. Lutz, Energy Strategies for Sustainable Development, the Netherlands
- Managing the Convergence of Energy Labelling Programs in Australia
Tony Marker, Australian Greenhouse Office, Australia

Session 12: Policy Delivery

Chair: Mark Hoffman, Consortium for Energy Efficiency, USA

- Tracking Market Shares of High-Efficiency Measures in California's Residential Sector,
Fred Sebold, Regional Economic Research, Inc., USA
- Energy consumption of domestic appliances in European households – results from stock model calculations,
René Kemna, VHK, the Netherlands
- The Energy Impact of Different Cold Appliances and Washing Machines Policy Scenarios in The European Countries: The Results of the E-GRIDS Project,
Stefano Faberi, ISIS, Italy
- The historic and potential impact of residential electrical equipment energy efficiency policies in the OECD,
Paul Waide, PW Consulting, UK
- Trends in the Energy Consumption of major Household Appliances shipped in Canada,
Jean-François Bilodeau, Natural Resources Canada, Office of Energy Efficiency, Canada

- Evolution of sales of domestic appliances
Matilde Soregaroli, GFK, Italia

Session 13: Market Transformation 1

Chair: Stefan Thomas, Wuppertal Institute, Germany

- Recommending “Best Choice” to Consumers,
Paul White, MTP UK and Kelly Butler, EST, UK
- HomeSpeed: a pan-European database, basis for market transformation,
Hans-Paul Siderius, Novem, the Netherlands
- EcoTopTen – Innovations for Sustainable Consumption,
Carl-Otto Gensch, Oeko-Institute e.V., Germany
- TopTen.ch.
Eric Bush, Swiss Agency for Efficient Energy Use c/o Bush Energy GmbH, Switzerland
- Estimating Baseline and Projected Market Shares from MT Interventions with Limited Observations – Making the Most of Your Data,
Lisa A. Skumatz, SERA, USA

Thursday 2 October 11:30 – 13:00

Session 14: Standards & Labels 2

Chair: Christine Egan, CLASP

- The Influence of Energy Efficiency Legislation and Standards for Appliances in Israel, on Electricity Consumption and Peak Load
Eddie Bet-Hazavdi, State of Israel / Ministry of National Infrastructure, Israel
- The Influence of the Energy Labelling Legislation on Energy Efficiency in the Household Sector – The Experience of the Czech Republic
Tomáš Voříšek SEVEN, The Energy Efficiency Center, o.p.s., Czech republic
- Energy Efficiency Standards and Labelling of Household Appliances in Algeria – from Programme design to Implementation
M.S. Bouzeriba, APRUE, Algeria
- Energy efficiency standards for residential refrigerators in Brazil: results from a life-cycle cost analysis.
Gilberto DeMartino Jannuzzi, International Energy Initiative, Brazil

Session 15: Boilers 2

Chair: Felix Van Eyken, EHI

- Boiler Energy Labelling and Associated Measures in the UK
Bruce Young, Building Research Establishment, UK
- Voluntary Certification Programs for Heating Products in the U.S.
Mark Kendall, Gas Appliance Manufacturers Association, USA
- Promotional campaign for the installation of 4 star boilers
Marcello Antinucci, AESS, Italy
- How to label Heating Systems – Suggestions and Positions of Industry
Stefan Lechtenböhmer, Wuppertal Institut für Klima Umwelt Energie GmbH, Germany

Session 16: Appliance Technologies

Chair: Franco Moretti, Whirlpool Europe and CECED, Italy

- Revised U.S. Test Procedures for Dishwashers
Larry Wethje, AHAM, USA
- A lifecycle approach on energy efficiency of appliances in Brazil,
Paulo Vodianitskaia, Multibras S.A. Eletrodomesticos
- North American Test Procedures Electric Ranges,
Katherine Delves, Natural Resources Canada, Canada
- Energy efficiency in cooking: The superiority of Gas Cooking in Terms of Primary Energy and recent EEC Directives on Energy labelling of Electric Ovens
Luca Salvi, SABAF Spa, Italy

