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CONTENTS

Page 2 ■

Introduction

Pages 3-5 ■

Globalisation and
Sovereign Control over
Energy Resources

Page 6 ■

The State and Energy
Governance: 'Towards
Responsible Sovereignty'

Pages 7-8 ■

Changing Roles of States
and Markets in the
Resource Sector

Page 9 ■

Frameworks for Sharing
Value and Avoiding Conflict
in the Resource Sector

Page 10 ■

Recommendations

Page 11 ■

Conference Agenda

Page 12 ■

List of Participants

ENERGY SECURITY:

MANAGING RISKS,

BALANCING CONCERNS

AND DEVELOPING

FRAMEWORKS



Introduction



L to R: Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, Government of India; Dr. R.K. Pachauri, Director General, The Energy and Resources Institute, New Delhi and Christian M. Schlaga, Minister and Deputy Head of Mission, Embassy of the Federal Republic of Germany

2

The sustained and affordable supply of energy resources is confronted with multiple pressures, from intrinsic resource concerns such as environmental externalities of extraction and use to extrinsic concerns involving governance and development of resources. Given the globalisation of energy markets, conventional notions of resource ownership are being reconstituted to balance local, national and international concerns. It was in this regard – to better understand emerging risks, changing interactions between markets and states, and the multiple competing pressures connected to resources and their development – that the 5th International Energy Security Dialogue

Conventional notions of resource ownership are being reconstituted to balance local, national and international concerns

of The Energy and Resources Institute (TERI) and the Konrad-Adenauer-Stiftung (KAS) was held at Surajkund on October 24-26, 2010. The conference had four main sessions and a concluding plenary session. This policy brief presents the key points made under each sub-theme and the discussions that followed.

Globalisation and Sovereign Control over Energy Resources

■ Globalisation and its attendant impacts on the organisation of political and economic activity have reconstituted the role of the state in the energy sector. The changing relationship between state and market forces is in evidence both at the domestic and international levels. Clearly, the nature of energy as an unequally distributed strategic resource, along with its growing demand, has led to the development of a dense network of trade and investment linkages globally. The need to address the environmental externalities associated with energy supply and consumption, in addition to grave energy security concerns that are fuelled by rising energy prices and uncertain assessments of resource availability, have animated discussions on energy policy across countries. Regulatory mechanisms and policy interventions that address themselves to energy economics and pricing, geopolitics, technology, trade and institutionalisation of practices, have become increasingly significant.

Energy Challenges

The global energy market, both on the supply and demand front, has witnessed much change in the last few decades, and we are now entering an age of unprecedented uncertainty. While the emphasis on uptake and up-scaling of renewable energy creates a new set of policy pressures particularly with regard to science and regulation, the energy market presents challenges on four major counts:

■ **Insensitivity of oil demand to price:** Despite changes in the suppliers' price of oil and gas, demand has continued to rise with no apparent response to such changes. Demand growth has remained steady even as prices have risen and suppliers have restricted flow (such as during the



Dr. Inge Kaul, Adjunct Professor, Hertie School of Governance, Berlin

Gulf of Mexico oil spill, or restriction of supply during the mid-2000s). It is unclear whether this will continue, yet the inelasticity of demand is certainly a cause of concern.

■ **Increasing demand from emerging economies:** The year 2008 marked the first time when non-OECD energy demand was higher than that in the OECD countries. As growing economies, China and India will register a steep growth in the demand for energy in the coming years. According to projections put forth by the International Energy Agency (IEA) in the World Energy Outlook 2007, the two countries together will account for 45% of the increase in world energy demand through to 2030. This



L to R: Dr. Daniel Bach, Research Professor and Director of Research, CNRS Paris, France; Ramendra Gupta, Chairman and MD, Uranium Corporation of India Limited (UCIL), India and Gen. Ramesh Chopra (Retd), Senior Strategic & Corporate Advisor

growing demand for energy in the Asia Pacific holds significant implications for the global energy market. Even though the countries' energy choices today are informed by changes made incumbent by climate change and the decreasing stock of hydrocarbons, the dominance of fossil fuels in their energy baskets is slated to continue.

