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Communication Research on Energy Efficiency in India

Communication Needs Assessment and Stakeholder Mapping



Prepared for the World Bank
Energy and Extractives Global Practice,
South Asia Region

Prepared by :

Heather Worley, Ashok Sarkar and Neha Mukhi of the World Bank, Padu S. Padmanaban, Senior Advisor and team from PwC comprising of Amit Kumar, Jayakrishnan Nair and Manish Soni



2016

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Acronyms and Abbreviations

AC	Air conditioner
AEEE	Alliance for an Energy Efficient Economy
B2B	Business-to-business
B2G	Business-to-government
BCC	Behavior change communication
BEE	Bureau of Energy Efficiency
CEO	Chief executive officer
CERC	Central Electricity Regulatory Commission
CII	Confederation of Indian Industry
CxO	Any C-level corporate executive, such as a CEO or CFO
DAVP	Directorate of Advertising and Visual Publicity
DELP	Domestic Efficient Lighting Program
DISCOM	Distribution company
DSM	Demand-side management
DTD	Door- to- door
EE	Energy efficiency
EESL	Energy Efficiency Services Limited
ERC	Electricity regulatory commission
ESCO	Energy service company
FI	Financial institution
FICCI	Federation of Indian Chambers of Commerce and Industry
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IEC	Inform, Educate and Communicate
IESS	India Energy Security Scenarios
IIT	Indian Institute of Technology
IITF	India International Trade Fair
INR	Indian rupee
JICA	Japan International Cooperation Agency
kmph	Kilometers per hour (unit of automobile mileage)
LED	Light-emitting diode
LPG	Liquefied petroleum gas
M&V	Measurement and verification
MSMEs	Micro, small, and medium enterprises
MT	Metric ton
MW	Megawatt
NDTV	New Delhi Television Limited

NECA	National Energy Conservation Awards
NITRA	Northern India Textile Research Association
NMEEE	National Mission on Enhanced Energy Efficiency
OOH	Out- of- home
PAT	Perform, Achieve, and Trade
PCRA	Petroleum Conservation Research Association
PFC	Power Finance Corporation
POWERGRID	Power Grid Corporation of India Limited
PwC	PricewaterhouseCoopers Private Limited, a limited liability company in India, which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity
QCBS	Quality- and cost- based selection
RfP	Request for proposal
S&L	Standards and labeling
SIDBI	Small Industries Development Bank of India
SMEs	Small and medium-sized enterprises
SMS	Short Message Service
SLNP	Streetlight National Program
SSEF	Shakti Sustainable Energy Foundation
TERI	The Energy and Resources Institute
TV	Television
TVC	TV commercial
UNIDO	United Nations Industrial Development Organization

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1. Executive Summary

India is the world's third largest consumer of energy.¹ It is widely acknowledged that the role of energy efficiency (EE) in reducing India's carbon dioxide emissions and improving energy security is critical. Achieving the overarching goal of increasing EE in South Asia would be enabled by a well-planned, professionally executed public communication strategy and outreach program with clear audience segmentation. As the first step towards implementing a strategic communication program, the World Bank commissioned an analysis of EE-related communications in India targeted towards various stakeholders and energy consumers.

This communication analysis, including mapping of key stakeholders in the Indian EE communications landscape, is part of the World Bank's implemented program titled 'Scaling up the Demand-Side Energy Efficiency Business Line in South Asia', and will inform a communications strategy that aims to increase awareness and foster an enabling policy and business environment for EE in India.

The study aims to understand the attitudes of the policymakers and nodal agencies, EE implementers, and consumers (industries and general public from various energy consuming sectors) about EE, and gauge the various stakeholders' informational needs and preferred channels of information on EE issues. In order to influence more energy efficient behaviors in India, there is a need to examine what has worked in motivating new behaviors, and what has not worked and why. The research also aims to map various categories of stakeholders in the EE landscape in India, which have an impact on identifying, developing, designing, and implementing EE improvement activities in all major energy consuming sectors, namely, Industry, Transport, Agriculture, Commercial, and Residential.

The World Bank and PwC India developed a methodology that holistically covers the following elements:

- An in-depth review of the major EE communication campaigns in India over the last five years.
- Sharing of experiences (and also communication needs and gaps) by managers of major EE programs.
- Direct feedback about the consumers' perception of EE-related activities in India through a field survey covering the commercial, domestic (residential), and agricultural sectors.

The target groups for this study are identified below:

1. Policymakers and nodal agencies for EE implementation: Bureau of Energy Efficiency (BEE), Petroleum Conservation Research Association (PCRA), and Niti Aayog.
2. EE program implementers: Development agencies, media agencies, and enablers, such as industry associations, banks, and financial institutions (FIs), and energy service companies (ESCOs).
3. Consumers: End users from major energy-consuming sectors.

EE communication is still at an evolving stage in India with only a handful (listed below) of dedicated campaigns aimed at creating consumer awareness, outreach, and behavior change impact for end users.

1. PCRA's educational campaign on fuel saving for transport, industry, residential, commercial, and agricultural consumers.
2. Energy Efficiency Services Limited's (EESL's) communication campaign, ILedTheWay, for the Domestic Efficient Lighting Program (DELP).
3. BEE's Information, Education and Communication (IEC) campaigns, including the National Energy Conservation Awards (NECA) and the Standards and Labeling (S&L) program.

¹ India is the third largest consumer of energy after China and the United States (Enerdata, *Global Energy Statistical Yearbook 2015*, Grenoble, France, <https://yearbook.enerdata.net>).
Communication Research on Energy Efficiency in India:

4. NDTV’s Mission Energy, a campaign on EE launched during February–June 2014, focused on innovation in EE at the industrial, commercial, and household level.

In addition, an innovative communication initiative—the Utility CEO Forum on demand-side management (DSM)—is being implemented for effective one-to-one communication among electricity distribution licensees (utilities), regulatory bodies, and nodal agencies for sharing knowledge and experience on design, development, and delivery of megawatt-scale DSM programs. Chapter 3 presents an in-depth analysis of major EE communication programs in India.

On the communication campaign front, the communication content (such as creatives, messages, and activities) is available in the public domain. It is observed that all IEC campaigns on EE have effectively used the digital space and out-of-home (OOH) events. Campaigns that have been particularly effective are listed below:

- Crowdsourcing of “motivators” (taglines for EE campaigns) by PCRA through the Digital India² platform, www.mygov.in.
- Real-time dashboard for statewide distribution of light-emitting diode (LED) bulbs under DELP by EESL.
- Various tools and energy-saving calculators (based on the S&L program) by BEE.

The PCRA and BEE have also undertaken significant efforts at improving consumer education and behavior change communication (BCC), acknowledging the influence that children (school students) have within their families for driving home the messages about improved consumer habits for EE.

Program managers and media agencies involved in these campaigns believe that a two-tier communication strategy (national profiling with a focus on regional consumer needs) is most effective in increasing end-user awareness. This is particularly demonstrated by the strong correlation observed for local IEC campaigns and the huge uptake of LED bulbs under the ILedTheWay campaign. Another successful example where this strategy was employed is the PCRA’s painting and essay competitions for school students, wherein the number of participating students shot up to more than half a million in 2015–16, by involving the local state and district-level institutional machinery. This was a huge improvement in comparison with a similar program organized in a centralized manner in 2014–15, in which approximately 23,000 students participated.

The implementation level details of major EE communication programs are mostly available with the program managers of the respective organizations and their media partners. PwC conducted interviews with the key implementers of the campaigns (including nodal bodies and some of their media agencies, banks and financial institutions, and development agencies) to understand their background context, opinions on EE communication needs, existing partnerships and platforms for communication, success stories, and lessons learned. The scope of interviews also included particular organizations where communication is undertaken as a specific component of larger programs with a few elements, such as newsletters, audiovisual documentaries, and cluster-level campaigns.

A survey covering 40 end users (consumers) from residential, commercial, and agricultural sectors was also conducted for gauging the consumer perception on EE and policy direction on EE; different barriers and motivators towards EE choices, recall value of existing campaigns, and media preferences. Thirty-six out of the 40 respondents mentioned the adoption of the following EE measures and behavioral practices after hearing about EE communication.

- Use of LED lights.
- Use of star-rated products.
- Switching off idle lights and other equipment.

² Digital India is a campaign launched by the Government of India to ensure that government services are made available to citizens electronically by improving online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology.
Communication Research on Energy Efficiency in India:

- Driving vehicles at moderate speed.

The recall value of the communication on EE appliances by a few private players and BEE, and an educational campaign on fuel saving by PCRA is observed to be higher than others. Chapter 4 presents a detailed analysis of these stakeholder interviews and consumer research surveys.

The stakeholder interviews and the consumer survey indicated that EE program managers at implementing agencies often face a dearth of support with respect to effective communication of their activities with the stakeholders. On the other hand, general consumers do not have avenues for providing upward feedback on their informational needs and preferences.

Common pointers for all stakeholder groups:

1. **The significance of EE and that of spreading awareness on EE is acknowledged uniformly across institutional stakeholders, as well as end users.** There is a need for continuous recall on the significance of EE to create top-of-mind awareness and to position EE as one of the prime factors during decision making.
2. **The EE policy in India is acknowledged to be moving in the right direction uniformly by institutional stakeholders. A majority of consumers also indicated** an acceptance of policies and programs on EE. EE policies are at an advantageous position for expansion to cross-ministerial applications in view of widespread public acceptance.
3. **Monitoring and impact assessment of EE communication campaigns:** Monitoring, evaluation and dedicated impact assessment of communications is viewed as insufficient for almost all major EE communication programs in India. Of all the major EE communication programs by PCRA, BEE, EESL, and NDTV, we have information about only PCRA's campaigns engaging professional services for measuring the outcomes as per their well-defined methodology for impact assessment. Complete details on the results of this impact assessment are not available in the public domain. However, PCRA does quantify and publish the overall outcome through its educational campaign in terms of fuel saving and the corresponding monetary benefits in the economy, as illustrated next.

An impact assessment study conducted for the year 2013–14 demonstrated that mass awareness campaigns resulted in estimated fuel savings of 567,375 MT of petrol, 1,873,083 MT of diesel and 948,383 MT of LPG. These savings will reduce carbon dioxide emissions into the atmosphere by approximately 9.10 million MT.

—PCRA: http://www.pcr.org/pcra_adm/writereaddata/upload/files/COP%2021-2910.pdf.

A detailed analysis based on stakeholder interviews and the corresponding communication needs assessment is provided in Chapter 5. It is clearly evident from the analysis of communication needs that communication on increasing consumer awareness and institutional awareness on EE needs to follow a different strategy as compared to communication for a product or service.

The overall analysis results in seven key recommendations to be considered while formulating a dedicated EE communication strategy (and also for strengthening existing ones):

1. Develop a comprehensive communication strategy and identify champion of EE communication.
2. Improve effectiveness of messaging on EE behavioral change.
3. Conduct research on consumer behavior to understand the audience's attitudes, preferences, and awareness levels.
4. Build capacity of technical speakers and decision makers.

5. Streamline implementation of communication or educational campaigns on the program implementer's side.
6. Promote and ensure close integration and coordination among the communications team and technical team.
7. Conduct impact assessments for all campaigns.

2. About This Study

The World Bank is currently implementing the Energy Sector Management Assistance Program (ESMAP)–funded analytical and advisory activity, Scaling up the Demand-Side Energy Efficiency Business Line in South Asia, with focus on Bangladesh, India, Nepal, and Pakistan. The development objective of the program is to take stock of the lessons learned in EE, deepen the understanding of the demand-side EE landscape in South Asian countries, and develop a comprehensive diagnostic-based set of delivery models, implementation solutions, and practical entry points for scaling up investment in demand-side EE and DSM in the region.

