

Breaking out of the efficiency box

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Published online: 26 June 2008
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“Little boxes on the hillside,
Little boxes made of ticky-tacky,
Little boxes, all the same.”

Malvina Reynolds

Those of us who have been working at the interface between energy efficiency research and policy for a while share a double frustration. The first is that in spite of solid evidence that energy efficiency saves money, pollution and carbon, many sound policies and projects have long been collecting dust on the shelves of policy makers, energy suppliers, businesses and consumers. In other words, we still face the hugely important task of finding ways to get economically viable and technically feasible projects out into everyday practice.

The second frustration derives from a timid reaction in the energy community to the increasing importance of environment and climate change. These lay down a gauntlet for deep changes in both energy policy and

research agendas. We have been far too slow in adjusting our thoughts and actions to address these changes.

For a long time, we have been held hostage by a peculiar form for economic thinking which, from the inside of its box, has viewed the resolution to the energy problem in optimising resources perceived as scarce in the short run but infinite in a long run. We should have moved out of this box earlier, but our imaginations have been captured by the promises of efficiency and optimisation. We have been slow to recognise that environmental carrying capacities are indifferent to efficiency but rather react to the volume of pollutants and emissions. For many categories of pollutants, especially CO₂, these continue to increase in most parts of the world, or at least not decrease at rates necessary to avoid potential catastrophic changes.

The onus is on Organisation for Economic Co-operation and Development (OECD) countries to reduce the use of conventional energy production. Substitution with renewable energy production will contribute to this, but as has so clearly been illustrated in the recent debates on biofuels, every form for energy production, renewable or not, has social and environmental consequences. The cleanest, cheapest and least intrusive way to free up more energy for basic needs is to reduce the consumption of energy for key ‘energy services’ such as heating and cooling, food chain refrigeration and (auto)mobility, to name a few. It is time to lift our heads out of the box which is built on assumptions about individual devices, atom-

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ised consumers and efficient markets. We must accept the simple truth that economic and technical efficiency are means, not ends. We need new thinking on the ways energy makes everyday lives go around and how to reconnect the lines between people, their work and their material worlds.

We contend that this reconnection will not happen without a profound contribution from the world of business; in fact, another beyond the box maneuver will be to find ways to make energy sustainability a part of core of business. Global warming will not be resolved through image adjustments and new ways of marketing of business as usual but rather by developing new products and new markets. Businesses will

have to stop quibbling about short-term costs and direct their attention to the ways that sustainable energy can be used to produce future value. Making this shift will require the development of new partnership and new brands.

We challenge the readers and contributors of this journal to keep up the research and policy pressures on getting energy efficient products into everyday use but also to break out of the efficiency box and dazzle us with the building blocks of a new paradigm for energy sufficiency. We hope that the selection of European Council for an Energy Efficient Economy Summer Study 2007 papers in this issue will stimulate these box-breaking efforts.