■ **Energy governance:** Energy governance structures, especially at the global level, are still malleable and dependent on the interests of member nations. How this policy space develops, and the ways in which it will decide to promulgate regulation will shape the oil and gas markets. Until a system of governance emerges, uncertainty over the future of regulation in the sector will continue.

■ **Economic recovery and the effect on climate mitigation policies:** The effects of the global economic meltdown of 2008 and 2009 are still being felt, as governments are focused more on economic recovery than on climate mitigation. As governments' policies have developed in this regard, there has been a sharp response by global energy markets. This may continue until the economic situation becomes more stable and predictable.

We are now entering an age of unprecedented uncertainty

Energy security is adversely impacted both by events that restrict the distribution of the resource and those that restrict the attempt to secure energy resources for nations. The spike in oil prices following the World Trade Centre attacks of September 11, 2001 and a similar price trend after recent hurricanes in the United States, signify the hair-trigger nature of the oil market on the supply side. This creates incentives for channelling funds for the development of alternative energy options that help diversify energy baskets away from fossil fuels. Further, domestically, energy risks are exacerbated in a situation where energy access is limited, with segments of the population living on no or intermittent supply of energy. Therefore, the availability of energy infrastructure and efficient mechanisms for service delivery are critical for ensuring security of supply. At the same time, on the demand side, there are the issues of inefficient use of energy, as



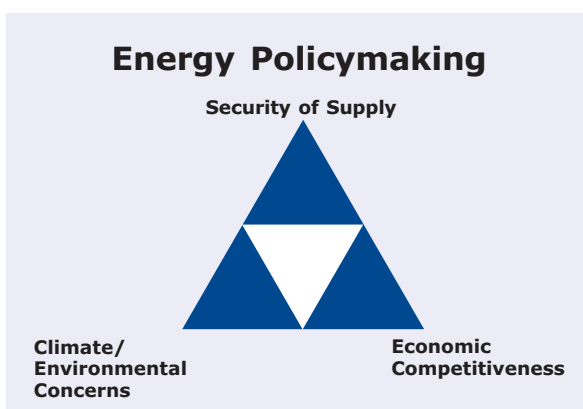
L to R: Cdre. C. Uday Bhaskar, Director, National Maritime Foundation; Dr. Leena Srivastava, Executive Director, TERI; Prof. Dr. Friedbert Pflüger, Director of the European Centre for Energy and Resource Security, EUCERS, King's College London and Former Parliamentary State Secretary at the Federal Ministry of Defence, Federal Republic of Germany and Dr. Frank Umbach, Senior Associate, Head, International Energy Security Programme of CESS GmbH and Associate Director, EUCERS

well as the development of islands of energy over-consumption, which need to be urgently addressed.

Internationally, the growing need for resources has caused (or contributed to) aggressive national action, as evidenced in the Iraq War and the recent militarisation of the Arctic for claims over its rich mineral resources. Significant geopolitical risks also exist due to the concentration of resources, especially in politically volatile regions. The Persian Gulf, including the Caspian Sea, is home to 70% of the world's oil and 40% of the world's gas reserves. Of proven reserves, this region houses 65% of oil and 34% of

Energy security is adversely impacted by events that restrict the distribution of the resource

gas reserves. Over-dependence of energy-deficient economies on the region for their supply of energy imports is a relationship fraught with risks. The stability of the region and efficient functioning of the region's energy supply apparatus is crucial to maintaining security of supply.



Energy policymaking, therefore, needs to take into account the multiple dimensions of the energy debate. Three key objectives can be identified as integral to this endeavour: 1) economic competitiveness, 2) energy supply security, and 3) addressing environmental policies and climate change concerns. For an effective policy, each of these objectives needs to be balanced against the other such that multiple risks can be effectively dealt with.

