

Energy Dialogues 2012



Shakti Sustainable Energy Foundation

Shakti Sustainable Energy Foundation

works to strengthen the energy security of the country by aiding the design and implementation of policies that encourage energy efficiency as well as renewable energy. Shakti belongs to an association of technical and policy experts called the ClimateWorks Network. Being a part of this group helps Shakti connect the policy space in India to the rich knowledge pool that resides within this network.

Our Vision

A clean, secure and equitable energy future for all Indians.

Our Mission

To aid low carbon growth by catalyzing innovative policy solutions through collaborations with government, civil society and business.



SHAKTI

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Dear Friends,

The energy scenario in 2012 was in many ways a watershed. Despite being defined by marked demand and supply gaps and increasing coal imports, 2012 was actually a year when critical energy policies and programmes rolled out.

The Perform Achieve and Trade (PAT) scheme for designated industries and the Super Efficient Equipment Programme (SEEP) are cases in point.

PAT will save India about seven *mtoe* by 2015 while SEEP will help manufacturers leapfrog appliances from current to super-efficient levels.

In 2012, the government also announced an INR 1900 billion debt restructuring package for the struggling state power distribution companies, started the process of reducing diesel price subsidies and increased its 2020 renewable energy target from 6.4% to 15%. India's current climate, economic and energy situation is making the case for energy efficiency and renewable energy even stronger. This continues to be an opportunity for an organisation like Shakti to help strengthen India's energy security by enabling policies that support energy efficiency and renewable energy.

At Shakti we are committed to ensuring that the country chooses the most sustainable development plan. The subsequent pages outline what Shakti has been able to facilitate in the three years of its existence.

These are small steps but important ones. I continue to be optimistic about India making the right choices to address its energy needs and its energy security.



Jamshyd Godrej

Board Chair
Shakti Sustainable Energy Foundation



SHAKTI

One of our biggest challenges has been to communicate what we are trying to achieve and why. Our existing funders understand and have been very supportive and generous. I would like to take this opportunity to present our case to others.

India's development needs are immense. We need to maintain a high rate of growth over the next two decades for the economic disparities to even start to diminish. But growth needs energy and India faces severe constraints in this area. Increasing oil and coal imports are placing great strains on our balance of payments and, thereby, on national security. With limited conventional resources and growing energy needs, the country urgently needs to transition to sustainable energy sources that will serve both our inclusion and environmental ambitions. Disparate energy initiatives cannot fill this pool. Only well informed policies have the power to mandate action and lend scale. If we desire positive change, we must invest in creating a framework of smart energy policies.

What sort of energy policies do we need?

India needs to practice energy efficiency to meet its immediate needs, and at the same time foster the renewable energy market so that renewables can become a mainstream option in the coming two decades. As coal and

oil become scarcer and more expensive, we must turn increasingly to the sun and the wind to fuel our growth.

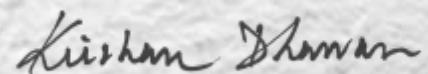
At Shakti, we work to aid the design and implementation of policies that encourage energy efficiency and use of renewable energy. There are five major sectors in India that either already have, or can do with, efficiency policies and we work in all of them – appliances efficiency, buildings efficiency, industry efficiency, demand side management and transport.

What does aiding the design and implementation of a policy entail?

If a policy is a product, we invest in a market strategy that ensures a quality product and a robust market. Fundamentally this means we invest in research and analysis to inform a policy design and facilitate stakeholder dialogues to keep the design process participative. We invest in building policy evidence as also the capacity for implementation. We orchestrate movement as per a well thought out plan.

The pages ahead will give the reader a better sense of what we do and what we have done.

We have just begun and these actions lay the foundation for future action. I am very optimistic about what lies ahead.



Krishan Dhawan

CEO
Shakti Sustainable Energy Foundation

What our team has contributed to:

In the last days of July 2012, half the country was plunged into darkness when the northern, eastern and north-eastern grids collapsed in quick succession. This was attributed to overdrawing by certain states that were unable to meet the spike in demand. India's power situation has always been less than ideal but now it borders on the critical.

Currently peak demand shortage is more than 10%, whereas the overall energy shortage is over 7%. The collapse happened despite an installed capacity of more than 210 GW; a low per capita power consumption rate (734 kWh annually as compared to the world average of 2,429 units) and, a power sector growth figure of 7% every year. India's power comes largely from coal (about 56%), while just under a quarter (about 22%) is hydro-electric. In times of depleting resources and growing climate change concerns, this is hardly the ideal energy blueprint for an energy-starved country like India.

India is waking up to the fact that capacity addition alone is not the answer and energy efficiency is fast becoming a focus area. The team at Shakti is capitalising on the current power situation by pushing for a national mandate on Demand Side Management. This is because should India have a national policy on DSM, by 2030, energy efficiency measures could potentially reduce its projected Business as Usual electricity demand by 25%.

