IEA-India Seminar on

Perspectives on appliance standards and labelling in IEA countries
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Opening Statement
by
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(Slide 1 - cover)
Honorable Chief Minister, Ladies and Gentlemen,

The International Energy Agency is very pleased to co-organise this important seminar with the Ministry of Power and the Bureau of Energy Efficiency. We are particularly pleased that this event coincides with the advent of a new era of energy efficiency activity in India and that the IEA has been invited to share the accumulated experience of our member countries.

I would like to offer a global perspective on policies to improve energy efficiency in appliances. To date appliance energy labels and efficiency standards have been implemented in some 54 countries around the world and are being developed in 19 more. The level of implementation varies considerably, as does the number of products for which labels and standards have been developed; however, it is remarkable that including India these programs are now in place or under development in countries comprising 80% of the world's population. That statistic alone is a striking testimony to the high credibility that standards and labeling programs have attained in recent years and is indicative of the substantial potential of these policy measures.

My perspective on this subject is reflected in three books published by the International Energy Agency and by numerous events and workshops we have held to discuss this subject.

In 2000 the IEA published Energy Labels & Standards (slide 2). This concise book reviews the range of appliance efficiency policies found around the world, from the Japanese TopRunner program to the European A – G label. The book (and our work since then) reached one very important conclusion: appliance efficiency standards work—regardless of where in the world they were implemented—they save energy at a savings to both consumers and society.

Energy labels are a critical element of an energy efficiency policy strategy as they provide the otherwise missing information on equipment energy use that is needed to allow demand and supply to interact on a level playing field. But there is both an art and science to creating an informative label that will guide consumers toward the appropriate purchasing decision. Poorly-designed labels can actually direct consumers towards the wrong product. This is why it is important that the effectiveness of a potential energy label, and particularly its capacity to be correctly understood, be market tested prior to its deployment.

In some ways an energy label is like a brand. It is competing among a sea of other signs and symbols to attract and maintain the interest of consumers, so that its message will be listened to and acted upon. Once a good label design has been established for a single product-type, e.g. refrigerators, it needs to be replicated for other products (room air conditioners, fans, lights, etc.) to ensure that brand recognition is built and that the intellectual investment required by consumers to understand the message is minimized.

But having a good label design is not enough. Just like commercial brands, energy labels require a large promotional effort to make them effective. This is needed not only to ensure that consumers recognize and understand them, but also to ensure that they remain intrigued and motivated by them. The US Energy Star Program

spends millions of dollars each year making certain that consumers know what the label looks like, what it means, and how to use it.

Recently the IEA published Things that go Blip in the Night: Standby Power and How to Limit it (slide 3). More and more appliances are consuming significant amounts of power when they are not being used just so they can be activated remotely or can be woken quickly from a sleep mode. Several appliances use more power over a year in this standby mode than they do when being used for their primary purpose. What's more, very cheap and simple low cost solutions exist to dramatically reduce or minimize this consumption.

Standby power consumption is a global phenomenon that requires global action and such collaboration. The IEA has begun to coordinate international efforts, most recently publishing the Blip book. There are now regulations or voluntary programs dealing with standby power in at least eight countries.

Last year the IEA published Cool Appliances: Policy Strategies for Energy-Efficient Homes **(slide 4).** This book quantifies the energy use of appliances in the OECD countries and the potential savings available through more comprehensive appliance standards and labeling. Total energy consumption of appliances is too large to be ignored. In the OECD they are responsible for roughly 30% of total electricity use. Electricity demand for these appliances continues to grow at a rapid pace and will continue if not addressed by aggressive policies.

The *Cool Appliances* book presents cost-effective savings potentials in the residential-electric sector. It shows that, under current policies, total residential electricity demand in the OECD is set to rise from 2000 TWh in 1990 to over 3000 TWh by 2020 (Slide 5a). However, if it had not been for the implementation of existing policy measures such as energy labeling, voluntary agreements and minimum energy performance standards electricity consumption in 2020

would be about 12% (393 TWh) higher (Slide 5b). But how much are these savings costing? *Cool Appliances* concludes that the current policies will produce cumulative net savings of US$172 billion in North America and €137 billion in OECD-Europe by 2020. In other words any small increase in appliance prices due to these policies is more than offset by the reduction in energy bills.

As large as these benefits are, we found that much greater benefits could be attained were existing policies to be strengthened. This untapped savings opportunity arises because current policies only address a subset of all appliance and equipment types and are rarely set at levels that would promote equipment with least life-cycle cost-efficiency. The least-life cycle cost is the minimized sum of the equipment price and its discounted life-cycle operating costs.

(Slide 5a,b & c) Residential electrical appliance electricity consumption under 'No Policies', 'Current Policies' and 'Least Life-Cycle Costs from 2005' scenarios in IEA countries, 1990-2030.

For example, were all policies to be strengthened to the point where the efficiencies of average electrical equipment sold in OECD countries were at the level equal to the lowest life-cycle cost for the consumer, OECD-wide residential electricity demand would fall to 1892 TWh in 2020 (the green line in Figure 3). This is 35% less than with the current mix of policies. And to do this would save money. In OECD Europe, for example, following this pathway would produce additional cumulative net cost savings of €266 billion by 2020 and in OECD North America of US$238 billion. This amounts to further averaged savings of $803 per capita to 2020.

The potential savings—like the present patterns of use—are distributed over many appliances (Slide 6). That's why a comprehensive policy is needed. However, developing and implementing this policy requires the presence of strong government agencies with a clear mandate, proper financial resources and the necessary technical capacity to execute their mandate. Few governments have yet developed their institutions to the levels required to fully exploit the potentials, which these policy mechanisms offer. As a result many standards and labeling efforts are only partially delivering their potential. India, as elsewhere, will need to ensure that their institutions are up to the job if success is to be assured.

(Slide 6) Savings in residential electricity consumption by end-use for the 'Least Life-Cycle Costs from 2005' scenario compared with the "Current Policies" scenario in IEA countries, 1990-2030.

Before summing up I would like to thank the international experts who have responded to the IEA's invitation and have travelled from far a field to attend and speak at this seminar. I would also like to thank the domestic audience who have made the trip here from across India. In particular I would like to thank the organisers and co-sponsors of this event: MOP, BEE, UNDP, UNDESA and the Government of Australia: without whom, this important and timely dialogue would not be possible. Thanks to their efforts, we have for these two days a gathering of many of the best experts in the world in this area, and I do hope that their time is being most valuably used.

Thus in conclusion, please excuse me for giving you a tour of the International Energy Agency's publications list. In between books, however, I offered several challenges to India and the rest of the world. Plenty of energy savings (and other benefits) can still be achieved through greater efficiency. But will India be up to the challenge? I hope that this conference will address that question. I am eager to leave this podium and begin listening to the discussions.

Thank you for your kind attention.