Session 17: Standby Losses

Chair: Michel Machiels, UIE

- Industry led improvements in Energy Performance of Electronic Products now and the Future,
Peter Evans, EICTA, Sony Visual Products Europe, UK
- Energy Efficiency of Computer Power Supplies,
Bernard Aebischer, CEPE, ETH- Zentrum, Switzerland
- Future Impact of Digital TV Services and Broadband Internet Connections on Residential Energy Consumption
Barbara Schlomann, Fraunhofer ISI, Germany
- Profiling stand-by power in Australia,
Charles Edlington, Australian Greenhouse Office, Australia

Session 18: Monitoring

Chair: Nico Beute, Cape Technikon University, South Africa

- Non-Intrusive Electric Appliances Load Monitoring System,
Yukio Nakano, CRIEPI, Japan
- End-use Metering Campaign in 110 Households in Italy; Analyses of Energy Saving Resources and of the Potential Impact of Demand Response Activities
Lorenzo Pagliano, Politecnico di Milano, Italy
- Intelligent 3-phase metering system for recording power quality and end-uses non-intrusively in residences,
Hannu Pihala, VTT Technical Research Centre of Finland, Finland
- Watteco, towards an Electricity Efficiency Service,
Alain Anglade, ADEME / DMDE, France

Thursday 2 October 14:00 – 15:30,

Session 19: Lighting 3

Chair: Nils Borg, IAEEEL, Sweden

- Life Cycle Cost and Emission Reduction of Lighting Retrofits in Malaysia Residential Sector,*T.M.I.*
Mahlia, University of Malaya, Malaysia
- Domestic Retrofitting of Incandescent Lights with Compact Fluorescent,
Fatouh Al-Ragom, Kuwait Institute for Scientific Research, Kuwait
- The development of LED lighting in the domestic sector
Nico Beute, Cape Technikon University, South Africa
- The Results of the EU CFL Campaigns
Vasco Janeiro, Eurelectric, Belgium

Session 20: Energy Star

Chair: Reinhard Höhn, IBM

- You Snooze... You Save: The Benefits of Enabling ENERGY STAR® Office Equipment,
Katherine Johnson, KJ Consulting, USA
- Energy Star: Actual Market Relevance and Prospects for the Future – An Austrian Market Study,
Bernd Schächli, E.V.A., Austria
- Marketing Energy Efficient Consumer Electronics and Office Equipment / Experiences with Government, retail trade, consumers and industry,

A.F.J. van de Water, Novem, the Netherlands

- Energy Star, a false start?,
Alain Anglade, ADEME, DMDE, France

Session 21: Consumers' Behaviour 2

Chair: Hideotoshi Nakagami, Jyukankyo Research Institute Japan

- Design and Functionality of Prospective Energy Consumption Displays,
Marcus Newborough, Heriot-Watt University, UK
- Analysis on Energy Saving Activities Induced by Information Display System in Residential Houses,
Tsuyoshi Ueno, Osaka University, Japan
- The Romanian Domestic Consumption: a Dynamic Trend for a Transition Economy,
Oana Popescu, SC Electrica SA, Rumania
- Residential Consumer Behaviour During and After an Energy Crisis,
Raymundo Aragao Neto, IIEC, Brazil

Session 22: Market Transformation 2

Chair: Vincent Berrutto, European Commission, DG JRC Ispra, Italy

- Public Procurement of Efficient Products: Make it Happen!,
Stefan Thomas, Wuppertal Institut für Klima Umwelt Energie GmbH, Germany
- Procurement programs – a blessing for white goods suppliers or a waste of resources,
Tomas Dahlman, Electrolux Home Products, Belgium
- Long Lists, Colourful Pictures or Confusing Labels – How to Seduce Consumers to Buy Efficient Appliances,
Kerstin Kallmann, Berliner Energieagentur GmbH, Germany
- “The Mother” of Non-Energy Benefits (NEBs) Studies – Comprehensive Analysis and Modeling of NEBs for Resource Acquisition and Market Transformation Programs,
Lisa A. Skumatz, SERA, USA

