

WORLD ENERGY INVESTMENT OUTLOOK

**2003
INSIGHTS**

INTERNATIONAL ENERGY AGENCY



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The International Energy Agency (IEA) is an autonomous body which was established in November 1974 within the framework of the Organisation for Economic Co-operation and Development (OECD) to implement an international energy programme.

It carries out a comprehensive programme of energy co-operation among twenty-six* of the OECD's thirty member countries. The basic aims of the IEA are:

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- to assist in the integration of environmental and energy policies.

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FOREWORD

To the best of my knowledge, no previous attempt has been made by any organisation to build a comprehensive and authoritative picture of future investment needs, worldwide, in all parts of the energy-supply chain. This is the task which has been undertaken by the team, under Fatih Birol, responsible for the *World Energy Investment Outlook 2003*. It is my pleasure to acknowledge the work of this team and the contribution made by a wide circle of collaborators, wider than ever before, drawn from international organisations, energy companies and the financial community.

The total figure which emerges for the required global investment over thirty years is enough to make anyone pause: \$16 trillion. No one claims that this figure will be precisely validated in thirty years time. Indeed, policy-makers will have failed if the energy economy has not been reshaped to make it more sustainable. But the figure is well enough founded to establish an order of magnitude for the task ahead.

Fortunately, no individual nor organisation has sole responsibility for mobilising that level of finance. But all of us who have a role need to recognise that the task is daunting. We all need to contribute constructively and sagely to easing the way. If the problem goes unsolved, someone, somewhere in the world, will go without the energy he (or, more likely, she) needs.

It is in the detail that most readers will find the insights they seek. Fuel by fuel and region by region, the global picture is built up. Each chapter presents an overall analysis, a regional breakdown and, in most cases, the consequences of making one or more changes in key assumptions, such as more intensive efforts in OECD countries to limit emissions of greenhouse gases.

Quantifying global investment needs and then analysing the obstacles to funding leads, inevitably, to the question: "Will the required sums be forthcoming?". Rather than attempt to answer that question definitively, we shall be satisfied if we promote an urgent and serious debate, leading governments, in particular, to adopt policies which will help overcome the obstacles. It is clear that the greatest part of the challenge lies in financing investment in developing countries for domestic consumption. I would venture the personal judgement that finance will not be available on the required scale if the circumstances described in the analysis persist unchanged. We should turn our attention now to defining the changes of policy needed to invalidate that judgement and, to take up the theme on which my predecessor concluded this foreword last year, to go further and raise the funds necessary to bring electricity to every world citizen before the year 2030.

This work is published under my authority as Executive Director of the IEA and does not necessarily reflect the views or policies of the IEA member countries.

Claude Mandil, Executive Director

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