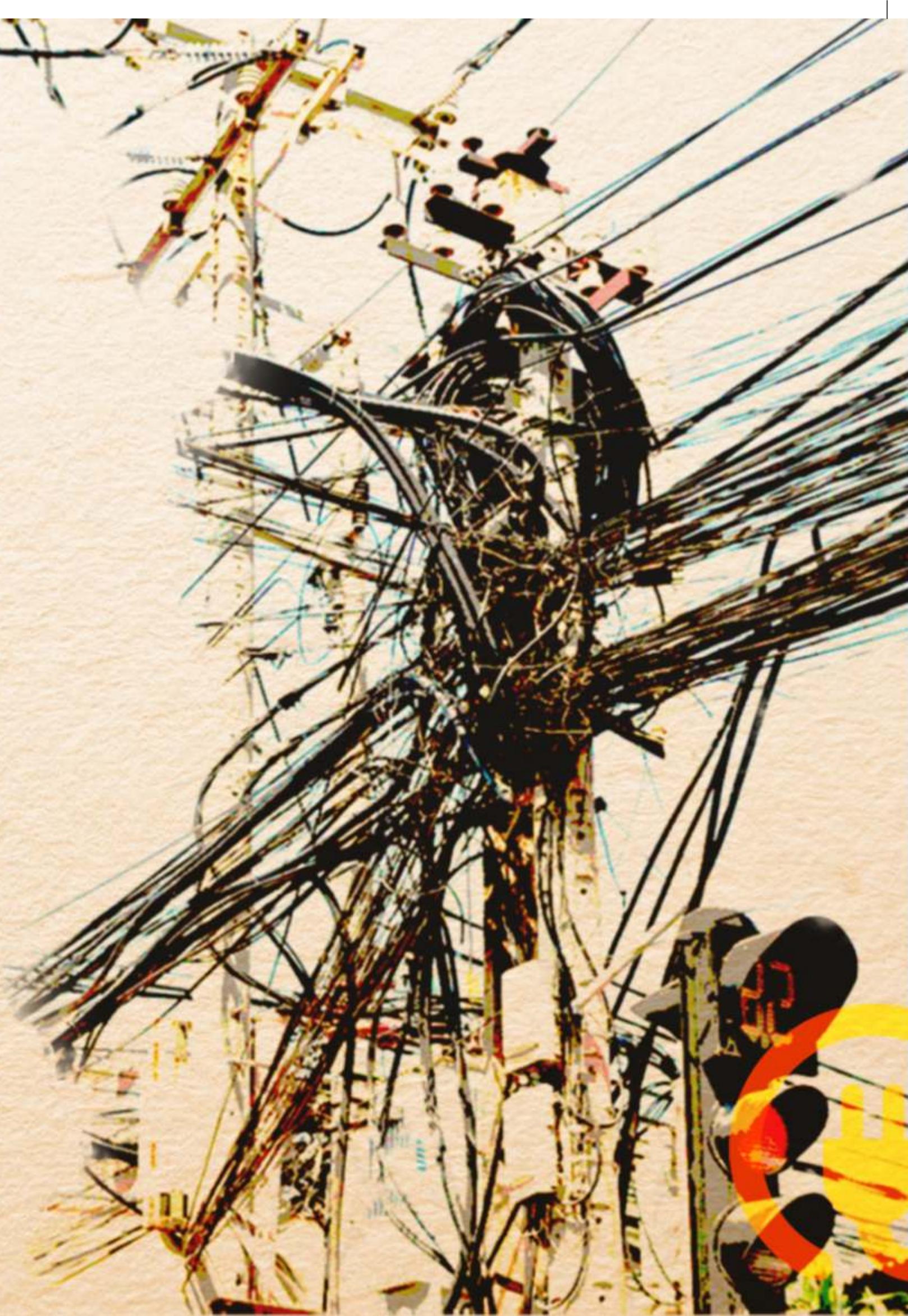
- Chinmaya Acharya
Electric Utilities Programme

Design of India's first Super Efficient Equipment Programme: Shakti facilitated the development of the Super Efficient Equipment Programme (SEEP) that will leapfrog energy efficiency performance standards in appliances by 30% to 50%. Under SEEP, the government will take care of the first cost barriers by giving incentives to manufacturers to make these appliances. The consumer will not have to pay extra for the improved efficiency levels. As volumes pick up, the need for incentives will reduce and eventually phase out. The government has committed INR 9 billion to this programme and the World Bank is investing USD 50 million in it. We contributed to the program design effort and are now supporting implementation arrangements to roll out the first phase of SEEP.

The development of DSM-for-revenue argument: In January 2013 at its flagship economic summit Vibrant Gujarat, the Government of Gujarat announced a strategic partnership with Shakti around the power sector. Shakti is helping a public sector distribution utility in the state design and implement DSM activities through pilot projects. The pilots will subsequently inform the design of market-based mechanisms for DSM investments. A regulatory mandate called Energy Efficiency Purchase Obligation (EEPO) may follow. Gujarat will set an example for other potential power surplus states to adopt efficiency despite absence of shortage and maximize their revenue from electricity sales. All this will strengthen the case for a national mandate on DSM.

The country's first clean energy coalition in Tamil Nadu: Shakti has facilitated the creation of a coalition to develop an overall Clean Energy Resource Planning Framework and act as a facilitating platform to enable effective planning and governance around it. The Tamil Nadu model could serve as reference for a national level resource planning framework at a later date.

"EFFICIENCY IS GAINING POWER"



"IT IS RENEWABLES' TIME UNDER THE SUN"

The year 2012 was one when the government reaffirmed the importance of Renewable Energy (RE) in India's energy security. The 12th Five Year Plan announced a renewable power capacity addition of about 30,000 MW. This will put the country on course for a 15% RE share in India's electricity mix, by 2020.