The State and Energy Governance: 'Towards Responsible Sovereignty'

The notion of sovereign control over energy resources plays a key role in defining resource policy. The traditional notion of sovereignty involves an ordering principle of the domestic and international sphere: one of delimited, exclusive, and independent supreme authority of the state. The emergence of a host of powerful non-state actors, an emphasis on democratisation and decentralisation in decision-making, and new governance related challenges and risks, have caused this concept of sovereignty to evolve, however, not as yet in a determinate and fixed direction. The absolute nature of state sovereignty has been influenced by normative concerns such as human rights and sustainable development, as well as non-normative concerns such as inter- and intra-state conflicts, terrorism and nuclear proliferation. 'Responsible sovereignty', as opposed to 'juridical sovereignty', is an acknowledgement of this reality.

In the context of resources, the juridical understanding of sovereignty relies on self-interest, survival and subsistence, location of resources, and the willingness to get resources at any cost. A strict adherence to this logic brings about a concept of sovereignty more

Developments that foreground Responsible Sovereignty

- Increased importance of values and norms
- Transnational actors as well as transnationality
- Role of markets and networks of inter-connections
- Expectations of an increased sharing of value with domestic stakeholders

Energy Governance

A comprehensive understanding of energy governance needs to take into account four elements of energy security policy:

- Availability
- Affordability
- Accessibility
- Acceptability (for instance, in the context of climate action)



L to R: Dr. Ligia Noronha, Director, Resources, Regulation and Global Security Division, TERI and Sudha Mahalingam, Member, Petroleum and Natural Gas Regulatory Board, India

closely aligned to the traditional notion of sovereignty. 'Responsible sovereignty', on the other hand, factors in demand-supply linkages, and values and norms that blacklist certain resources, and recognises that short-term benefits can pose long-term costs. It is under responsible sovereignty that effective and just energy governance can take place, as issues of equity, sustainability and participation are better reflected in governance measures.

As of yet, there is a lack of political will to implement such an energy governance system. The success in foregrounding 'responsible sovereignty'-based mechanisms and legislation thus relies on the ability to frame issues and the benefits of regulation in terms of self-interest.

Changing Roles of States and Markets in the Resource Sector



L to R: P.S. Bhattacharyya, Chairman, Coal India Limited; Prof. Dr. Friedbert Pflüger, Director of the European Centre for Energy and Resource Security, EUCERS, King's College London and Former Parliamentary State Secretary at the Federal Ministry of Defence, Federal Republic of Germany; Ramendra Gupta, Chairman and MD, Uranium Corporation of India Limited (UCIL), India; Surya Sethi, Former Principal Advisor, Power & Energy, Planning Commission, Government of India and Gurudeo Sinha, Distinguished Fellow, TERI

States and markets are in a unique position to address the challenges facing the resource sector, both individually as well as in partnership with each other. As supply and demand dynamics begin to shift, and there is an emerging need to manage externalities and risks, establish regulatory mechanisms, avoid resource conflicts, and ensure participation and growth of local communities, the roles that state and market actors play in the energy market are undergoing transformation.

An interrogation of whether energy should be considered as a public or a private good elicits varied responses. While this is an ongoing debate, it is agreed that both understandings justify the necessity of government action in the area. The understanding of energy as a public good suggests that it is in the government's mandate to regulate the sector. As a private good, energy still has significant externalities, and state action can be used to provide incentives for efficient and effective development or distribute net benefits evenly.

Evolving Role of the State

There is a disparity between the conventional notions of the role of the state and market in the energy domain and the realities on the ground, resulting in conflicts between the two sets of actors. Conventional notions see the state as playing an active role in policy, planning, direction, and oversight, whereas the market's role is to supply goods and services at prices determined by supply and demand. Yet the state continues to play a dominant role and stymie market forces in resource rich countries. In importing countries, the state is unwilling to recede and allow a free play of market forces, and continues to employ populist measures.