The program develops a set of possible delivery models and country-specific roadmaps and identifies and provides recommendations for pursuing specific opportunities. The programmatic approach also addresses the countries' common needs while also pursuing country-specific strategies and opportunities identified through detailed research. The program takes stock of the lessons learned, and a systematic assessment and analysis of demand-side EE improvement investment opportunities—in both electric power and thermal energy domains—across key end-use sectors (industry, buildings, agriculture, municipal and domestic sectors).

As part of the overall approach to programmatic communications, it is acknowledged that two distinct audience groups must be targeted in order to implement a successful communications strategy to scale up EE:

1. The public (or general energy consumers), whose lack of awareness about EE issues and consumer behaviors plays a major role in the potential uptake of EE solutions.
2. EE decision makers in the government (central, state, and municipal levels) and corporate sector, including large end users, such as industries and financial institutions.

In this context, the World Bank considers it important to take a strategic view of communicating effectively about the program's work and learning more about how communications interventions can help drive energy-efficient consumer choices, government policies, and their implementation and businesses.

With this background, it is acknowledged that achieving the overarching goal of increasing EE in South Asia would be supported by a well-planned, professionally executed public communication and outreach program with clear audience segmentation. As the first step towards implementing such strategic communication and outreach program, the World Bank commissioned a communication needs assessment study in India for various stakeholders and energy consumers. The communication needs assessment, along with the mapping of key stakeholders in the Indian EE landscape, will inform a communications strategy that increases awareness and fosters an enabling policy and business environment for EE in India.

Objectives

The overall objective of the assignment, **Communication Research on EE in India: Communication Needs Assessment and Stakeholder Mapping**, is to understand the attitudes of the general public and decision makers about EE, as well as to gauge the various stakeholders' informational needs and preferred channels of information on EE issues. The assignment also aims to map various categories of stakeholders in the EE landscape that have an impact on identifying, developing, designing, and implementing EE improvement activities in all major energy-consuming sectors in India.

The overall objective of the assignment is to be achieved through defining specific objectives, as listed below:

1. Identify key stakeholders in the EE landscape in India and map them according to their respective role in driving the EE campaign. The stakeholders include key audiences at the national, state, and urban or rural level.
2. Conduct an in-depth analysis of major EE communication campaigns in India during the last five years. The analysis will involve the following:

- a. Reviewing and analyzing previous national or state-level EE campaigns for their effectiveness and audience segmentation.
 - b. Understanding the informational needs, capacities, partnerships, platforms, and activities of EE market stakeholders, including government, businesses, financiers, and consumer groups.
 - c. Identifying success stories and lessons learned in previously implemented communication strategies for EE.
3. Conduct interviews with key stakeholders and the general public for research on existing opinions on EE, informational needs, and motivators and barriers towards adoption of EE and the preferred communication channels.

Methodology and Stakeholder Mapping

EE communication is still at an evolving stage in India with only a handful of dedicated campaigns aimed at creating awareness, outreach, and behavior change impact. This is also proportionate to the small number of organizations that have rolled out these campaigns, mostly as part of their policy mandate. On the communication campaign front, the communication content (such as creatives, messages, and activities) is available in the public domain. However, the implementation-level details are mostly available with program managers of the respective organizations and their media partners. At the same time, EE program managers (Implementers) often face a dearth of support with respect to effective communication of their activities with stakeholders. On the other hand, general consumers do not have avenues for providing upward feedback on their informational needs and preferences. Looking at this context, PwC and the World Bank developed the following methodology for achieving the assignment's objectives. Figure 1 shows the approach adopted in mapping of stakeholders on EE communication.

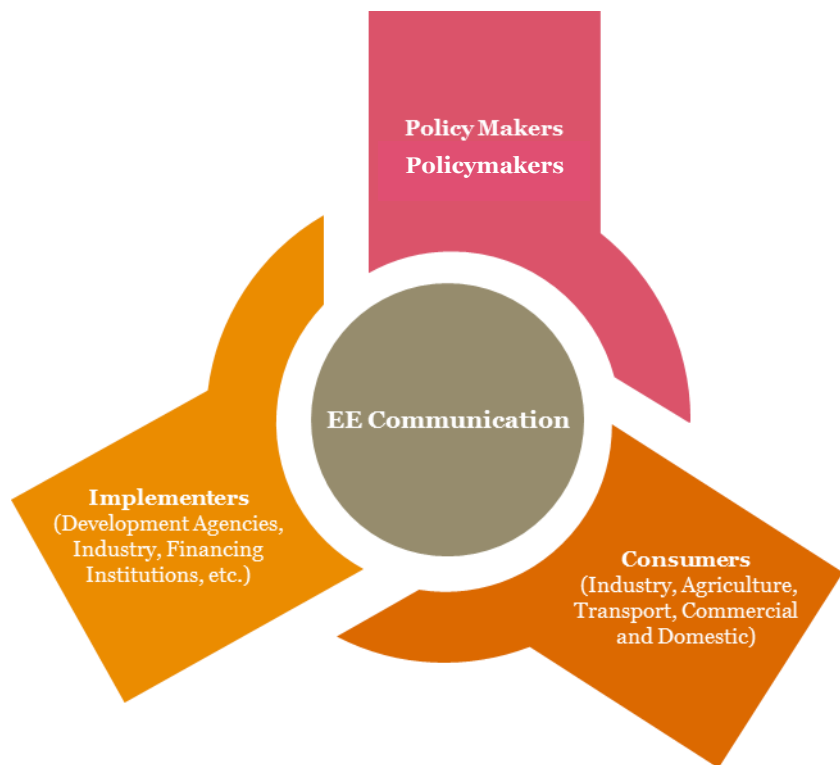


Figure 1: Stakeholder Mapping of EE Communications

Methodology

The methodology for the communication needs assessment is divided into three specific activities, each of which provides inputs for successive ones, thereby evolving into a research-based communication needs assessment and stakeholder mapping for EE communication in India. These specific activities are listed and briefly described below:

1. **Desk research:** Developing a bird's-eye view of the EE communication landscape in India, leading to identification of the following:

- a. Major EE programs having dedicated communication channels for stakeholders.
 - b. Platforms and existing partnerships for knowledge exchange on EE among various players.
 - c. Preliminary stakeholder mapping and segregation.
2. **Stakeholder mapping and primary research:** Gaining in-depth insights into the implementation of EE communication campaigns (strategic context and needs; opinions and objectives; barriers and institutional mechanisms; monitoring, evaluation, and impact assessment; informational needs; and stakeholder groups on the upstream and downstream side of programmatic activities) from program managers, as well as consumers or end users of energy. This involves the following tasks:
- a. Segregation of stakeholders on the basis of their respective roles in the EE landscape—policymakers and nodal agencies, implementers and consumers.
 - b. Understanding the profile of such audience groups in terms of demographic details; perception of the roles of government, consumers, and private players; existing and residual knowledge on EE; barriers, and motivators for behavior change; and perceptions on the benefits of EE.
 - c. Opinion research with key stakeholders and organizations across the spectrum of energy-consuming sectors in India and having the experience of running EE communication campaigns (or related activities) across audience groups. The activity also reinforces findings from desk research.
3. **Communication needs assessment:** Comprehensive communication research, including analysis of the responses received from institutional stakeholders and the general public, and conducting communication needs assessment based on the observations and findings from desk research and interviews.

Stakeholders in the EE landscape in India are classified into three distinct categories (see Figure 2) based on their respective role in the EE activities, as well as potential EE communication campaigns. PwC identified key entities from each of these categories for conducting primary research based on the following:

1. Exposure to EE communication campaigns.
2. Influence on EE and its related communication campaigns.
3. Representation in energy consumption (overall as a sector: Industry, Agriculture, and Commercial, for example).

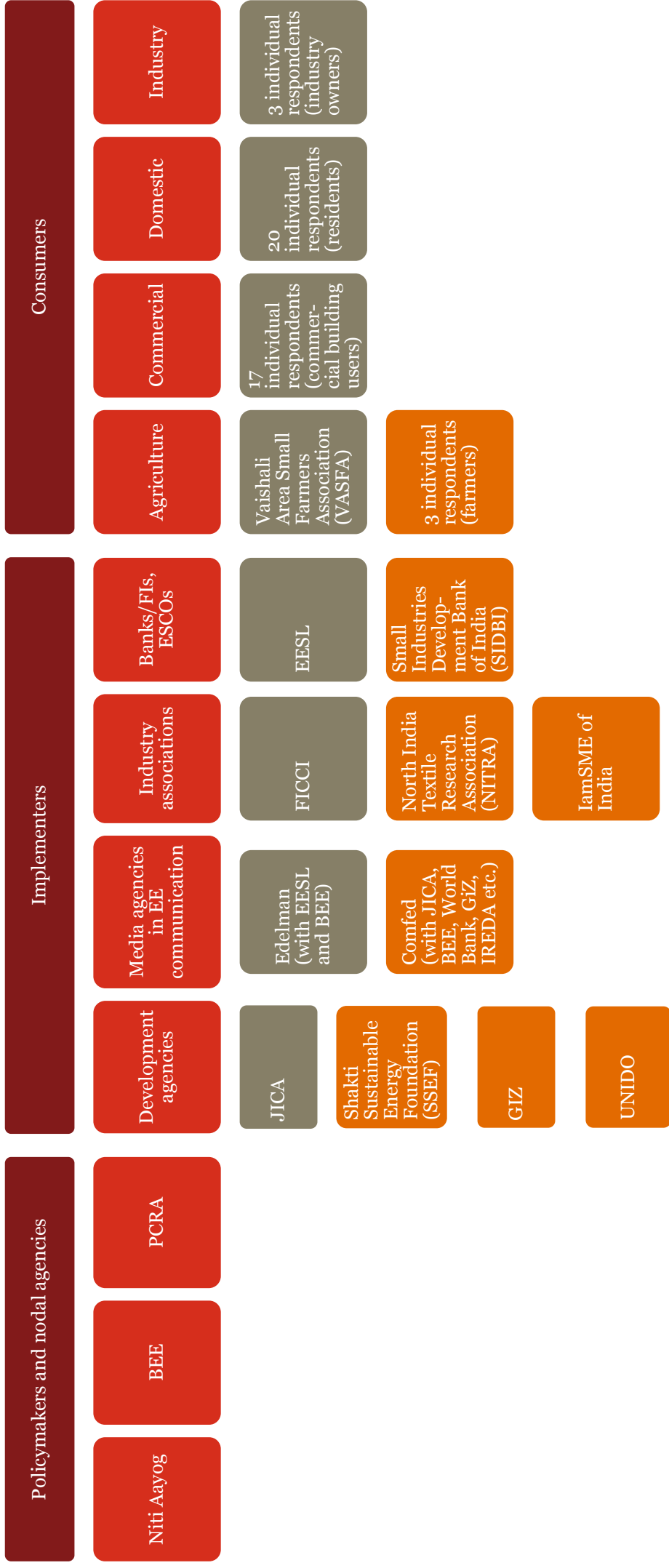


Figure 2: Classification of Stakeholder in EE Landscape

A brief description on stakeholder mapping illustrated above is presented in Table 1.