This announcement comes in the face of a rapidly worsening power situation. India's historic challenge of providing enough electricity to sustain the needs of its economy and its population is becoming more and more difficult thanks to depleting resources and climate change. The fact that India is serious about mainstreaming renewables is evident from the disparate but important initiatives that are underway: the pursuit of 20,000 MW of solar power by 2022; use of RE to solve the energy access problem; steps towards mandating Renewable Purchase Obligations; enhanced incentives framework; grid expansion and the exploration of a national wind mission.

But these areas need to be co-ordinated to achieve scale and results. We are capitalising on the current intent and the ambition in the sector to push for a comprehensive national RE policy. If we get a RE policy in the next two or three years, it will result in RE contributing at least 25% of India electricity generation by 2030.

- Deepak Gupta,
Renewable Energy Programme





What our team
has contributed to:

Positioning wind as a way to meet the NAPCC targets:

India needs to make a quantum jump in renewable energy generation to meet the National Action Plan on Climate Change (NAPCC) target of 15% RE in the total energy mix by 2020. Wind power, which has witnessed a phenomenal growth in India over the past few years, could contribute significantly to making the jump. We have been working to assess the potential of wind in the country and finding solutions to its variable nature. Research done by our grantees show that actual potential could be more than ten times the official estimates. We are working closely with the government to bring about an official reassessment and creating technical and commercial frameworks for absorption of higher quantum of wind into grid.

Creating a stronger RE market:

We have facilitated the creation of a RE India portal to help potential investors compare states and gauge market viability. We have had Gujarat and Tamil Nadu mapped for RE potential in order to build a more informed market discussion in each of the two states. Since RE-based electricity will need to flow freely through the grid to compete with conventional power, we have also been investing in market mechanisms to increase grid absorption. We have been especially successful in pushing the case of small, off-grid projects making them eligible for Renewable Energy Certificates as well as getting them on the priority lending list of private banks.

Strengthening advocacy for a comprehensive national framework for RE:

We are investing in bringing together diverse stakeholders to advocate for a comprehensive national framework for RE. The National Renewable Energy Platform, a multi-stakeholder advocacy forum that is technology, size and geography neutral is a step in this direction. It will provide inputs to the Government on creating an enabling RE environment; develop a network of key players in the renewable energy sector and function as an apex policy advocacy centre for the promotion of renewable energy. We are also cultivating important stakeholders, as RE ambassadors to advocate for a larger share of renewables in the country's energy mix and sustain pressure around deliverables.



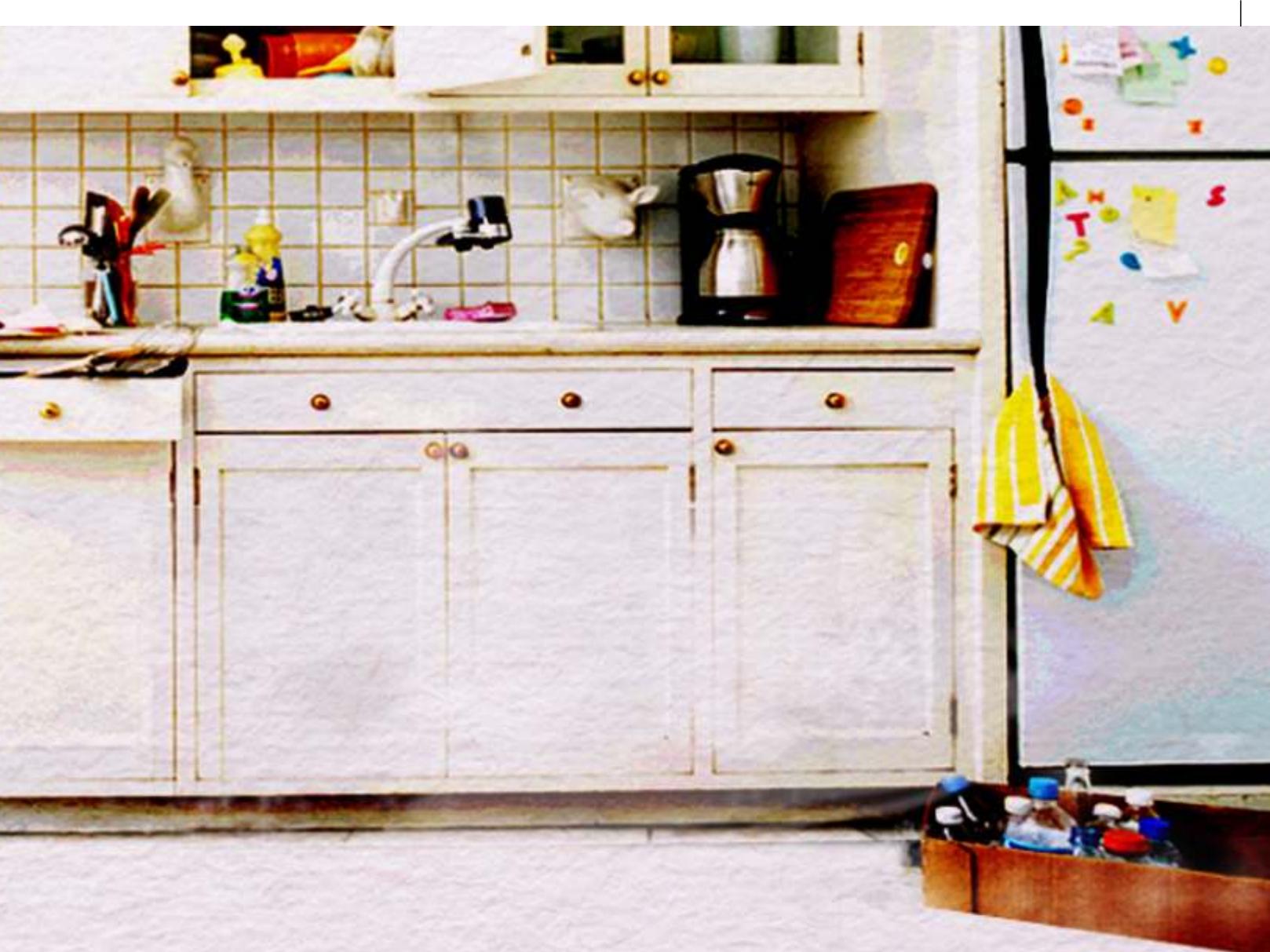
Rising incomes, urbanization and, its accompanying aspirations have ensured that the vast middle class market is purchasing appliances for a better lifestyle. Call centres in smaller cities, Internet retailing, and easy financing are ensuring that demand for consumer appliances is growing despite fluctuating GDP growth rates. However, the irony is that this growth will worsen India's energy and climate situation unless the appliances that populate the market are energy efficient.

