

## SESSION 5C

### READY, AIM, IMPLEMENT: DESIGNING, IMPLEMENTING, AND EVALUATING ENERGY EFFICIENCY TARGETS

*Moderator: Nigel Jollands, IEA*

#### PANELISTS:

Claude Turmes [invited] [Backup: Marcella Pavan]

Paulo Bertoldi, European Commission

Dian Grueneich, California Public Utilities Commission

#### SUMMARY DESCRIPTION:

This panel examines the experience of policymakers in designing, implementing, and evaluating energy efficiency **targets** for a specific region (e.g., a state, country, or the European Community). The **design** of these targets is challenging, as multiple stakeholders with multiple objectives are involved in determining the type of target (electricity, natural gas, etc.), its specificity (e.g., 2% reduction in retail sales per year for 10 years), coverage (all sectors, or for specific sectors (e.g., industrial customers)), enforcement (e.g., penalties if the targets are not met or, conversely, incentives if the targets are exceeded), relationship to greenhouse gas (GHG) emissions reduction targets, etc. Similarly, the **implementation** of programs to attain these targets is challenging, as reflected in the following questions: Should implementation be based on voluntary efforts (e.g., lighting programs) or mandatory measures (e.g., appliance standards and building codes)? Will this be the responsibility of utilities, national energy agencies, or local governments? How will these efforts be funded (e.g., utility ratepayer funds, public goods charge (wires charge), bonds, loans, etc.)? And how will these efforts be financed by consumers (e.g., grants, loans, etc.)? Finally, the **evaluation** of whether these targets are reached will be based on how the targets are designed, but they can be based on a top-down approach (e.g., looking at large-scale indicators or macro-modeling (e.g., energy use per household, energy use per GDP, etc.) or on a bottom-up approach (e.g., evaluating projects and programs). The evaluation-related questions include the following: who does the evaluation (e.g., can the program administrator also do the evaluation?)? How much money should be spent on evaluation (e.g., should 4% of program funds be allocated for evaluation)? How will the results of the evaluation efforts be used for modifying targets? And how will the energy impacts be used for evaluating reductions in GHG emissions?