Table 1: Stakeholder Mapping

Stakeholder Institution	Role in EE landscape
 Policymakers and nodal agencies	
BEE	BEE is the apex nodal agency for formulating and implementing various policies and programs under the Energy Conservation Act, 2001, and National Mission on Enhanced Energy Efficiency (NMEEE). Major EE programs by BEE include the PAT scheme (industries-large), small and medium-sized enterprises (SMEs) program (industries—small and medium), S&L (appliances), and Energy Conservation Building Codes (ECBC).
PCRA	PCRA is a national agency engaged in promoting fuel consumption efficiency in various sectors of economy. PCRA helps the government in proposing policies and strategies for petroleum conservation, aimed at reducing excessive dependence of the country on oil. Over the years, PCRA has broadened its role in improving productivity in use of various sources of energy.
Niti Aayog	Niti Aayog is the premier policy think tank of the Government of India, providing both directional and policy inputs at the highest level. While designing strategic and long-term policies and programs (including the ones for EE) for the Government of India, Niti Aayog also provides relevant technical advice to the center and state governments.
Implementers	
JICA	The Japan International Cooperation Agency (JICA) is one of the largest providers of official bilateral development assistance to India. JICA is supporting two major programs in Clean Energy sector—the MSME Energy Saving Project Phase III, and New and the Renewable Energy Development Project Phase II. Both of these programs have communication channels, such as newsletters, awareness campaigns, audiovisual documentaries, and websites, for reaching out to respective stakeholder groups.
GIZ	GIZ in India works in areas of sustainable economic, environmental, and social development. GIZ's major programs in clean energy and EE landscape in India are Indo-German Energy Network (IGEN) and IGEN—Renewable Energy Access. GIZ has recently undertaken development of communication tools and creatives for promotion of Solar Irrigation Pumps, after due communication research, creative development, and field testing with target audience.
Shakti Sustainable Energy Foundation	SSEF works for promoting policies that encourage energy efficiency, as well as the increased generation of renewable energy. SSEF has supported formulation of the Utility CEO Forum, a discussion and communication platform for senior officers of state and regional level power utilities. In addition, SSEF has supported BEE and other agencies in strengthening their programs in EE by conducting various market research studies, status reports, and stakeholder consultations.
UNIDO	The United Nations Industrial Development Organization (UNIDO), in partnership with BEE, has undertaken the Cleantech program for 12 clusters from five energy-intensive industrial sectors—ceramic, hand tools, foundries, brass, and dairy production.
Edelman	Edelman is one of the pioneering media agencies in EE landscape in India. Edelman has worked with BEE and EESL at different levels in their communication campaign.

Comfed works in areas of communication for education on sustainable development issues. Comfed has developed communication strategies, consumer research reports, detailed communication strategies, and various creatives for an array of multi-lateral and bilateral development agencies, the center, and state governments.

Comfed

The Federation of Indian Chambers of Commerce and Industry (FICCI) is one of the leading industrial associations in India and functions as the voice of industry while engaging with policymakers, executives, and other stakeholders on various concurrent issues. FICCI also houses a Resource Conservation and Management (RCM) division to promote sustainable production practices and EE measures in Industry. FICCI also provides various avenues for communication among various EE stakeholders related to the Industry, for example, development agencies, technology suppliers, and consultants.

FICCI

Northern India Textile Research Association (NITRA) represents textile industry (one of the eight identified highest energy consuming sectors in India) and undertakes various functions for enhancing energy and other resource efficiency in textile sector. NITRA communicates various cutting edge developments in textile sector among its members' base. NITRA has also developed infrastructure for reaching out to various levels within industrial organizational structure.

NITRA

IamSMEofIndia is one of the industrial associations dedicated for micro, small, and medium enterprises (MSMEs) in India. IamSMEofIndia is positioned as representative of the MSME sector as its member base comprises of industries from a variety of sectors.

IamSMEofIndia

EESL is a joint venture company of National Thermal Power Corporation Limited, Power Finance Corporation (PFC), Rural Electrification Corporation, and Power Grid Corporation of India Limited (POWERGRID) to facilitate implementation of EE projects. EESL works as an ESCO and as a consultancy organization for such programs as EE and Clean Development Mechanism. The organization has delivered one of the key EE communication campaigns for DELP. EESL has launched a national level communication campaign and strengthens it with a local campaign at the footprint of its LED distribution program.

EESL

The Small Industries Development Bank of India (SIDBI) is the apex financial institution for sustainable development oriented finance for the MSME sector. SIDBI has also undertaken communication initiatives, such as EE equipment exhibitions, workshops, and awareness campaigns, as part of various programs for EE promotion in industry.

SIDBI

3. An In-Depth Analysis of Major EE Communication Programs in India

This chapter presents a detailed review and analysis of the major EE communication programs in India developed and implemented by various policy bodies and implementing agencies. The programs are identified and analyzed based on various parameters, such as the importance of the campaign to the national EE agenda, coverage of sectors, and communication footprint—both in terms of target audiences covered and communication media employed.

The following dedicated campaigns aimed at bringing consumer awareness, outreach, and behavior change impact for end users are analyzed:

1. PCRA’s educational campaign on fuel saving for transport, industry, residential, commercial, and agricultural consumers.
2. EESL’s communication campaign ILedTheWay for DELP.
3. BEE’s IEC campaigns, including campaigns for NECA and the S&L program.
4. NDTV’s Mission Energy, a campaign on EE launched during February–June 2014, focusing on innovation in EE at the industrial, commercial and household level.

A summary of the campaigns is presented in Table 2 to facilitate a quick comparison of these major EE communication programs in India across various aspects like sectors covered, target audience, use of digital space and mass media, and impacts assessment.

Table 2: Summary of the Campaigns

	Educational campaigns by PCRA	ILedTheWay campaign by EESL	BEE	NDTV’s Mission Energy Campaign
Sectors covered	<ul style="list-style-type: none"> ✓ Residential ✓ Industry ✓ Commercial ✓ Agriculture ✓ Transport 	<ul style="list-style-type: none"> ✓ Residential 	<ul style="list-style-type: none"> ✓ Residential ✓ Industry ✓ Commercial ✓ Agriculture 	<ul style="list-style-type: none"> ✓ Residential ✓ Industry ✓ Commercial
Target audience	Energy users (end consumers) from above sectors			
Digital space	<ul style="list-style-type: none"> ✓ Android game for mobile phones ✓ Android app for efficient driving tips ✓ Crowdsourcing of motivators for fuel saving through mygov.in ✓ Facebook page ✓ YouTube page 	<ul style="list-style-type: none"> ✓ Real-time dashboard on LED distribution ✓ Facebook page ✓ Twitter handle 	<ul style="list-style-type: none"> ✓ Web portal for equipment EE comparison ✓ Android app for star labeled equipment ✓ Facebook page ✓ YouTube presence 	<ul style="list-style-type: none"> ✓ YouTube page ✓ Online repository of posters and reports
Mass media	<ul style="list-style-type: none"> ✓ TV commercials (TVCs) (national) ✓ Radio jingles (national and local) 	<ul style="list-style-type: none"> ✓ Radio jingles (local) ✓ Newspaper and other print (local) 	<ul style="list-style-type: none"> ✓ TVCs (national) ✓ Radio jingles (national and local) 	<ul style="list-style-type: none"> ✓ TV shows (chat shows) ✓ Celebrity endorsement

	<ul style="list-style-type: none"> ✓ Newspapers and other print (national) ✓ Celebrity endorsement (national) 		<ul style="list-style-type: none"> ✓ Newspapers and other print (national) ✓ Celebrity endorsement (national) 	
OOH	<ul style="list-style-type: none"> ✓ Painting and essay competitions for school students (national) ✓ City-level street events (<i>Raahgiri</i>, local) ✓ Demonstration of better driving habits and benefits (national) ✓ Electronic interface at stalls in major consumer events (e.g., India International Trade Fair, IITF) 	<ul style="list-style-type: none"> ✓ Mobile vans (local) ✓ Sunpack boards (local) ✓ Door-to-door (DTD) campaign(local) ✓ Banners, posters, and hoardings (local) 	<ul style="list-style-type: none"> ✓ Painting competitions for school students (national) ✓ Observing National Energy Conservation Day ✓ Events like NECA 	Not Used
Impact assessment	<ul style="list-style-type: none"> ✓ Dedicated impact assessment of educational campaign by third party, quantification of results in terms of fuel and monetary savings 	<ul style="list-style-type: none"> ✓ Impact of the local campaign assessed in terms of offtake rate of LED bulbs 	<ul style="list-style-type: none"> ✓ Impact assessment of IEC campaign as part of the development agencies' funded programs 	Not Available

Campaigns Oriented towards EE Communication among Policymakers and Implementers

While most EE communication programs are oriented towards the consumer or end user, policymakers and implementers are also key stakeholders in shaping and executing the EE agenda of the country. It is therefore important to address the communication and information needs of these key stakeholder groups.

The needs of EE communication campaigns targeted towards the upstream stakeholder groups (policymakers and implementers of EE programs) are entirely different compared to campaigns targeting consumers or end users of energy. Communication and information needs of this stakeholder group revolve around the potential and impact of EE programs; fresh ideas and avenues for EE implementation in the country; sector-level barriers and opportunities in EE; and innovative EE implementation, financing, and risk mitigation mechanisms. Being institutional stakeholders, this stakeholder group best lends itself to focused communication media, such as subject- or area-specific discussion forums and platforms.

The Utility CEO Forum on DSM is one of the innovative initiatives catering to the information and communication needs of policymakers and implementers in the electricity supply industry. The objective is to bring together key stakeholders to stimulate fresh ideas, identify critical challenges, replicate best practices, and create an enabling policy environment for scaling up utility-driven DSM programs in the country.

Table 3 lists some of the key features characterizing this initiative. These will provide pointers for effective forums or platforms for EE communication among policymakers and implementers.

Table 3: Important Features of the Utility CEO Forum on DSM Initiative

Maintaining a clear purpose and agenda	<ul style="list-style-type: none"> ✓ A charter has been prepared for the forum, including a vision and mission statement, structure and constitution of the forum, themes of the past meetings, and details about honorary chairpersons. ✓ The CEO Forum has a logo to consistently project a brand identity. ✓ The forum meets periodically with a specific theme for each of the meetings. ✓ The background paper describing the theme and agenda is circulated to the participants one week prior to the meeting.
Credibility of the platform among the stakeholder groups	<ul style="list-style-type: none"> ✓ The chairperson is an opinion leader representing the forum. The successive chairpersons are well reputed and highly regarded experts and authority figures among the stakeholders within the reach of the forum and its activities.
Involvement and ownership of the key stakeholders responsible for implementation	<ul style="list-style-type: none"> ✓ The themes for the successive meetings of the forum evolve from the discussions of the forum members and are adopted by consensus. ✓ The recommendations of the forums are evolved through brainstorming and deliberations with the involvement and participation of the key stakeholders. In this way, when the outcomes or recommendations are sent out to these key stakeholders, they already have the much-needed buy-in and a clear understanding about these outcomes. This greatly facilitates implementation.
Focus on outcomes	<ul style="list-style-type: none"> ✓ Call to action–based pointers are developed from the meeting outcomes, which are followed up with the stakeholders. ✓ The activities and outputs of the forum have reached many stakeholders across the country. ✓ The forum has gained substantial significance as an exclusive platform for learning about DSM opportunities and successful implementation models. ✓ Participants agreed that the forum has progressively voiced the necessity of DSM measures in the Indian electricity sector. ✓ A number of participant states notified DSM regulations in 2014–15. Participants acknowledge that the forum has been a catalyst or a facilitator in strengthening the DSM policy, building institutional capacity, developing concrete DSM proposals, and on-ground roll-out of DSM projects.

The following sections present a detailed review of the campaigns summarized in Table 2: Summary of the Campaigns.

Educational Campaign by PCRA

PCRA undertook an IEC campaign with the objective of creating awareness among the masses about the importance, methods, and benefits of conserving petroleum products and emission reduction.

As part of the campaign, PCRA deployed several media for mass communication. These included electronic, print, and OOH media—TV, radio, electronic displays, press at the national and state level; printed literature for specific target groups, outdoor publicity through hoardings, bus panels, kiosks, balloons, and banners. The focus of all the messages included a **call to action with easy-to-implement and practical conservation tips** for the industrial, transport, agriculture, and domestic sectors (Figure 3 captures some visuals from advertisements for the different sectors)

For effective communication to the target groups in semi-urban and rural areas, the messages were developed in regional languages. Field interactive programs, such as seminars, technical meets, consumer meets, workshops, clinics, van publicity, exhibitions, and *Kisan melas* (farmer meets), were organized for dissemination of conservation messages and demonstration of conservation techniques. Figure 4 attempts to provide the visual feel, through glimpses from advertisements on fuel conservation from PRCA’s website.