We need to curb energy intensity without curbing aspirations. India's Appliances Standards and Labelling Programme is a step in this direction, although from the supply end. However for this programme to be successful, it is equally important that a market pull for efficient appliances is created in parallel. Rising cost of electricity is building the argument for such appliances. Consumers are becoming more receptive to higher star ratings despite the price difference. Manufacturers are therefore now displaying their own star labels more prominently and investing time and effort into building efficiency into their selling proposition.

This is the right time to invest in strengthening the market for energy efficient appliances in parallel to the national Appliances Standards and Labelling (S&L) Programme. Given the huge market for appliances, we are working to bring about a market transformation such that by 2030, India has a self-sustaining Appliances S&L Programme that is at par with the best in the world.

- Smita Chandiwala,
Appliances Efficiency Programme

“WE
MUST
SWITCH
ON THE
MARKET”



What our team
has contributed to:

Strengthening the government's efforts towards market development:

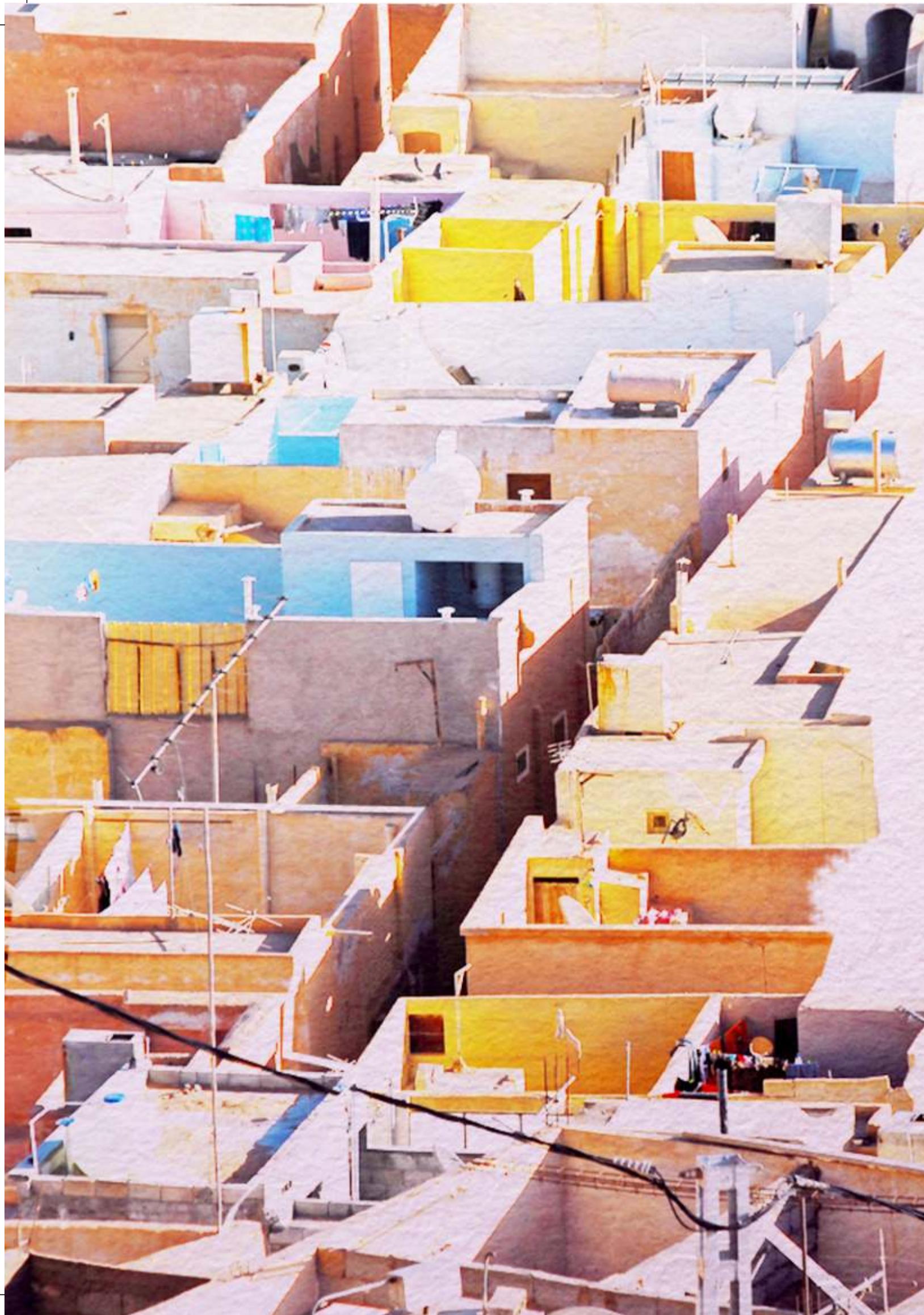
We have been focusing on market development by commissioning studies to understand the state of play. One such study was the nationwide demand aggregation for space lighting needs that can be met by LEDs. A consumer behaviour analysis was another step in the direction. These studies are feeding into the government's plans for market development. A retailer-training programme is also underway. The retail space is an important venue to influence purchase decision and the retailer, an important conduit. This programme, the first of its kind in the country, will seek to push the energy efficiency argument via retail.