Energy is not just any other commodity traded on the open market, and is too intertwined with strategic interests to abandon state action altogether. Fuel security is intrinsically linked to food security, economic security and human welfare. Further, the internationalisation of energy trade has brought along threats and risks



L to R: Vijay Duggal, Deputy General Manager Commercial (Gas), BPCL and R.K. Batra, Distinguished Fellow, TERI

associated with inter-state power politics, piracy and terrorism. The state needs to acquire the capacity to deal with these risks. For instance, it is necessary to develop means to deal with import and supply risks, understand how to finance supply, and integrate energy policy into the larger thinking on foreign policy. The growing accent on overseas equity investments has also led to a policy debate on the extent to which the government should support national oil and gas companies in the acquisition of exploration and production projects. In addition, the government needs to address demand risks including the lack of energy infrastructure, and determine whether this is best left to the markets or if this risks leaving under-developed areas as they are.

At the domestic level, there is the need for a unified, independent, transparent and effective regulatory body. The salience of the energy market necessitates that the state plans and prioritises development objectives, and employs fiscal tools to direct energy consumption appropriately while providing policy stability and certainty to investors.

Emergence of the Intermediary State

As energy security issues become more salient, the separation between national and international interests is narrowing. States

are no longer dealing with their own interests alone but must balance incentives and costs across the global market. Currently, therefore, what is emerging is the 'intermediary state,' which is brokering interests between the national and the international domain. The functions of the intermediary state in the resource sector will continue to develop as the issues and concerns with regard to resources expand and gain importance. While its significance is up for debate, such a brokering agent is necessary for the efficient working of domestic and international markets, and is in a position to reprimand other states for free riding in international engagement.

Global Governance of Energy

The existing frameworks for energy governance at the global level are disjointed, and marked by a set of non-prioritised objectives, and fragmented and weak governing bodies. Most institutions have very narrowly defined areas of scope and influence, and many prove to be ineffective even within these. That institutions tend to reflect energy path dependence, and are ill-equipped at resolving trade-offs, adds to their inability to introduce innovative solutions to energy challenges. Also, the growth of these institutions is difficult, as states are unwilling to give up control over energy governance and most energy-related regulations are still implemented within nation states. The global and national energy spheres, nevertheless, interact through multiple pathways, which include private transnational authorities, disclosure mechanisms (such as the Extractive Industries Transparency Initiative), self-regulation and adherence to codes of conduct.

Global energy governance is marked by multiple sources of authority, and the interaction between the domestic and the global needs to be probed to further a comprehensive understanding of the multiple spatial levels of energy governance, and the internal and external pulls and pressures that determine energy policy.

Frameworks for Sharing Value and Avoiding Conflict in the Resource Sector

Legal frameworks and institutional mechanisms for the resource sector are required to address benefit- and burden-sharing and the provision of adequate compensation for those adversely impacted by resource development. The rapid growth in the energy sector foregrounds the need to design and implement energy policy to avoid resource-based conflicts and to ensure that the resultant value is not appropriated by powerful vested interests.

Potential Areas of Conflict

Resource exploitation in nations will invariably be faced by differing priorities, whether it is between the state and its communities, a private actor and the state, or an international body and a state. The literature on these issues has primarily focused on larger policy issues, including the resource curse, macroeconomic policymaking, foreign exchange management and governance. Resource revenue has been found to induce profligate and volatile public spending, stifling long-term and balanced growth. Particular sectors, especially the minerals sector, squeezes out other sectors, and rent-seeking behaviour can have deleterious effects on the quality of institutions.

Less observed, at the national and international level, are the harmful effects of resource extraction for local communities. Displacement impacts life and livelihood security, distancing families from their resource bases and destroying support groups and communities. Precipitous violence and protests are often not dealt with as an economic consequence but instead a law and order issue.

Further, environmental impacts including the destruction of land, water resources and biodiversity are potential sources of conflict little recognised in planning resource action.