Figure 3: Highlights from IEC Awareness Campaign



Figure 4: Glimpses of Advertisement from PRCA Website

Sectors Covered and Key Messages

PCRA's IEC campaign attempted to holistically cover the major energy-consuming sectors at the broader level, disseminating key messages as described in Table 4.

Table 4: Key Messages

Sector	Objectives	Examples
<p>Industrial</p>	<p>EE in industry through energy audits and operating practices</p>	
<p>Transport</p>	<p>Fuel efficiency, driving habits, carpooling, etc.</p>	

<p>Agricultural</p>	<p>Operating practices for farm equipment, such as tractors, and star-rated water pumps</p>	
<p>Domestic</p>	<p>Fuel- and electricity-saving tips at homes and residences, use of star-labeled equipment</p>	

<p>Commercial</p>	<p>EE in buildings, energy audits, use of star-labeled equipment</p>	
<p>Others</p>	<p>Use of biofuels and gender-specific communication</p>	

The information mentioned in Table 4 shows that PCRA’s campaign covered all the major energy-consuming sectors and provided easy-to-understand messages with a call to action for the target audiences. For instance, energy-saving tips for households, drivers of passenger vehicles, and owners of industrial enterprises were disseminated to educate them on the benefits of conducting energy audits at their respective facilities.

Key Details of PCRA’s IEC Campaign

PCRA’s IEC campaign for awareness on fuel savings and related issues has successfully used several elements that make it stand out as one of the most comprehensive educational campaign on EE. One of the ground rules adhered to while developing communication campaigns is the simultaneous targeting of multiple motivating factors (such as health, money, conservation, and environment) to break the monotony and enhance the appeal of communication messages. Important details of PCRA’s campaign with an overall annual budget to the tune of INR 200–300 million are presented below.

School-Level Intervention for BCC

PCRA undertook a highly successful communication activity involving large-scale mobilization of school students. During 2014–15, PCRA organized a painting competition for school students wherein approximately 23,000 students participated.

The next year, 2015–16, PCRA scaled up the intervention by joining hands with the district-level Department of Education, Sarv Shiksha Abhiyan (education program) to organize painting and essay competitions for more than half a million students in 23 languages (for essay writing) and 24 events across India. The credibility of the entries was certified at the school principal’s level.

The important takeaway from the program was that it helped in driving home the message of EE not only among children, but also indirectly among their parents and elders (who help the child prepare for the competition).

PCRA intends to further scale up the target for the subsequent year by using the Digital India³ platform to reach out to 10 million students.

Digital Space

To reach out to audiences who have access to the Internet and smartphones, PCRA has launched two Android-based mobile applications (see Figure 5 and Figure 6):

1. PCRA—Fuel Saving Tips
2. Drive Smart and Save Fuel



Figure 5: Snapshots of the PCRA—Fuel-Saving Tips App

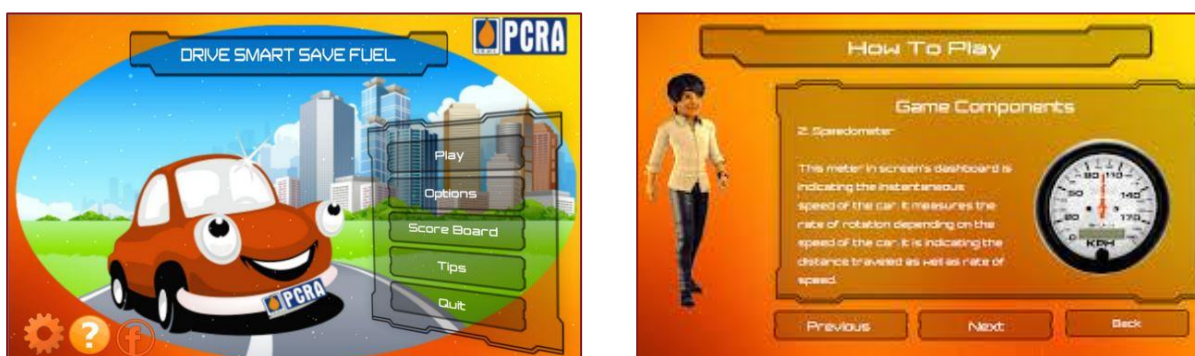


Figure 6: Snapshots of the Drive Smart Save Fuel App

³ Digital India is a campaign launched by the Government of India to ensure that government services are made available to citizens electronically by improving online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology.
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In addition, an Android mobile game for simulation of best driving practices is underway to train drivers.

Other examples of utilizing the digital space for community involvement and mobilization are mentioned below:

1. Engaging audience on social media: Regular updates on the Facebook page (with over 110,000 subscribers) and quizzes and prizes for audience.
2. Crowdsourcing of messages and thematic communication elements through the two-way communication platform (<http://mygov.in>), recently launched by the Government of India.

OOH Communication

Other than traditional OOH media (for example, hoardings, banners, and mobile vans), PCRA also undertakes the following activities:

- Communication activities as part of regularly conducted *Raahgiri* (street) events.
- Live demonstration of particulate matter (measurements) at busy crossings and fuel stations to educate vehicle drivers; PCRA claims to have reached out to 4.8 million users through 45,000 fuel stations.
- Participation in large exhibitions such as the IITF, employing outreach methods such as:
 - Provision of games, puzzles, paintings, and selfies for audience engagement.
 - Roping in professional event organizers for games like word hunt.
 - Slow cycling competitions to promote avoidance of cars and vehicles for short-distance commuting.

Mass Media Communication

Mass media-based communication is also deployed extensively by PCRA subsequent to defining objectives, conducting communication research, and development of creatives.

The campaign is carried out on TV, radio, and other communication channels during the months of January–March. PCRA is also targeting to increase the span of communication activities, eventually taking it up around the year. As of today, PCRA considers a shelf life of three years for various creatives. Promotional material is revised and updated or newly created every three years. However, this revision frequency is often too low—and this is a limitation.

Table 5 provides relevant details of a previous campaign by PCRA in terms of media vehicles adopted, networks used, development of creatives, and number of insertions.

Table 5: Details of PCRA Campaign in 2013-14

Details	Campaign 2013–14
TVC campaign	
TV (cable and satellite)	141 channels; 30,345 spots; 21 days
National channel (including regional, 9 channels)	30,345 spots; 30 days
Radio campaign	
Private FM channels	214 stations; 62,916 spots; 14 days
National and regional	98 stations; 16,324 spots; 14 days
Print campaign	
Half-page advertisement insertions in newspapers	8 advertisements; 1,448 insertions
Magazines	Advertisements in 77 magazines
Digital campaign	
Cinema halls	Advertisements in 6,574 halls for 14 days
SMS campaign	14 days; 2.4 crore ⁴ SMSs
Advertisements on websites and social media	20 websites for 14 days
OOH campaign	
	Roadside activity for vehicle drivers and others
	Painting and essay competitions for schoolchildren
	Walkathon on fuel conservation at Noida
	Activity for households and domestic sector

Impact Assessment

PCRA also undertakes impact assessment of various mass media campaigns through dedicated agencies shortlisted through the quality- and cost-based selection (QCBS) mechanism. The current agency for impact assessment is GfK Mode Pvt. Ltd., India. The results of the impact assessment are translated in terms of estimated or extrapolated savings in fuel consumption and greenhouse gas emission reductions across various fuel-consuming sectors. Following is an example of such an impact assessment:

An impact assessment study conducted for the year 2013–14 demonstrated that mass awareness campaigns resulted in estimated fuel savings of 567,375 MT of petrol, 1,873,083 MT of diesel, and

⁴ 1 Crore = 10 million or 100 lakhs.
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948,383 MT of LPG. These savings will reduce carbon dioxide emissions into the atmosphere by approximately 9.10 million MT.⁵

The impact assessment studies are believed to be influencing next year's campaign inputs, as well as resources. The methodology for impact assessment of the campaigns covers the following:

- Qualitative analysis of the increase in the awareness level, post campaign.
- Effectiveness of the creatives.
- Effectiveness of the media.
- Reach to the target groups.
- Overall impact of the campaign.
- Suggestions (if any) for corrective measures for the future.
- Quantitative analysis of the tangible gains or savings accrued on account of the increase in awareness and attitudinal change on account of the educational campaign, in terms of money and fuel saved.

A post-campaign survey is conducted annually (detailed results are not available in the public domain) to measure the shift in behavior, the attitude of the end users of petroleum products, and the efficacy of the campaign. It is worth mentioning here that PCRA seems to be the only agency in the EE communication landscape in India to consistently run post-campaign evaluations.

ILedTheWay: A Campaign by EESL

EESL has launched two flagship programs, namely, the Domestic Efficient Lighting Program (DELP) and the Streetlight National Program (SLNP) at the national level for distribution of LED lights for domestic use and municipal streetlights respectively. EESL launched a dedicated communication campaign to create awareness and meet the IEC objective for the DELP scheme under the title ILEDTheWay.

The ILEDTheWay campaign has witnessed a very positive reception by the target audience, an indication of which is reflected in the phenomenal uptake of LED bulbs from its various city-level distribution programs. As can be seen from the snapshots of the **National Ujala Dashboard**⁶ (updated April 11, 2016, 4:28 p.m.), more than 93 million LED bulbs have been procured by target users and 31 million users have pledged their support for the campaign.

Appointment of Media Consultant

Edelman, media consultant to EESL, is advising and supporting public relations and marketing activities, including brand building, digital and social media, and experiential activations to amplify key messages and deliver mission success across programs. The #ILEDTHEWAY campaign on mass media and social media, supplemented with posters, radio spots, and newspaper advertisements, advertised the benefits of LEDs. The campaign has been successful, as indicated by the huge uptake of LEDs (Figure 7) and success of the DELP program in line with the expectations (Figure 8).

Figure 7, Figure 8, and Figure 9 also provide visuals on some of the digital and other media creatives and messaging for the DELP scheme.

⁵ Source: PCRA - http://www.pcra.org/pcra_adm/writereaddata/upload/files/COP%2021-2910.pdf

⁶ An innovative web-based dashboard highlighting, in real time, the total number of LEDs distributed across India under EESL's DELP scheme: <http://www.delp.in>
Communication Research on Energy Efficiency in India:

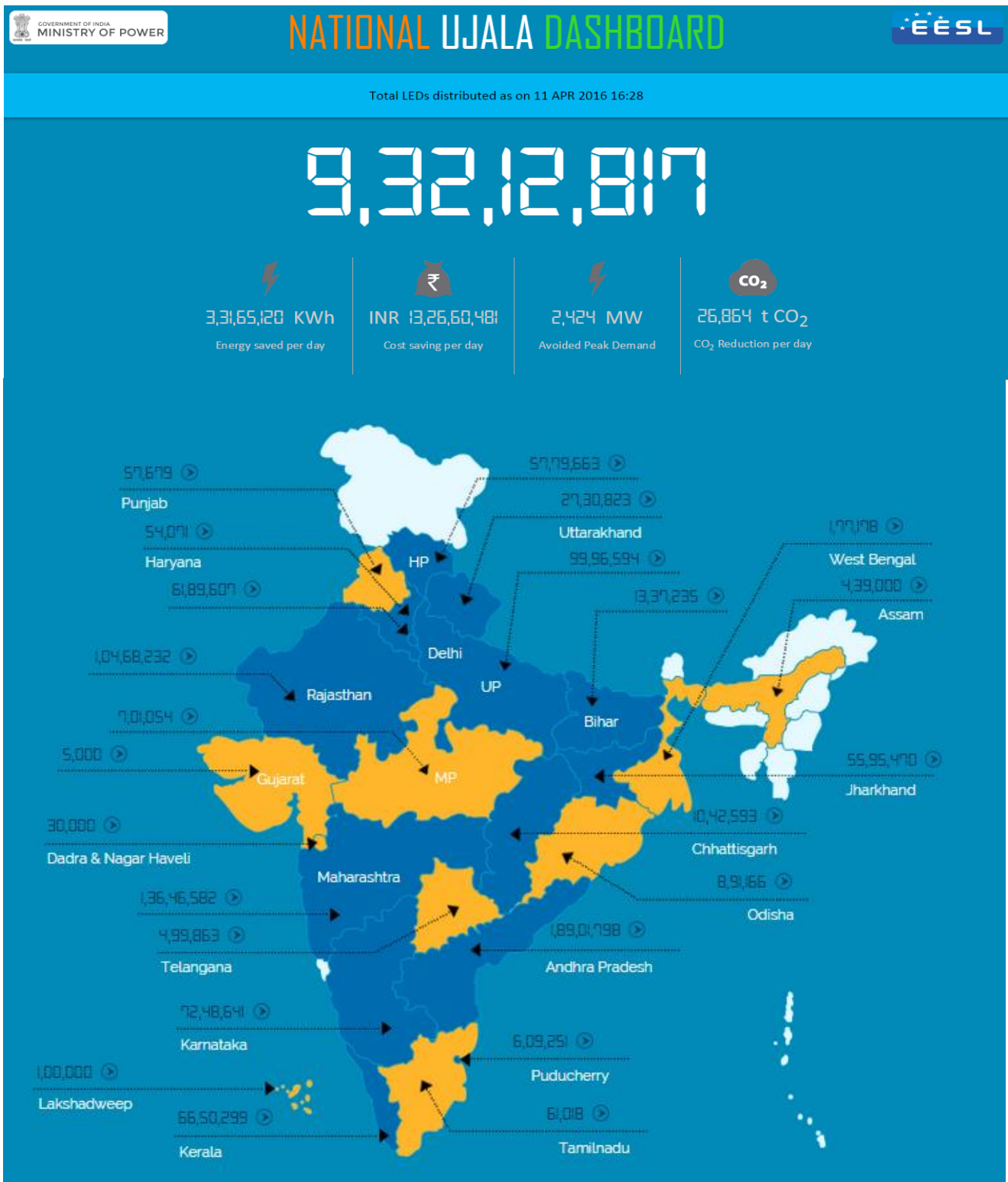


Figure 7: DELP Dashboard Showcasing the Number of LED Bulbs Distributed to Consumers

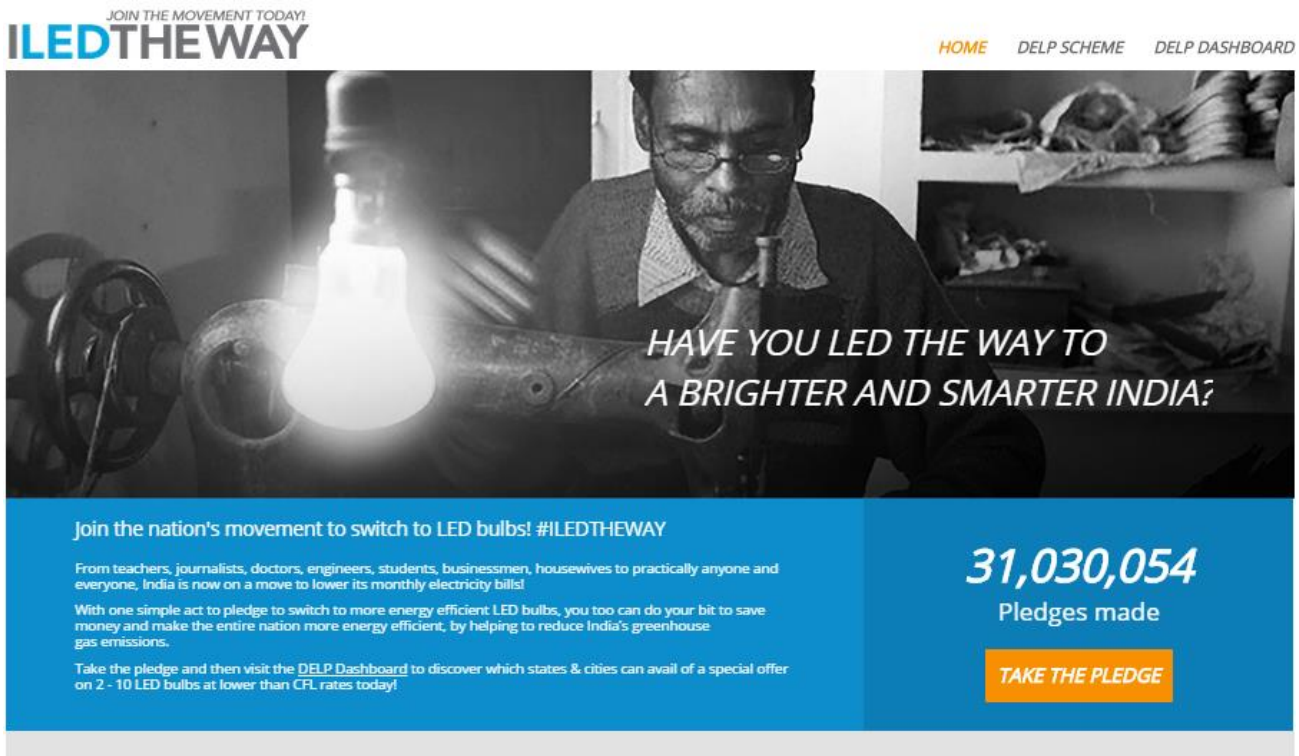


Figure 8: DELP Homepage Showcasing Number of Support Pledges for the Campaign by Consumers

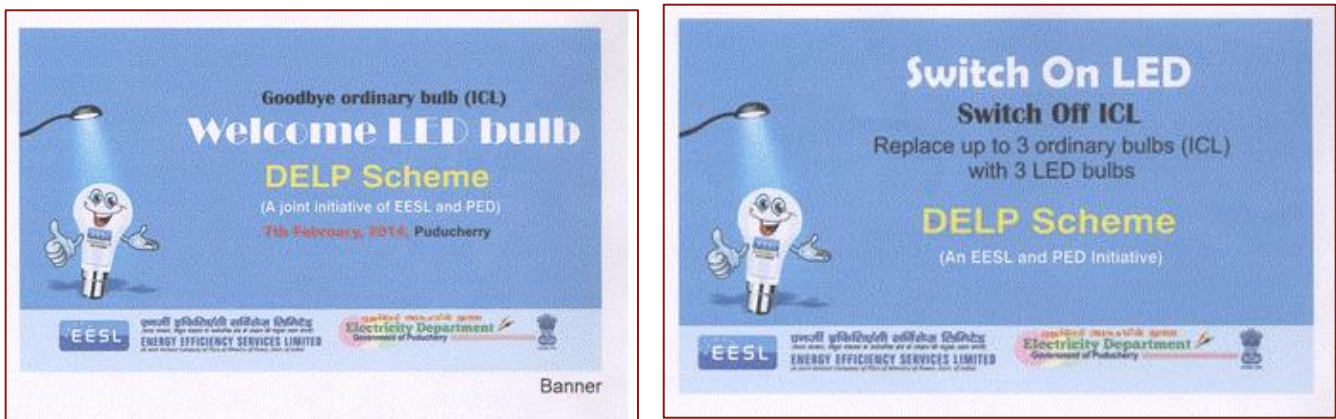


Figure 9: Some Media Creatives for DELP Scheme

Two-Tier Communication Campaign

EESL and Edelman have implemented a two-tier communication strategy for rolling out communication at the national and regional or local level.

EESL rolled out the DELP scheme at the city level by setting up distribution counters. At the same time, EESL hired *local agencies for each city*. These local agencies were responsible for the following:

1. LED distribution, storage, inventory management of LED bulbs and database preparation.
2. Dedicated media awareness campaigns for distribution.

These local agencies organized city and statewide awareness and outreach activities in order to inform the domestic consumers of the details of the scheme. Work was carried out according to the tenders floated for individual cities. Distribution companies (DISCOMs) were also roped in to facilitate different aspects of the city-level communication campaign.

A Typical Local IEC Campaign

M/s. Span Communication and M/s. PAMM Marketing & Advertising were appointed to carry out the distribution and awareness activities using various media tools like print, radio, local announcements, outdoor media, and DTD campaigns in Ratnagiri and Sindhudurg region (Maharashtra, India). The distribution and awareness agency worked in close coordination to ensure that the awareness initiatives gain ground and the reach is augmented. A snapshot of the local IEC campaign is presented below.

Print: Newspapers

- Five print advertisements (800 sq. cm.) and 12 (400 sq. cm.) were released between July and August 2015.
- Six more advertisements (240 sq. cm.) were released later and were displayed for nearly three months. Some snapshots can be seen in Figure 10.

Collaterals: Leaflets, banners, standees, posters, and hoardings

- Over 6 lakh⁷ leaflets were distributed at the start of the campaign.
- Over 150 banners and posters were featured across local tourist and religious spots and DISCOM offices (Mahavitran Kendras) throughout the city.
- Around 20 hoardings and standees were placed at different locations and 200 additional banners and posters were placed across local tourist and religious spots and DISCOM offices (Mahavitran Kendras) throughout the city.

OOH Media: Mobile van, sunpack boards

- Five mobile vans with loudspeakers ambled through the city and announcements were made in all parts of the Konkan zone (targeted approach) for 30 days as seen in Figure 11.
- Almost 200 sunpack boards were placed near local *kirana* (grocery) stores across the city a week after coordinating with the distribution agency.
- Three mobile vans with loudspeakers were deployed and announcements were made in all parts of the Konkan zone (targeted approach) for the next 30 days.

Electronic media: TV

- The cable TV strip and scroll ad were played on two local TV channels, and a special TV commercial was also aired.

Local awareness: DTD, school interactions, and mall activities

- DTD promotion activities were conducted using 10 DTD promoters.
- Intensive interaction targeting malls and local school contact programs were carried out.

⁷ A *lakh* is a unit in the Indian numbering system equal to 100,000.
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Figure 10: Newspaper Articles, Interviews, and Insertions



Figure 11: OOH Media—Mobile Van and Banners

Digital Space

EESL has developed online dashboards to keep a track of the statewide progress of the DELP and municipal streetlighting programs.

A dedicated website—www.iledtheway.in—has also been developed to provide relevant information on the DELP scheme, tweets, motivational videos, facts, and myth-busting communication about benefits of LED bulbs over conventional ones. Figures 12, 13, 14, and 15 reflect some of the work in digital space.