Session 23: Washing Technology

Chair: Rainer Stammiger, University of Bonn, Germany

- How accurate can we measure dishwasher performance,
Hans Beer, BSH Bosch und Siemens Hausgeräte GmbH, Germany
- Global Application of IEC 60456,
Anthony Hardaway, Whirlpool, USA
- Energy efficiency of different dryer types in a real-life environment,

Christoph Wendker, Miele & Cie. GmbH & Co, Germany

- Recent improvements of the measurement standard for washing machines
Ulrich Sommer, Federal Institute for Materials Research and Testing (BAM), Germany

Thursday 2 October 16:00 – 18:00

Session 24: Lighting 4

Chair: Ronnie Belmans, University of Leuven and UIE, Belgium

- Beyond efficient lighting demonstration projects in Latvia,
Dagnija Blumberga, Riga Technical University, Latvia
- Is Electricity Efficiently Used For Lighting In Households from Romania,
Camelia Burlacu, Electrica S.A., Romania
- Energy Efficient Lighting Technologies Market Penetration in the Czech Conditions – an example of the ELI Initiative,
Juraj Krivošik, SEVEN, The Energy Efficiency Center, o.p.s., Czech Republic
- CFL Promotion in the Hungarian residential sector in the framework of the ELI program Activities and result,
Zoltán Lontay, EGI Contracting-Engineering Co. Ltd., Hungary
- Institutionalizing the ELI Quality Mark: Crafting a Sustainable Post-Program Implementation Legacy,
Russel Sturm, International Finance Corporation, USA
- Energy Efficient Lighting in South Africa,
Ken Tiedemann, Habart & Associates Consulting, Canada

Session 25: Cold Appliances

Chair: Paolo Manini, SAES Getters S.p.A., Italy

- Analysis of the impact of relevant parameters concerning stability and energy consumption of household cooling appliances,
Friedrich Arnold, BSH GmbH, Germany
- Energy Efficiency labelling and Standards – Household Refrigerating Appliances for Kimchi,
J.Y. Choi, Korea Testing Laboratory, Korea
- Identification of Domestic Refrigerator Models Including Cool Storage,
G. Cerri, University of ROMA TRE, Italy
- Experimental Performance Evaluation of High Efficient Household Refrigerating Appliances in Standard and Non Standard Framework,
Simonetta Fumagalli, ENEA ENE-TEC, ICELAB Laboratory, Italy
- Effects of Ambient Temperature and Consumer Behaviour on Energy Consumption of a Household Refrigerator Modelling and Experimentation,

Yamina Saheb, LESETH-UPS, France

- The Effect of Blowing Agent Choice on Energy Consumption and Environmental Impact of a Refrigerator ,
Robert W. Johnson, RWJ Consulting, Inc., USA

Session 26: Focus on China

Chair: Benoit Lebot, IEA, France

- Background, Development and Implementation Processes of the Hong Kong Voluntary Energy Efficiency Labelling Scheme,
Tseng Hing-wah, Electrical and Mechanical Services Department, Government of the Hong Kong Special Administrative Region
- Made for China: Accelerated Adoption of Efficiency Standards and Labels in China,
Jiang Lin, Lawrence Berkeley National Laboratory, USA
- Present Status and Perspective of Energy Efficiency Certification in China,
Liu Caifeng, CECP, China
- The Design and Implementation of China's Energy Efficiency Information Label,
Jin Minghong, China National Institute of Standardisation, China
- Research on Energy Saving Potential from Standards and Labels for Chinese Major Energy-Using Products,
Liang Xiuying, China National Institute of Standardisation, China
- Transforming the Refrigerator Market in China: View from a Project Mid-Point,
Mohan Peck, United Nations Department of Economic and Social Affairs