Avoiding Conflict

The key to resolving tensions that may arise at the local level is to understand the issues and concerns of local communities and stakeholders, and incorporate them in project planning and implementation from the outset. The government and private players must both understand that gaining the trust and consent of the local population is vital for the successful operation of energy projects. Giving them a stake in a positive outcome can contribute to their willingness to support the project. Three issues need to be highlighted:

- Revenues from resource exploitation need to be shared with local communities. Effective methods for sharing are context-specific and depend on the country's and community's development status and the nature of the project, among other local factors.
- Energy companies and public actors need to engage directly both with national governments and local communities right from the planning stage. Agreements need to be formulated in consultation with local actors instead of following a top-down approach such that the communities feel an integral part of the process of decision-making.
- Since it is agreed that communities' interests need to be integrated in project planning, and communication channels need to be institutionalised between the state, business and civil society, communities' capability to negotiate with their counterparts needs to be developed. It is imperative that they understand how to communicate their interests effectively to an external actor, such that their concerns are recognised in the process of drawing a mutually beneficial agreement. Negotiation training by an independent third party is important for a successful compromise to be reached.

Recommendations



L to R: Dr. R.K. Pachauri, Director General, The Energy and Resources Institute, New Delhi; Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, Government of India; Christian M. Schlaga, Christian M. Schlaga, Minister and Deputy Head of Mission, Embassy of the Federal Republic of Germany and Dr. Beatrice Gorawantschy, Resident Representative, Konrad-Adenauer-Stiftung

Government

■ The state needs to put in place initiatives to address knowledge and capacity gaps with regard to imminent and long-term energy challenges. This includes resource assessment, understanding of possible energy production and consumption scenarios, and research and development in renewable energy and cutting-edge energy options such as shale gas and geothermal energy.

■ In resource-rich countries, the governments need to take proactive steps to manage resource revenues judiciously. The creation of energy funds with specific investment objectives, depending on the country's development status, is one adopted route.

■ The government must employ fiscal instruments to influence consumer energy choices and industry investment decisions to save on resource use.

■ In creating a comprehensive energy policy, it is critical to balance the objectives of securing stable energy supply, maintaining economic competitiveness, and adapting to and mitigating climate change and other environmental concerns.

■ It is necessary for the state to develop means to deal with import risks and domestic supply risks, as well as take a holistic view of political considerations, commercial wants, infrastructure availability and technological capabilities.

■ The government needs to take measures towards ensuring universal delivery of basic

energy services through development of infrastructure and financial incentives to industry.

■ Working with industry leaders, the government must find ways to ensure social and environmental safety while efficiently allowing resource exploration and use.

■ States need to view energy governance beyond a nationalist framework to recognise the importance of norms of transparency as well as sustainability.

Industry

■ As climate concerns impact energy resource and technology choices, the industry needs to allocate funds to research and innovations in new and efficient technologies.

■ Energy companies should be extremely alert to addressing the social and environmental effects that resource exploitation can have on land, habitats and livelihoods.

■ Community interests should be incorporated in the planning of development activities, including them as stakeholders in development. This could include:

- providing employment to affected populations, as well as establishing civic facilities and assets;
- sharing profits with affected communities; and
- instituting appropriate resettlement programmes to maintain/improve standards of living.

Conference Agenda

Sunday, October 24, 2010

1900-1930
1930-2030

Registration

Inaugural Session

- Welcome and Opening remarks: **Dr. R.K. Pachauri**, Director General, The Energy and Resources Institute, New Delhi
- Special Address: **Christian M. Schlaga**, Minister and Deputy Head of Mission, Embassy of the Federal Republic of Germany
- Inaugural address: **Montek Singh Ahluwalia**, Deputy Chairman, Planning Commission, Government of India
- Vote of thanks: **Dr. Beatrice Gorawantschy**, Resident Representative, Konrad-Adenauer-Stiftung (KAS)

Monday, October 25, 2010

Venue:
0845-0900
0900-0915

Claridges Resort, Suraj Kund

Registration

Welcome

- **Dr. Beatrice Gorawantschy**, Resident Representative, Konrad-Adenauer-Stiftung (KAS)
- **Dr. Leena Srivastava**, Executive Director, The Energy and Resources Institute (TERI)