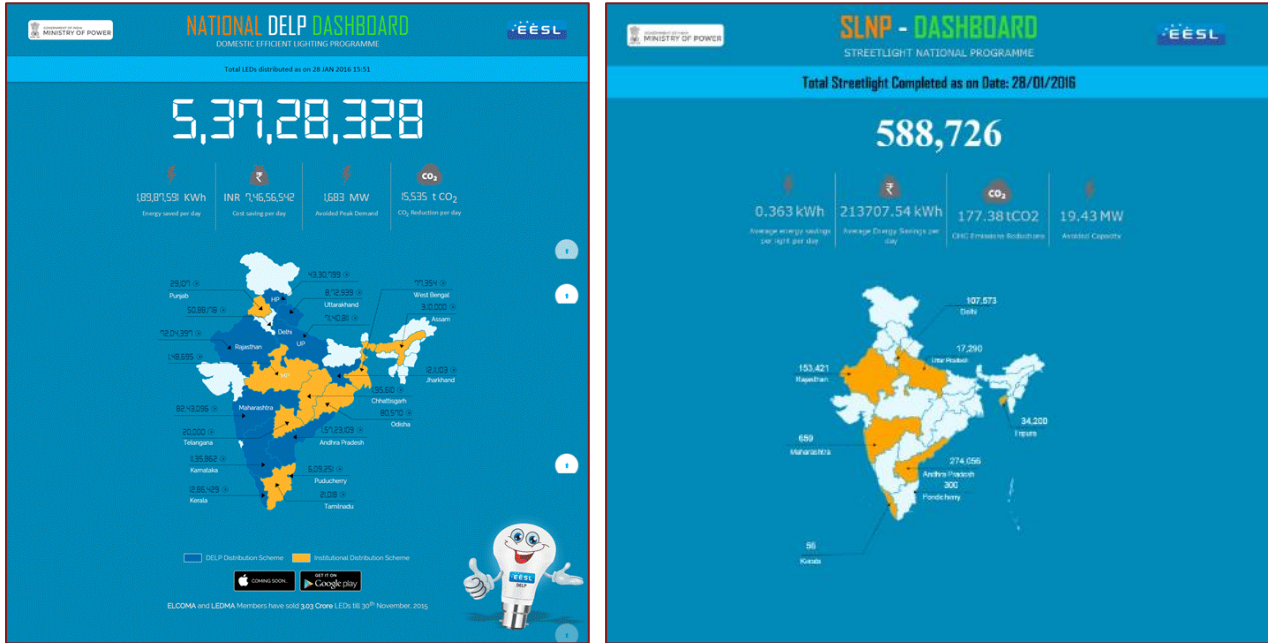


Figure 12: Dashboard Screenshots

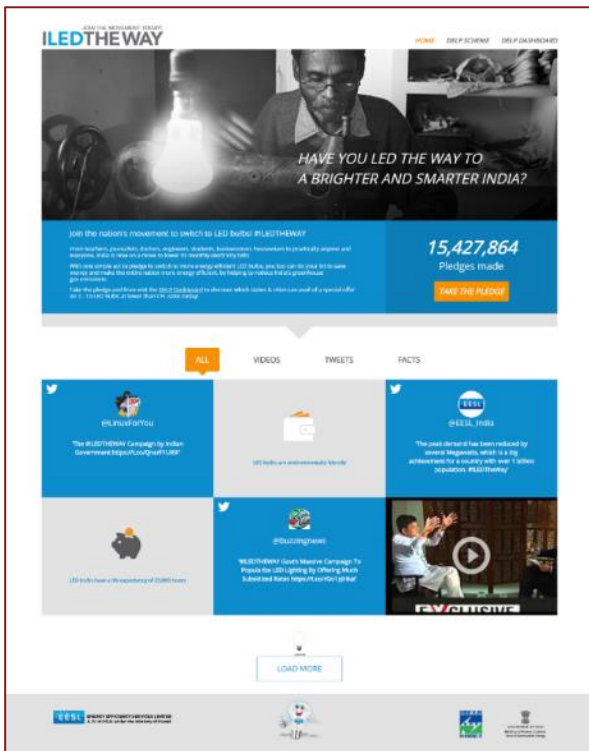


Figure 13: Website Screenshots



Figure 14: Tweets

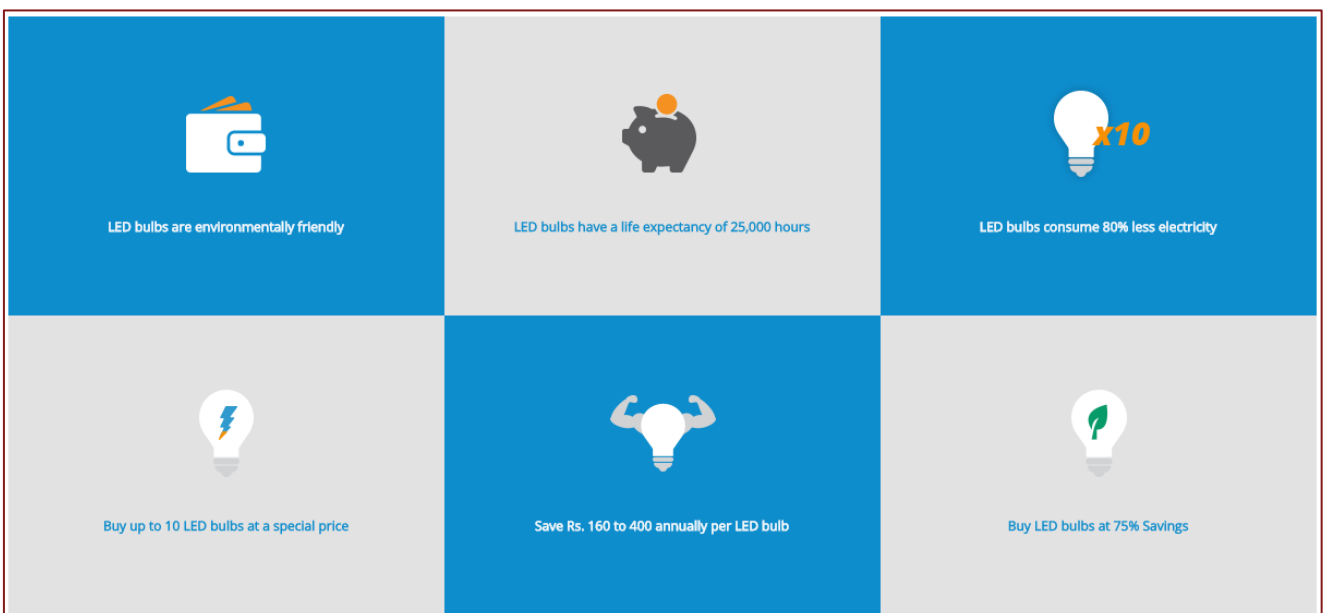


Figure 15: Facts

Impact Assessment

An interesting phenomenon observed while monitoring some of the IEC campaigns was the strong correlation between the IEC campaign frequency and rate of uptake of LED bulbs. This is important evidence that establishes a positive impact of the campaigns on end consumers. Whenever there were instances where a campaign had to be suspended for various reasons, there was a corresponding and marked dip in the offtake of LED bulbs.

Educational and BCC Campaign by BEE

BEE is the apex body under the Ministry of Power, Government of India, to provide leadership and policy direction to national energy conservation and efficiency efforts and programs. The mission of BEE is to assist in developing policies and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act, 2001, with the primary objective of reducing energy intensity of the Indian economy. Through BEE, the government has initiated a number of EE initiatives in the areas of household lighting, commercial buildings, S&L of appliances, DSM in agriculture and municipalities, small and medium-sized enterprises (SMEs), and large industries, including the initiation of the process for development of energy consumption norms for industrial subsectors and capacity building of state-designated agencies.

One of the primary objectives of BEE is to create awareness and disseminate information on EE and promote the use of energy-efficient processes, equipment, devices, and systems. Over the years, BEE has employed various communication-related initiatives to achieve this objective.

Behavior Change Communication for Students

As part of its promotional activities, the Ministry of Power launched a web portal called Energy Savers (www.energysavers.co.in—see Figure 16 for some snapshots), which provides tools to help children assess and improve energy usage in their schools and homes. The idea behind this is to employ the catch-them-young strategy and to influence the energy-consuming behavior of the children to make them ambassadors of energy conservation. The website is mainly focused on students with links for school registration, past interaction sessions, posters, comics, booklets, and handbooks. The content featured on the site is child-friendly.



Figure 16: Energy Savers Portal

National Energy Conservation Awards

The annually held National Energy Conservation Awards (NECA) ceremony recognizes innovation and achievements in energy conservation in various categories, including industries, buildings, railways, state-designated agencies, manufacturers of BEE star-labeled appliances, electricity DISCOMs, and the municipal sector. The awards are also a recognition of demonstrated commitment of individuals and entities from major energy-consuming sectors and subsectors towards improvement in EE. Figure 17 shows posters and print media advertising the NECA ceremony.



Figure 17: National Energy Conservation Awards

The participating units of NECA 2015 have collectively invested INR 238.4 billion in energy conservation measures and have achieved annual monetary savings of INR 292.8 billion, implying a short payback period of only 11 months. The participating units have also saved 2,598 million kWh of electrical energy, which is equivalent to the energy generated from a 423 MW thermal power station.

Source: The knowledge exchange platform—a collaborative initiative partnered by BEE to promote and share best practices and energy efficient technologies (<http://knowledgeplatform.in/neca-2015/>).

Digital Space

Digital space is used throughout the educational and BCC campaign by BEE in various ways as highlighted below.

Search and Compare

The portal www.beestarlabel.com provides consumers with the facility to search and compare various appliances and equipment, such as refrigerators, air conditioners (ACs), diesel generator sets, motors, water heaters, and ceiling fans on the basis of brand, capacity, and star ratings. Screenshot of the portal is presented below in Figure 18.

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Figure 18: Search and Compare

AC Energy Calculator

The AC energy calculator allows users to choose from different AC capacities, quantities, efficiency levels, and operating time to estimate savings in electricity charges by opting for higher efficiencies, say, a Star-5 AC over Star-1 AC. The tool provides options for both residential (small, medium, or large flats) and commercial (banks, clinic, restaurant, or office) buildings. A screenshot from the web-based tool is shown below in Figure 19.

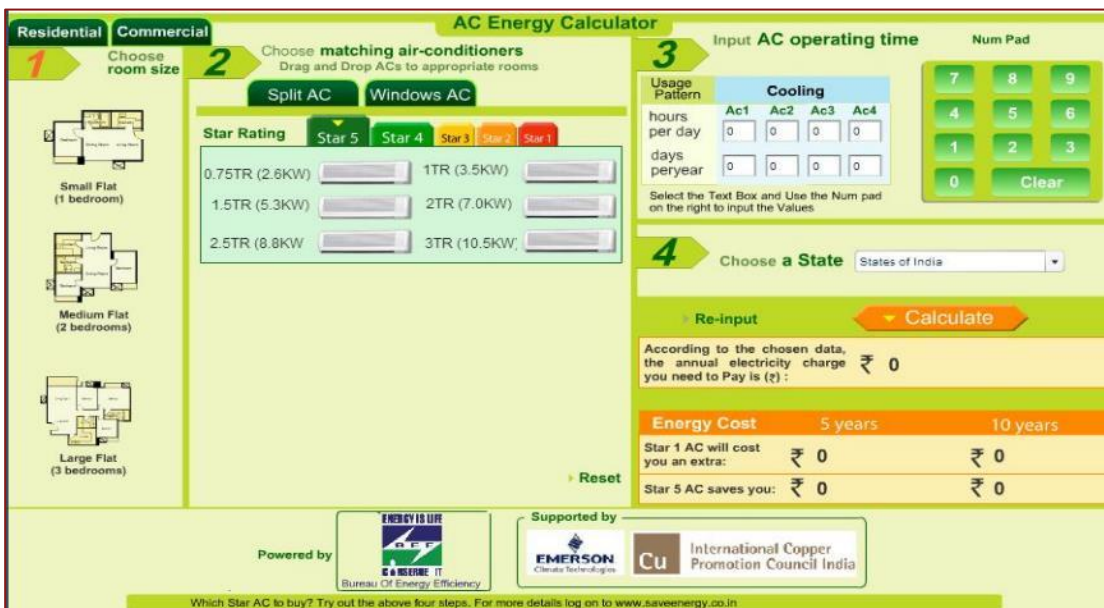


Figure 19: AC Energy Calculator

Test Results of Star-Labeled Equipment

This portal provides information on appliances and equipment that failed to meet the energy consumption standards declared on their label. The website mentions the name of the manufacturer, its model number, and deviation of the energy consumed from the standards mentioned on the label.

Knowledge Exchange Platform

The knowledge exchange platform is a collaborative initiative of BEE and the Institute for Industrial Productivity to promote and share best practices and energy-efficient technologies among large-scale industries. The website (www.knowledgeplatform.in) has sector-wise discussion forums and blogs in which various stakeholders can interact and discuss issues. The platform also organizes industry site visits, workshops, and seminars to encourage the exchange of ideas on energy-efficient technologies and best practices. Presentations on best practices and energy conservation efforts by different industry units are also available on the website.