Raising the efficiency ambition of appliances:

India is running the Super Efficient Equipment Programme (SEEP) in parallel to the Appliances Standards and Labelling Programme. This is an effort to leapfrog the existing energy performance standards by 30% to 50%. The first phase, slated to roll out in this plan period, will cover ceiling fans. We are supporting the techno-economic analysis of three more appliances to reach super efficiency levels: ACs, TVs and Refrigerators.

Increased capacity for implementation:

States need to actively participate and support the Bureau of Energy Efficiency for the programme to be effectively implemented and reach the desired scale and impact. We have commissioned needs assessment studies to evaluate the role and capacity requirements of state nodal agencies and also, roadmaps to design holistic strategies for regional market transformation in two states.



"IT'S TIME TO BUILD ON THE FOUNDATION"

The increase in per capita income and the standard of living has caused a boom in the construction business. Demand for housing has grown, as also for retail space and commercial buildings. Over the last decade, the gross built up area grew by about 10% per annum. The McKinsey 2009 India Report states that, given current trends, the country will need to add the equivalent of a Mumbai to its urban landscape every year.

The energy and emission implication of this is serious. Energy consumption and associated greenhouse gas emissions will continue to rise unless one works urgently to direct the construction industry towards sustainable consumption and production.

The country is cognizant of this and there is considerable movement in this direction. India has green-building rating schemes such as the Green Rating for Integrated Habitat Assessment (GRIHA) and LEED India. It also has a national mandate on efficiency in the form of Energy Conservation Building Code (ECBC). The Code was launched by the Bureau of Energy Efficiency (BEE) in 2007 and is expected to save the country 1.7 billion kWh annually. The state-by-state adoption process has begun and the 12th Five Year Plan aims to reach 65% compliance by 2017.

We are working to ensure that by 2030, 90% of India's commercial buildings are ECBC compliant.

- Smita Chandiwala,
Buildings Efficiency Programme

What our team has contributed to:

A more relevant code:

ECBC is a first generation building energy code and BEE envisions that it will be revised for stringency by 2017. This provides an opportunity to build in robust data and analysis into ensuring that the revised code is more stringent as well as relevant to the Indian context. To achieve this, we have supported the development of the adaptive thermal comfort model for India to account for its climatic and cultural context in determining the comfort criteria for building design and operation. We are also supporting the collection of updated energy data and analysis, to inform building benchmarks.

Easier compliance:

We have facilitated the design of a three-tiered compliance approach, which sequences the Code adoption based on ease of enforcement and market adoption. This has been recognised by BEE as a valid method for ECBC implementation in states. We have commissioned the development of implementation roadmaps for the states of Gujarat and Tamil Nadu. Besides helping roll out ECBC in these two states, these roadmaps will also serve as templates for others. This will help the market, the builder and the enforcer evolve in tandem and ensure a smoother rollout. We have also put an ECBC knowledge portal in place to facilitate information exchange.

Better enforcement:

We are working with cities and Urban Local Bodies (ULB) to ensure that ECBC criteria are incorporated in the building by-laws and enforcement is done rigorously. ULB and State Designated Agencies (SDA), responsible for the overall implementation of ECBC do not yet have the technical expertise or the manpower to check compliance. We have facilitated the development of a Third Party Assessor model to build mechanisms and capacity for enforcement. Involving third-party inspectors could rapidly expand the capacity for plan reviews and broad implementation.

Government leading by example:

Shakti's efforts have led to the central government mandating ECBC for its buildings, through revision of CPWD manuals. The Gujarat Public Works Department is revising its manuals as well. Delhi government has mandated cool roofs for all its buildings. Shakti had actively advocated for this.

"THE IRON IS HOT"

India is already one of the fastest emerging industrialized countries in the world. The manufacturing sector currently contributes about 17% to the GDP. In the coming years this contribution will increase significantly as will the sector's share of energy consumption.

At present, Industry accounts for almost half of the country's energy consumption. Given the energy crisis in the country, Business As Usual growth in the sector could have serious implications for the economy. Energy efficiency in Industry is critical, especially in pivotal sectors like steel and cement.