Session 27: Policy Strategies

Chair: James McMahon, LBNL USA

- Household Energy End-Use Survey as a Basis for Devising Residential Energy Efficiency Strategy,
David Cogan, David Cogan Engineering Professional, New Zealand
- The Heat Replacement Effect – are we claiming the right saving?,
Bruce Young, Building Research Establishment, UK
- Early Adoption or Quantum Leap in Appliance Energy Efficiency Policy,
Piotr J. Tulej, International Energy Agency
- An Investment of the European Production of Refrigerators with Energy Efficiency Improvements: the Results of the E-GRIM model,
William M. Mebane, Italy
- Vintage Stock Modeling of Domestic Appliances: Dealing with Uncertainties,
Chris Riedy, University of Technology, Australia
- Public Awareness Initiatives for an Energy Sustainable Europe,
Rayner Mayer, Sciotech, UK

Session 28: Distributed Generation

Chair: John Mollet, International Copper Association

- Domestic Energy Optimisation (DEO): An EC supported demonstration project of microCHP and other Energy Efficient Domestic Applications,
Simon Burton, Faber Maunsell Ltd, Brussels Office, Belgium
- Domestic Refrigerator Energy Saving Through Cool Storage,
G. Cerri, University of ROMA TRE, Italy
- Effectiveness of Micro Cogeneration System for Japanese Residential Houses Based on the Monitored End-use Energy Demand Data,
Fuminori Sano, Osaka University, Japan
- A 4 years feedback of DSM / DGE in Saint Nicolas des Glénan Island,
Jean-Christian Marcel, Transenergie, France

Friday 3 October 09:00 – 11:00

Session 29: Home Automation 1

Chair: Ettore Arione, Whirlpool Europe, Italy

- Smart Appliance Alliance Promotion in Taiwan,
Cheng-Ting Lin, Industrial Technology Research Institute, Taiwan
- Next Generation Energy Management ,
Giuseppe Casella, Echelon South Europe, Italy
- Konnex/Lon Talk compliant method for connecting white goods to a home network at a very low cost,
Valerio Aisa, WRAP Spa – Merloni Group, Italy
- Smart Meters for Energy Saving,
Fabio Barretta, Microlab Sistemi Srl., Italy
- Household Electricity Usage Display and Intelligent Metering Using Current Digital Service System Reception Platforms (Set Top Box),
Bob Harrison, ITS Research and Testing Centre, UK

Session 30: Standards & Labels 3

Chair: Diana Vorsatz, ECU, Hungary

- Globalisation and the European Energy Label : Refrigerating Appliances Performance Measurements ,

- *Franco Moretti, Whirlpool Europe Government Affairs, Italy*
- Development of the Energy Standards Information System (or “Who Does What, To What And With Whom”),
David Cogan, Consulting Engineer, New Zealand
- Regional Co-operation in Energy Efficiency Standard-Setting and Labelling in North America,
Stephen Wiel, LBNL, Lawrence Berkeley National Laboratory, USA
- Recent Analyses of Energy, Economic and Environmental Impacts from U.S. Appliance Standards,
James E. McMahon, LBNL, E.O. Lawrence Berkeley National Laboratory, USA
- Energy Efficiency Standards and Labels for Residential Appliances as an Important Direction of the Russian Energy Conservation Policy in Households,
Garegin Aslanyan, Research Institute for energy Policy of the Ministry of Science, Russia

Session 31: HVAC 1

Chair: Sule Becirspahic, Eurovent

- Use of Water-bearing Stratum for Building Climatisation by means of a Heat Exchanger coupled with Heat Pump. Pilot Plant and preliminary Test Results,
R. Viadana, CESI, Italy
- An Energy-Efficient Heat Exchanger for Air-Conditioners,
Se-Yoon Oh, LG Electronics, Digital Appliance Laboratory, South Korea
- Assessment and Modelling of Cool Storage Alternatives in The Residential Sector,
Antonio Gabaldon, Universidad Politécnic de Cartagena, Spain
- Application of Flattened Tubes to Small Evaporators: What are the Pros and Cons,
John R. Thome, EPFL / STI / LTCM, USA