Mass Media

Mass media used for communication during awareness campaigns include TV advertisements, radio spots, newspaper advertisements, and advertisements in BEE newsletters (BEE Line). The mass media campaign is specially launched at the time of the launch of the label and standards for specific appliances.

Newspaper Advertisements

Advertisements were published in highly circulated regional newspapers to ensure adequate reach (such as *Anand Bazar Patrika* in West Bengal and *Rajasthan Patrika*). Snapshots of some newspaper advertisements are shown in Figure 20.



Figure 20: Examples of Newspaper Advertisements

Radio Spots

The S&L program in India was branded with the message *Bachat ke sitare* (meaning stars of savings) and extensively communicated to the general public via FM radio channels. The 15-minute radio program titled “*Bachat ke Sitare, dost hamare*” (title of the Hindi version) was aired in 20 languages. It is a story-based program that includes some songs and radio spots in between. The program incorporated various mechanisms for responses and feedback from audiences, such as quizzes with prizes to win and a dedicated email for the participants’ responses (sitara@beenet.in) based on which its popularity was judged.

OOH and Other Media

The use of OOH and other media includes the following:

- Installation of LED TVs in various railway stations, such as Chennai, Old Delhi, Nizamuddin, and Ahmedabad. This medium is also employed in Ahmedabad-Mumbai Shatabdi Express and a few other Shatabdi trains.
- Print advertisements promoting star-labeled LED bulbs on 35 lakh Air India boarding passes per month.
- Mugs imprinted with the BEE star label, along with pen stands and rulers inscribed with EE messages for students, are regularly distributed at various exhibitions and events wherein BEE participates.
- Short Message Service (SMS) campaigns are regularly held through the Directorate of Advertising and Visual Publicity (DAVP) route. BEE recently sent 9 crore SMSs to announce the extension date of their national painting competition.

NDTV: Mission Energy Campaign

NDTV, an Indian commercial broadcasting television network, along with Grundfos Pumps, launched the Mission Energy Campaign during February–June 2014. The campaign, **It's all about ME**, aimed at highlighting the power of an individual in making a change towards EE. The campaign was supported by the Confederation of Indian Industry (CII) as the knowledge partner, The Energy and Resources Institute (TERI) as the content partner and SSEF, along with Alliance for an Energy Efficient Economy (AEEE), as EE partners. The campaign website is www.sites.ndtv.com/missionenergy (See Figure 21).

Figure 21: Mission Energy Campaign



This was perhaps the first, one-of-its-kind televised mass multimedia campaign organized by a television network that focused on energy conservation for consumers at the national level. The elements of the campaigns are discussed next.

Mission Energy Challenge: TV Show

The Mission Energy Challenge was a month-long contest (May–June 2014) organized as part of the campaign where homeowners, educational institutions, manufacturing facilities, and commercial establishment participated, showcasing the EE measures adopted in residential, commercial, and industrial applications.

Among the entries received, a total of 111 contestants were shortlisted for the Energy Challenge and the composition was as follows:

- Residential contestants: 56.
- Manufacturing units: 33.
- Education institutions: 9.
- Commercial buildings: 13.

One winner and three runners-up were announced for each category and were given special prizes and certificates.

Case study videos were made for various participants—depicting the story and experiences before and after the adoption of the EE measures. The videos presented a brief interview with the concerned individuals on the problems they were facing, and how they came up with the solution. They also discuss their plans to scale up or implement the same in other areas. These videos proved to be a great medium in not only recognizing the participants for their efforts, but also presented an example for the viewer, thereby encouraging implementation of such initiatives.

Over 25 videos demonstrating the successful applications of EE and renewable energy, conservation measures in day-to-day life, smart innovations, and the initiatives employed by the local people to cater to their specific energy demands are showcased on the website www.sites.ndtv.com/missionenergy/videos and some stills from the videos are shown in Figure 22.



Figure 22: Stills from the Videos

Celebrity Endorsement

Actor Abhay Deol, who is building an eco-friendly home in Goa, India, with solar panels, rainwater harvesting set-up, energy-saving fans, and an eco-friendly clay refrigerator, was invited as a panelist during these sessions. He congratulated the winners of the Mission Energy Challenge, which saw more than 100 contenders competing to achieve highest energy and monetary savings through the adoption of EE measures.

The Mission Energy sessions: TV Chat Shows

A series of consultative sessions were conducted to discuss current issues and gaps, and to suggest solutions, policy changes on EE, ideas and energy-intelligent innovations by representatives from the policymakers and the country's leading organizations, such as the Planning Commission, Ministry of New and Renewable Energy, BEE, SSEF, EESL, TERI, Center for Science and Environment, CII, AEEE, and industrial ecosystems, such as Mahindra and Mahindra, Thermax, and Grundfos Pumps.

These sessions provided a platform for prominent energy experts, policymakers and industry leaders to highlight issues; recommend solutions for industry and the government; and focus on energy-efficient ideas for the future. Some pictures from the chat shows are shown below in Figure 23.



Mission Energy session 1: Breaking the energy code.

Dr. Ajay Mathur going through the profiles of Mission Energy participants.

Figure 23: Pictures from Chat Show

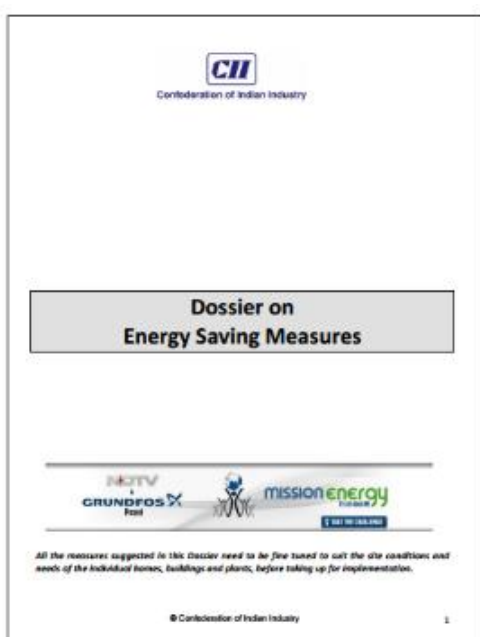
Digital Space

A collection of 17 pictorial advertisements (fashioned as Green Gyans) providing interesting facts and tips on saving energy was also developed. These were regularly posted on Facebook and Twitter which is shown below in Figure 24.





Figure 24: Example of Advertisements Posted on Social Media



The posters are simple and concise, and they use the color scheme effectively with a short, sharp, and compelling titles that relate to energy conservation. However, the posters did not receive much appreciation in terms of Facebook likes, which were mostly in the range of 5–10 likes.

The Facebook page www.facebook.com/MissionEnergyIndia posted more than 200 photos (posters, event photographs), including pictures clicked by individuals showcasing the EE measures adopted by them at the household level.

The program also published a dossier on energy-saving measures applicable for homes, manufacturing facilities, commercial establishments, and educational institutions (Figure 25).

Link: www.drop.ndtv.com/common/pdf/CII-Dossier-on-Energy-Saving.pdf

Figure 25: Dossier on Energy Saving Measures

Communication among Policymakers and Implementation Agencies: Utility CEO Forum

SSEF conceptualized the Utility CEO Forum on Demand Side Management (DSM) in 2012 to create a platform for sharing knowledge and experience on design, development, and delivery of megawatt-scale DSM programs.⁸ The objective was to bring together key individuals in the electricity supply industry to stimulate fresh ideas, identify critical challenges, replicate best practices, and create an enabling policy environment for scaling up utility-driven DSM programs in the country. PwC was appointed as the knowledge and events partner in August 2013 to manage and drive the forum’s activities.

Since the launch of the forum in February 2013, it held eight quarterly meetings until January 2015. Gireesh B. Pradhan, Chairperson, Central Electricity Regulatory Commission (CERC), chaired the first three meetings, after which Anil Razdan, Former Secretary, Ministry of Power, took over as Chairperson from the fourth meeting (Figure 26)

Thematic roundtable discussions form the core agenda of the forum’s quarterly meetings (see Figure 27). The discussions primarily revolve around the presentations made by the experts and officials from the participating organizations who present case studies, success stories, and emerging technologies to create awareness about DSM opportunities, markets, and successful implementation models.



February–October 2013

Mr. Gireesh B Pradhan
Chairperson and Chief Executive, CERC,
Former Secretary, Ministry of New and
Renewable Energy



December 2013–to present

Mr. Anil Razdan
Former Secretary, Ministry of Power

Figure 26: Honorary Chairpersons of the Forum

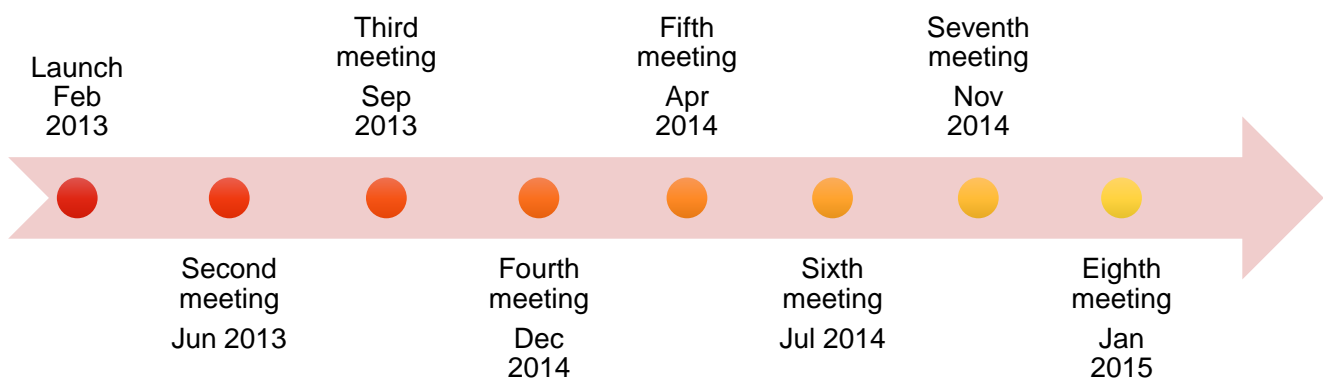


Figure 27: Communication Frequency: Timeline of the Forum’s Meetings

Target Audience for Communication

The profile of the participants in the forum’s quarterly meetings include officials from electricity distribution licensees (utilities), electricity regulatory commissions (ERCs), central nodal agencies (such as BEE and Central Electricity Authority), energy service companies (such as EESL), DSM technology, equipment, service vendors,

⁸ Adapted from <http://shaktifoundation.in/wp-content/uploads/2014/02/DSM-Forum-Synopsis-2013-15.pdf>
Communication Research on Energy Efficiency in India:

and other industry experts from all over the country (see Table 6). Figure 28 presents the participant mix in each of the forum’s eight quarterly meetings.