SESSION I
0915-1130

Globalisation and Sovereign Control over Energy Resources

Chair: **Cdme. C. Uday Bhaskar**, Director, National Maritime Foundation, New Delhi, India

Speakers

- **Dr. Frank Umbach**, Senior Associate, Head of the International Energy Security Programme of the Centre for European Security Strategies (CESS GmbH), Munich-Berlin, Germany and Associate Director of the European Centre for Energy and Resource Security (EUCERS), Department of War Studies, King's College London
- **Dr. Devika Sharma**, Associate Fellow, Centre for Research on Energy Security, TERI, New Delhi, India

Discussant

- **Dr. Ligia Noronha**, Director, Resources, Regulation and Global Security Division, TERI, India

Discussion

1130-1145
SESSION II
1145- 1335

Tea/Coffee Break

Changing Roles of States and Markets in the Resource Sector

Chair: **Moritz Lumma**, Counsellor, Economic Department, Embassy of Federal Republic of Germany

Speakers

- **Dr. Inge Kaul**, Adjunct Professor, Hertie School of Governance, Berlin, Germany
- **Sudha Mahalingam**, Member, Petroleum and Natural Gas Regulatory Board, India
- **Dr. Navroz Dubash**, Senior Fellow, Centre for Policy Research, India (joint with Ann Florini, NUS, Singapore)

Discussant

- **Vijay Duggal**, Deputy General Manager Commercial (Gas), Bharat Petroleum Corporation Limited, India

Discussion

1330 - 1430
SESSION III
1430-1630

Lunch

Risks and Challenges in the Energy Resource Sector

Chair: **Prof. Dr. Friedbert Pflüger**, Director of the European Centre for Energy and Resource Security, EUCERS, King's College London and Former Parliamentary State Secretary at the Federal Ministry of Defence, Federal Republic of Germany

Speakers

- **Ramendra Gupta**, Chairman and MD, Uranium Corporation of India Limited (UCIL), India
- **P.S. Bhattacharyya**, Chairman, Coal India Limited, India
- **Surya Sethi**, Former Principal Advisor, Power & Energy, Planning Commission, Government of India

Discussant

- **R.K. Batra**, Distinguished Fellow, TERI

Discussion

1630 -1645
SESSION IV
1645-1800

Tea/Coffee Break

Frameworks for Sharing Value and Avoiding Conflict in the Resources Sector

Chair: **Dr. Marianne Osterkorn**, Director General of REEEP

Speakers

- **Dr. Nik Senapati**, Vice President and MD, Rio Tinto India
- **Siddharth Varadarajan**, Strategic Affairs Editor, *The Hindu*, India
- **Nitya Nanda**, Fellow, Centre for Global Agreements, Legislation & Trade, TERI

Discussant

- **Gen. Dipankar Banerjee** (Retd), Director, Institute of Peace and Conflict Studies, New Delhi, India

Discussion

Tuesday, October 26, 2010

SESSION V
0930-1200

Concluding Session

Reflecting on the Previous Themes

Chair: **Amb. C. Dasgupta**, Distinguished Fellow, TERI

Panellists

- **Dr. Friedbert Pflüger**, Director of the European Centre for Energy and Resource Security, EUCERS, King's College London and Former Parliamentary State Secretary at the Federal Ministry of Defence, Federal Republic of Germany
- **Manish Tewari**, Member of Parliament, Ludhiana and Spokesperson, AICC, India
- **Prabir Sengupta**, Ex-Petroleum and Commerce Secretary, Government of India and Distinguished Fellow, TERI
- **Dr. Daniel Bach**, Research Professor and Director of Research, CNRS Paris, France
- **Dr. Frank Umbach**, Senior Associate, Head of the International Energy Security Programme of the Centre for European Security Strategies (CESS GmbH), Munich-Berlin, Germany and Associate Director of the European Centre for Energy and Resource Security (EUCERS), Department of War Studies, King's College London