Now is the right time to accelerate work in this space. In recent years Industry has been proactively choosing state-of-the-art technologies and the government has also been encouraging the same through instruments such as the Perform Achieve and Trade (PAT) scheme. PAT is an ambitious programme that aims to bring about energy efficiency in energy-intensive industries. It is expected to save the country 6.6 mtoe by 2015 and about 25 million tonnes of CO₂e thereafter every year. *In the first phase eight designated sectors were covered and within these sectors, 478 units. BEE estimates that these units together account for about 35% of India's commercial energy consumption.*

Just implementing the various industry-related provisions of the Energy Conservation Act of 2001 could narrow energy consumption bandwidth of Indian industries by 15% of 2005 figures. We are currently focusing on the implementation and adoption of the PAT programme.

- Shashank Jain,
Industry Efficiency Programme





What our team
has contributed to:

Effective programme design and smooth roll out of Phase 1 of PAT:

Phase 1 of PAT rolled out in April 2012. It covers 478 units under eight designated sectors. PAT is the only market mechanism in the world that sets individual targets for each unit under a designated sector thereby increasing the ease of compliance. Given the heterogeneous nature of the Indian industry we invested in extensive research, stakeholder participation and technical expertise to ensure that the scheme was designed to encourage adoption. PAT will save the country 6.6 mtoe by 2015 and about 25 million tonnes of CO₂e thereafter every year.

Widening the scope of PAT:

Phase 1 of PAT covers eight designated sectors. The Energy Conservation Act identifies about 15 sectors that need to be made energy efficient. Shakti is working through a series of grants to identify sectors that can feature in the second phase of PAT. It is also working to bring more units under the designated sectors already identified. Increasing both the depth and width of PAT will ensure that savings are optimized.

Better implementation:

We have invested in developing tools and protocols such as M&V and energy consumption reporting formats. We have also enabled technology compendiums for five sectors: iron and steel, cement, chlor-alkali, textiles and pulp & paper. These list efficient technologies along with their cost and will serve as reference for the manufactures as they decide on their energy efficiency blueprint. We are also creating a group of third party auditors and building the capacity of the implementation environment. This includes State Designated Agencies, Industry and certified energy auditors. At the end of the current implementation phase (2015), the designated sectors will be assessed against their targets and verification report prepared by the auditors will be presented to Energy Efficiency Services Limited (the ESCo that has the mandate to implement BEE programmes).



“IT'S TIME
TO CHANGE
GEARS”

India is experiencing rapid urbanization. Economic reforms have made cities hubs of employment.

Currently, 300 million Indians live in towns and cities.

Within 20-25 years, the number will increase by another 300 million. This kind of exodus will require careful urban planning, especially around infrastructure. The Planning Commission in its approach paper to the 12th Five Year Plan recognizes that by 2030, India will need to make investments to the tune of a trillion USD.

The country is stepping up its investments in this direction. Now is the opportune moment for advocates of sustainable transport to ensure that the infrastructure planning is based on principles of land use and transport sustainability. Most cities in India are in the process of creating or modifying their urban plans. This is the right time to engage with these cities and make sure that their plans factor in aspects such as transit, non-motorized transport, walking, para transit and densification.

Shakti's goal is to ensure that by 2030, sustainable transport in Indian cities has a modal share of 80%. To make this possible, the team is working so that each state draws up a Sustainable Urban Transport Policy (SUTP) based on the principles of sustainable transport. SUTPs will ensure that all cities within the state are guided by the vision of sustainability, thereby bringing scale to the country's mobility and accessibility exercise.

- Himani Jain,

Transport Programme

What our team has contributed to:

There is consensus on some principles of sustainable transport:

Principles of sustainable transport vary from region to region. Shakti has been working extensively with its partners to build a consensus amongst policy makers on principles of sustainability. In India, Shakti and its grantees are pushing for: densification, mixed land use, road-based transit, walkability, non-motorised transport and para transit. Most stakeholders now agree on the importance of integrated transport land use standards.

Key urban transport policies in India are incorporating chapters on sustainable transport:

The National Urban Transport Policy is the guiding urban transport policy for cities. Shakti has been working through a series of grants to have chapters on sustainable transport included in the document. The revision is work in progress and many of Shakti-supported recommendations are finding their way into the draft. The National Transport Development Policy, the Government of India's 2030 vision for transport is also being informed by Shakti's work. Many of the studies initiated by the team are serving as reference document for policy makers.

Change in the evaluation criteria of the Central Government funding window:

The Central Government funds urban projects, including those related to transport, through an initiative called the Jawaharlal Nehru National Urban Renewal Mission (JnNURM). Shakti has been working through a series of grants to ensure that JnNURM prioritizes the funding of projects that are based on the principle of sustainability. The idea is that since most cities seek JnNURM funding for their projects, they will have an incentive to plan greener projects. This will also give the Central Government a robust system with which to filter sustainable projects.

Facilitating the creation of a national transport-NGO network:

This is the first time ever that such a network has been put in place in the country. Building a united civil society voice will ensure that equity becomes an important consideration while writing policies. The equity aspect will push the participatory approach, backed by law, for advancing the case of walking, cycling and other low-cost, fuel-efficient modes of transport.

Strengthening the draft of India's first TOD Policy:

The draft of India's first Transport Oriented Development (TOD) policy is now in place. Shakti was actively engaged in this process. The team is now facilitating modelling and expert consultations. Having previously supported the development of toolkits such as the BEADS and the NMT manual, Shakti will now invest in comprehensive land use - transport models that will rely heavily on such tools. These modelling exercises will help in making the final policy more robust. Stakeholder and expert consultations at every step will ensure that the policies are developed in a participatory manner and therefore carry sound financial and infrastructure provisions. Subsequent to this, the team will engage in the design of four pilot corridors where these policies will be put to test.