Session 32: Market Transformation 3

Chair: Paul Waide, UK

- The California Residential Lighting and Appliance Program (1999-2001): Lessons Learned from a Multi-Phase Market Effects Evaluation,
Tami Rasmussen, KEMA-XENERGY, USA
- Innovative Approach Applied to Estimating Net Impacts of Residential Equipment Programs,
Mitchell Rosenberg, KEMA-XENERGY Inc., USA
- Reaching the Consumer: Different Approaches and Common Themes,
Marci Sanders, Northwest Energy Efficiency Alliance, USA
- Tracking the Effectiveness of Energy-Efficient Appliance Programs in the U.S.,

Elizabeth Titus, Northeast Energy Efficiency Partnership, Inc., USA

- FIDE's Financing Programs for Refrigerators, CFL's and Air Conditioning Units in Mexican Residential Sector,
Jose Antonio Urteaga Dufour, Mexico

Friday 3 October 11:30 – 13:00,,

Session 33: Home Automation 2

Chair: Jacques Roturier, University of Bordeaux, France

- Energy Analysis of the Future Life-House ,
Bernard Aebischer, CEPE, ETH-Zentrum, WEC, Switzerland
- Distributed Genetic Algorithms System for Efficient Use of Electrical Energy,
Fabio Garzia, Università degli Studi di Roma "La Sapienza", Italy
- Insertion of Boilers in Home Automation Systems,
D. Scaradozzi, University of Ancona, Italy
- Merged Title with #118: Preventive Maintenance through Energy Consumption Rationalisation in a domestic environment,
Paolo Falcioni, WRAP Spa – Merloni Group, Italy

Session 34: Climate Change

Chair: Tony Marker, AGO Australia

- Assessing the Impact of Fuel Pricing and Efficiency Improving on Energy Carriers Consumption and GHGs Mitigation in Residential Sector of Iran,
Mohammad Sadegh Ahadi, Iran's Climate Change Office, Iran
- Electricity Saving Possibilities in Household Appliances in Finland by the Year 2010,
Anne Korhonen, TTS Institute, Finland
- Potential of the Clean Development Mechanism on Residential Energy Efficiency Upgrades in Developing Countries: A Regional Perspective based on the Cases of China and India,
Young-Doo Wang, University of Delaware, USA
- A Method for Accurately Calculating the Carbon Savings Associated Reduced Electricity Demands,
Christine Pout, BRE, UK

Session 35: HVAC 2

Chair: Deborah E. Miller, Air-Conditioning and Refrigeration Institute

- Energy Efficiency for Residential Split Systems: Evolutions and Recent Innovations,
Giorgio Rusignuolo, Carrier Spa, Italy
- Residential central air conditioner standards in US: A Consumer Life-Cycle cost
Analysis of Regional Impacts,
Gregory Rosenquist, LBNL, USA
- The new Energy -Label for Residential Air conditioner:.,
Jerome Adnot, Ecole des Mines, Paris, France
- Industry Collaboration to Develop HVAC Equipment for the 21st Century,
Elizabeth Jones, P.E., Air-Conditioning & Refrigeration Institute, USA

Session 36: Market Transformation 4

Chair: Hans-Paul Siderius, NOVEM The Netherlands

- Buying Into Conservation – How Much Does it Matter Whether Customers Believe
They Can Effect Change?
Lisa A. Skumatz, SERA, USA
- Review of the German Campaign for Improving the Energy Efficiency of Domestic
Power Consumption,
A.-Cl. Agricola, Deutsche Energie Agentur, Germany
- Industrial Commitment – the case of wet appliances,
Franco Moretti, CECED, Italy
- The Impact of Energy+,
Brenda Boardman, University of Oxford, UK