Discussion

1200-1230

Wrap-up

Concluding Remarks

- **Dr. Beatrice Gorawantschy**, Resident Representative, Konrad-Adenauer-Stiftung (KAS)
- **Dr. Ligia Noronha**, Director, Resources, Regulation and Global Security Division, TERI, India

LIST OF PARTICIPANTS

Name	Designation and Organisation
P.K. Aggarwal	Distinguished Fellow, TERI
Veena Aggarwal	Associate Fellow, TERI
Dr. Daniel Bach	Research Professor and Director of Research, CNRS Paris, France
Gen. Dipankar Banerjee (Retd)	Director, Institute of Peace and Conflict Studies, New Delhi, India
R.K. Batra	Distinguished Fellow, TERI
Shikha Bhasin	The Climate Group New Delhi
Cmdr C. Uday Bhaskar	Director, National Maritime Foundation, New Delhi, India
Tanushree Bhattacharya	Research Associate, TERI
P.S. Bhattacharyya	Chairman, Coal India Limited, India
Ruchika Chawla	Fellow, TERI
Gen. Ramesh Chopra (Retd)	Senior Strategic & Corporate Advisor
Amb. C. Dasgupta	Distinguished Fellow, TERI
Dr. Navroz Dubash	Senior Fellow, Centre for Policy Research, India
Vijay Duggal	Deputy General Manager Commercial (Gas), Bharat Petroleum Corporation Limited, India
Swati Ganeshan	Research Associate, TERI
Dr. Beatrice Gorawantschy	Resident Representative, Konrad-Adenauer-Stiftung (KAS)
Ramendra Gupta	Chairman and MD, Uranium Corporation of India Limited (UCIL), India
Mareen Haring	KAS
Dr. Inge Kaul	Adjunct Professor, Hertie School of Governance, Berlin, Germany
Arpita Khanna	Research Associate, TERI
Moritz Lumma	Counsellor, Economic Department, Embassy of Federal Republic of Germany
Pankaj Madan	KAS
Sunit Kumar Madhur	Cicero Associates
Deepti Mahajan	Research Associate, TERI
Sudha Mahalingam	Member, Petroleum and Natural Gas Regulatory Board, India
Aastha Mehta	Research Associate, TERI
Nitya Nanda	Fellow, TERI
Dr. Ligia Noronha	Director, Resources, Regulation and Global Security Division, TERI, India
Dr. Marianne Osterkorn	Director General of REEEP
Rajiv Panda	IRADe, New Delhi
Prof. Dr. Friedbert Pflüger	Director of the European Centre for Energy and Resource Security, EUCERS, King's College London and Former Parliamentary State Secretary at the Federal Ministry of Defence, Federal Republic of Germany
Shivan Sarin	Research Associate, TERI
Dr. Nik Senapati	Vice President and MD, Rio Tinto India
Prabir Sengupta	Distinguished Fellow, TERI
Surya Sethi	Former Principal Advisor, Power & Energy, Planning Commission, Government of India
Dr. Devika Sharma	Associate Fellow, TERI
Rajiv Sikri	Former Secretary (East), Ministry of External Affairs, India
Gurudeo Sinha	Distinguished Fellow, TERI
Anmol Soni	Research Associate, TERI
Dr. Leena Srivastava	Executive Director, TERI
Manish Tewari	Member of Parliament, Ludhiana and Spokesperson, AICC India
Dr. Frank Umbach	Senior Associate, Head of the International Energy Security Programme of the Centre for European Security Strategies (CESS GmbH), Munich-Berlin, Germany and Associate Director of the European Centre for Energy and Resource Security (EUCERS), Department of War Studies, King's College London
Siddharth Varadarajan	Strategic Affairs Editor, <i>The Hindu</i> , India
Amit Kumar Verma	Research Associate, TERI
Poonam Yadav	Indian Youth Congress

Policy brief prepared by Shivan Sarin and Deepti Mahajan, TERI

KONRAD ADENAUER STIFTUNG

German House, First Floor, 2, Nyaya Marg, Chanakyapuri, New Delhi 110 021, www.kas.de