"INTENT IS
NOW
BECOMING
ACTION"

In the run up to the Copenhagen Summit, India announced that by 2020 it would reduce its emission intensity by 20 to 25 per cent of the 2005 levels. At the Major Economies Forum (MEF) it also agreed that the increase in global average temperatures above pre-industrial levels should not exceed two degrees centigrade. The 2009 emission commitment, sans request for funding, the formation of an expert group to recommend low carbon inclusive growth strategies for the 12th Five Year Plan, states enacting energy efficiency policies - all reflect that India understands its domestic as well as international obligations and is willing to look at a middle ground. There has been a conspicuous shift in India's stand on climate change. This finds reflection in its domestic policies too-not just the National Action Plan on Climate Change (NAPCC), but also initiatives like the National Clean Energy Fund (based on the principle of the polluter pays) or, the low carbon inclusive growth path being developed by an expert group. In such an environment it makes sense to push for a more comprehensive climate strategy that looks at India becoming a part of a progressive coalition working proactively to counter climate change.

The Shakti climate policy team is working to strengthen this perceptible change in stand. Its goal is to ensure that in the long term India is a part of an equitable and efficient global governance structure that effectively responds to the threat of climate change. To make this possible the team seeks to build consensus amongst domestic stakeholders to develop a low carbon economy of India that is consistent with achieving a desired GHG stabilization pathway.

– Kunal Sharma,
Climate Policy Programme

What our team
has contributed to:

Starting the trend for low carbon development planning at the state level:

Madhya Pradesh is one of the larger states in India and is in the process of defining its growth vision. This is an opportunity for ensuring low carbon growth. A climate-friendly growth plan at this stage will put the state on the path of sustainable development. The Shakti team has been engaging with the state government to advocate for this line of thinking. This resulted in the government requesting for a GHG abatement cost curve. This cost curve has set a valuable precedence for other states in the country. We are now looking to support the state government on some key initiatives

Sharpening the focus on low carbon growth in the 12th Five Year Plan:

India has just drawn its 12th Five Year Plan for the period 2012-2017. In the run up to the final blueprint, Shakti supported the deliberations of the Expert Committee on Low Carbon Strategies for Inclusive Growth. The Interim report of this committee referred to several Shakti commissioned papers. It looked at the emission intensity reduction potential of different sectors of the domestic economy and pointed out how India could meet its Copenhagen commitments. India's 12th Five-Year Plan emphasizes energy efficiency and renewable energy and focuses on specific initiatives needed to put the country's development on a path consistent with low carbon growth.

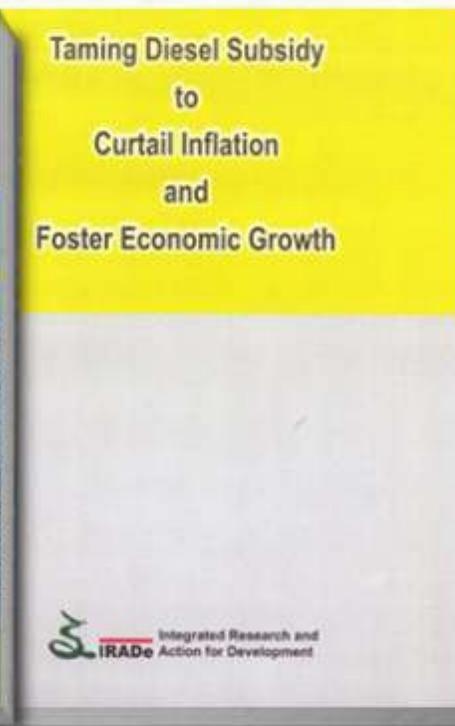
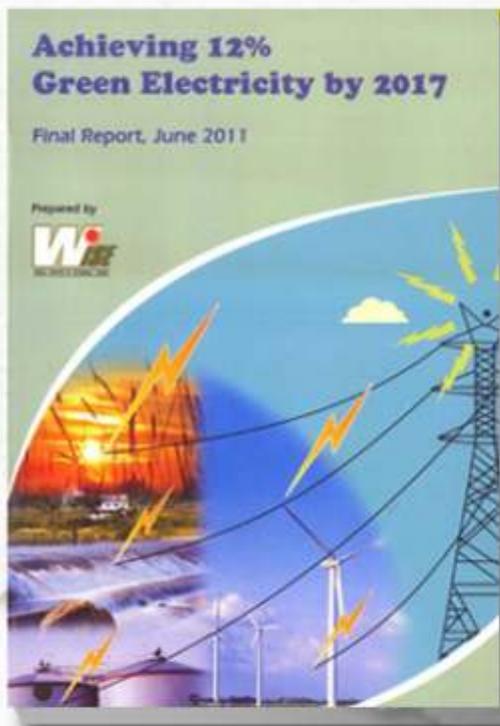
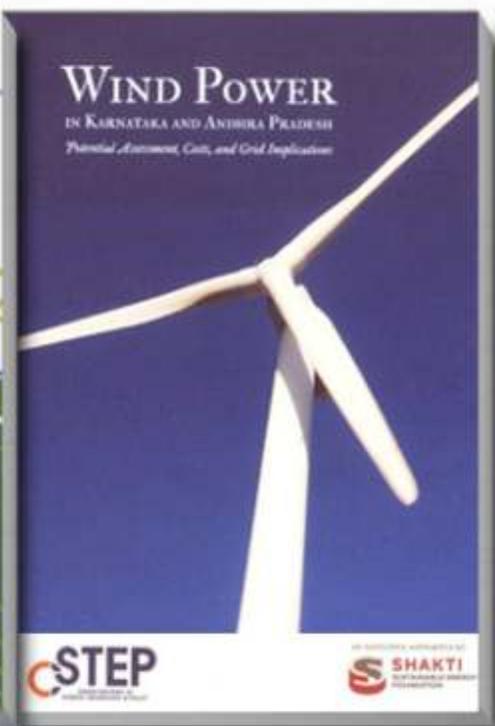
Bringing the brick kiln industry into the mitigation landscape:

The Indian brick kiln industry though an unorganized sector, is a major contributor to the Indian economy. There are approximately 100,000 brick kilns in India fired by 25 million tons of coal annually. The sector is an extremely polluting one and therefore provides an opportunity for intervention. Cleaner technologies exist which are economically viable on account of the energy savings. To build scientific evidence, we commissioned the first ever groundwork in the country to quantify the sector's energy, environment and economic footprint. The study presented a way forward to significantly reduce emissions by modernizing the industry. The report has found resonance in the policy space.

Evaluation of the NAPCC Mission:

NAPCC forms the backbone of India's move towards sustainable development. It houses eight missions that are a combination of adaptation and mitigation measures. Since they are the foundation on which a low carbon Indian economy is being built, it is important to ensure they are strong initiatives. Shakti commissioned their review by a group of experts. The analysis was shared with the policy makers. The team is working to ensure that strong advocacy for change accompanies the recommendations that have been made by the group.

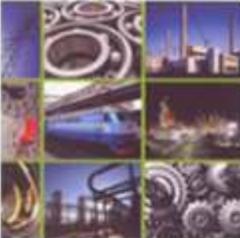
Shakti supported work



ae ee Alliance for an Energy Efficient Economy



Energy Efficiency in India
History and Overview



SHAKTI
Sustainable Energy
Institute

Constructing Change:
Accelerating Energy Efficiency in India's Buildings Market



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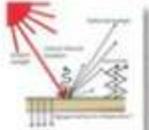
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and
Natural Resources Defense Council

March 2012

SHAKTI **ASCI** **NRDC**

Cool Roofs for Cool Delhi






SHAKTI



YALE PROJECT ON
CLIMATE CHANGE COMMUNICATION
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**DSM Action Plan
for Tamil Nadu**

Saurabh Gupta • Ramit Malhotra
P R Krihika • Tanushree Bhattacharya
K Ramanathan



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The Energy and Resources Institute

An initiative supported by

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Technology Compendium

On

Energy Saving Opportunities

Cement Sector

The journey towards a clean energy economy requires the active participation of all sections of society: government, business and civil society. We see a strong and empowered civil society as being essential to this transition. By empowering them, we empower the cause of clean energy and consequently the country. As a result, we try to direct our resources to the extent possible to CSOs, think tanks, academia, media and research organisations that are focused on clean energy.

OUR PARTNERS

We support existing organizations that are already active in the clean energy space, those seeking to include it in their portfolio as well as, new entities working to establish themselves. Over the last four years, our grantee partners have emerged as a strong and powerful group capable of leading the cause of clean energy. We take this opportunity to acknowledge their commitment and contribution.



Administrative Staff College of India
Alliance for an Energy Efficient Economy
Alliance to Save Energy
Aravali Foundation of Education
Aspen Institute India
Bharathiya Vikas Trust
Center for Clean Air Policy
Centre for Science and Environment
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Greenpeace India Society
International Council for Local Environmental Initiatives
Indian Institute of Social Welfare and Business Management
Institute for Financial Management and Research
Institute of Democracy and Sustainability
Integrated Research and Action For Development
International Institute for Energy Conservation
Leadership in Environment and Development in India
Lucknow Management Association
National Institute of Public Finance and Policy
Natural Resources Defense Council
Parisar Sanrakshan Sanvardhan Sanstha
Prayas Initiatives in Health, Energy, Learning and Parenthood
Sanchal Foundation
Society for Development Alternatives
Society for Energy Engineers and Managers
The Aspen Institute
The BBC World Service Trust
The Energy and Resources Institute
The Energy and Resources Institute - North America
Urban Management Center
Voluntary Organization in Interest of Consumer Education
Winrock International India
World Institute Of Sustainable Energy
World Resources Institute
Worldwide Fund for Nature - India
Yale University

We are grateful to ClimateWorks Foundation, The Pirojsha Godrej Foundation, Meher Pudumjee, and RDA Holdings & Trading Pvt. Ltd. for supporting us in our mission to aid India's low carbon growth through innovative policy solutions.

OUR FUNDERS

We would also like to thank our Board Members for investing their time and experience in shaping our programmes.

Shakti Sustainable Energy Foundation was
registered on the 5th of October 2009 under
Section 25 of the Companies Act.

SHAKTI

It is located at The Capital Court, Fourth Floor
Munirka Phase III, New Delhi 110067. It has the
following certifications: Section 12(A) - Income Tax
Act; Section 80(G) - Income Tax Act and Foreign
Contribution Regulation Act (prior permission).

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