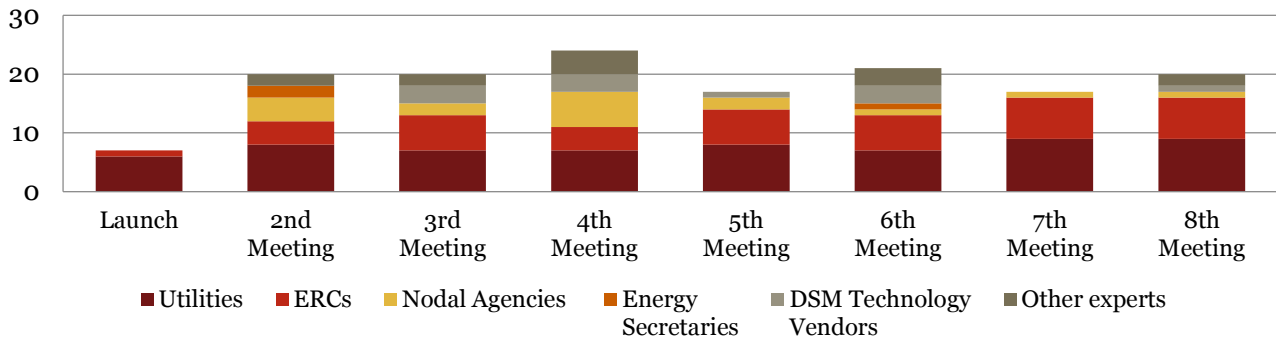


Figure 28: Forum's Quarterly Meetings—Participant Mix

Table 6: List of Participating Organizations in the Forum’s Meetings

Electricity regulatory commissions (ERCs)	Electricity distribution licensees (utilities)	Others
1. CERC	1. BSES Rajdhani Power Limited	1. BEE
2. Delhi ERC	2. BSES Yamuna Private Limited	2. Principal Secretary, Power, Government of Haryana
3. Haryana ERC	3. Reliance Infrastructure Limited	3. Principal Secretary, Power, Government of Delhi
4. Karnataka ERC	4. Tata Power Mumbai	4. Gujarat Energy Development Agency
5. Meghalaya ERC	5. Tata Power Delhi	5. International Finance Corporation
6. Telangana ERC	6. Maharashtra State Electricity Distribution Company Limited	6. United Nations Development Programme
7. Andhra Pradesh ERC	7. Uttar Gujarat Vij Company Limited	7. PACE-D Technical Assistance Programme
8. Joint ERC the state of Goa and Union Territories	8. Madhya Gujarat Vij Company Limited	8. Schneider Electric
9. Chhattisgarh State ERC	9. Uttar Haryana Bijli Vitran Nigam	9. Philips Electronics India Limited
10. Jammu and Kashmir State ERC	10. Dakshin Haryana Bijli Vitran Nigam Limited	10. Alliance for Energy Efficient Economy
11. Maharashtra ERC	11. Bangalore Electricity Supply Company	11. Versa Drives Private Limited
12. Bihar ERC	12. Chamundeshwari Electricity Supply Company	12. MP Ensystems Advisory Private Limited
13. Uttarakhand ERC	13. Calcutta Electric Supply Corporation	13. UTC Climate, Controls and Security India
14. Uttar Pradesh ERC	14. Jaipur Vidyut Vitran Nigam Limited	14. Customized Energy Solutions
15. Gujarat ERC	15. Kerala State Electricity Board	15. EDS Pvt. Ltd.
16. Tripura ERC	16. Purvanchal Vidyut Vitaran Nigam Limited	16. Probyon Power Consultants
17. Madhya Pradesh ERC	17. Paschimanchal Vidyut Vitran Nigam Ltd	17. Greentree Building (P) Ltd
	18. Punjab State Power Corporation Ltd	
	19. Tripura State Electricity Corporation Limited	
	20. Puducherry Electricity Department	
	21. North Bihar Power Distribution Company Ltd	
	22. Jharkhand Bijli Vitran Nigam Limited	
	23. Assam Power Distribution Company Limited	
	24. Central Electricity Supply Utility of Orissa	

Summary of the Forum's Quarterly Meetings

Themes for the quarterly round tables are chosen in consultation with the participants to discuss the most critical challenges. The focus is on advancing solutions driven dialogue among stakeholders. The meetings also include presentations that highlight case studies, success stories, and emerging technologies to create awareness about DSM opportunities and markets, as well as successful implementation models. Pointers for further action are developed from the outcomes of the meetings and these are then followed up with the stakeholders.

Selection of appropriate themes while ensuring the buy-in of participants, solutions driven dialogue, and regular follow-up with stakeholders on the outcomes are the factors that enable the Forum to facilitate outputs and influence progressive DSM action in states. Table 7 summarizes the chosen themes as well as outputs from these quarterly meetings.

Table 7: Summary of the Forum's Quarterly Meetings

Meeting	No. of participants	Theme	Outputs
Launch meeting	7	Barriers and enabling mechanisms for advancing megawatt-scale DSM programs in India	<ul style="list-style-type: none"> ▪ Launch meeting of the first-of-its-kind communication platform for DISCOMs.
Second meeting	20	Model state policy on electricity DSM	<ul style="list-style-type: none"> ▪ Number of participants increases by almost threefold. ▪ Relevant topic for communication and experience sharing with peers from other utility companies.
Third meeting	20	Load research and DSM program session: Best practices and case studies	
Fourth meeting	24	Issues and challenges in the measurement and verification (M&V) of utility-driven DSM programs	<ul style="list-style-type: none"> ▪ Continued update on the forum's agenda for discussion.
Fifth meeting	22	Cost effectiveness of utility-driven DSM programs	<ul style="list-style-type: none"> ▪ Number of participants remains constant and as per the program design.
Sixth meeting	27	DSM programs for buildings	<ul style="list-style-type: none"> ▪ The agenda for upcoming meetings is evolved through stakeholder deliberations/suggestions.
Seventh meeting	17	DSM regulations: Paving the way to action	<ul style="list-style-type: none"> ▪ Call to action: pointers for further action are developed from the outcomes of the meetings. These are then followed up with the stakeholders.
Eighth meeting	23	Successful DSM programs in India: Case studies and lessons learned	

Impact and Feedback: The Forum’s Achievements

During 2013–14, the forum’s activities and subsequent outputs had reached out to many stakeholders across the country. During the year, several organizations ensured participation in all its quarterly meetings. As a result, the forum gained substantial significance as an exclusive platform for exchange of knowledge about avenues, such as opportunities in DSM and successful implementation models.

Relationship Building

In 2014–15, one of the most significant achievements was getting EESL on board as the co-promoter of the forum. EESL was established as a public sector undertaking to boost the services infrastructure related to EE and DSM in India. Perceived as a public sector ESCO, EESL aims to lead the EE investment-related actions and create self-sustaining EE markets in India. Given its vast implementation experience across various states and sectors, EESL brings together its success stories and delivery models, thereby enabling participants to learn and examine critical information related to DSM.

Feedback Assessment

Apart from relationship building, under the directions of the chairperson, the forum sought feedback and suggestions from the participants in order to assess the performance of its ongoing activities and thereby chalk out a direction for the future. The feedback was received from nine utilities and four regulatory commissions during the last quarter of 2014.

A majority of the participants agreed that their association with the forum till date has been “very good” and they have been able to derive the benefits illustrated in Figure 29 from their association.

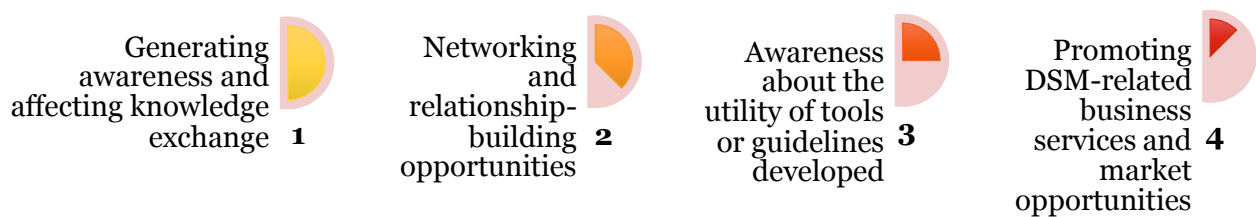


Figure 29: Achievements of the CEO Forum

A majority of the participants also agreed that the forum has progressively voiced the necessity of DSM measures within the Indian electricity sector. They believed that the forum has been constructive as a platform in bringing like-minded individuals on board in order to initiate grassroots-level changes in DSM markets.

A number of participant states (viz., Bihar, Delhi, Haryana, Karnataka and Uttar Pradesh) notified DSM regulations in 2014–15. In this regard, the participants acknowledged that the forum has been a catalyst or a facilitator in achieving the outcomes as outlined in Figure 30.

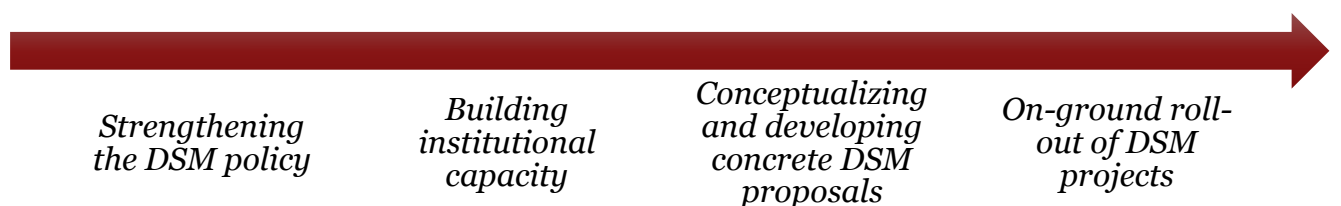


Figure 30: DSM Implementation in States

Sustenance of a Communication Platform: The Forum's Way Forward

A majority of participants suggested that the forum needs to invest time in the future to build the capacity of its stakeholders at the regional level (see Figure 31). It is noteworthy to share that the feedback has been incorporated in the program design. As part of the new program design, state-level meetings consisting of utility representatives and other relevant stakeholders (who were not part of the earlier program meant for utilities only) have been initiated. These stakeholders include financial institutions and consumer groups, as well as students pursuing courses in engineering or economics, who can affect the understanding about DSM across demographics.



Figure 31: Future Direction of the Forum's Activities

Apart from this, participants also suggested that the forum should invest time in the following areas:

- Creating awareness about DSM among mass consumers
- Sensitization of utilities
- Sharing the experiences of successfully implemented DSM projects
- Providing policy and regulatory insights
- Influencing cross-industry functioning, by roping in more representatives from industries and institutions

Participants also suggested several themes to be taken up in the future meetings. Table 8 presents some of the suggested themes for upcoming quarterly meetings.

Table 8: Suggested Themes for Future Meetings by the Participants

<i>Specific themes for future meetings</i>	On-ground implementation of DSM projects, expanding on case studies
	International experience of successful DSM initiatives
	Agriculture DSM: Challenges and way forward
	Demand response: Potential and best practices
	Financing and cost recovery mechanisms for DSM programs
	Realizing the DSM potential of smart grid applications
	Replicating the success of standard offer-based DSM programs for other appliances
	Renewable energy applications for DSM
	Review of DSM regulations and policy

Other suggestions included creating a knowledge repository for all presentations, discussion papers, tools, and other outputs of the forum meetings, along with blogs or newsletters in order to reach out to a larger audience.

4. Analysis of Stakeholder Interviews and Consumer Research

This chapter presents a detailed analysis of stakeholder interviews and consumer research activities carried out under this study.

Institutional Stakeholders

For this communication needs assessment study, institutional stakeholders are considered a distinct target segment of respondents, apart from the consumers or general public. Institutional stakeholders comprise of policymakers and influencers, nodal agencies for policy implementation, development agencies (largely bi- and multilateral organizations), industry associations, and businesses (banks, financial institutions, and ESCOs). A detailed mapping of institutional stakeholders is already presented as part of the methodology for this assignment. This section presents a detailed analysis of primary research conversations conducted with each of these institutional stakeholders for various aspects of their respective communication programs, target audience (both upstream and downstream), existing communication channels, and existing needs and barriers.

Policymakers and Nodal Agencies

The BEE and PCRA are two major nodal agencies responsible for the implementation of energy or fuel-saving programs in India. The BEE is the nodal agency under the Ministry of Power, and is responsible for policy formulation and implementation of EE activities, as well as encompassing activities under the NMEEE. It intervenes for EE agenda in all major energy-consuming sectors within the economy. The PCRA, the nodal agency for Ministry of Petroleum and Natural Gas, has been implementing educational and BCC campaigns on energy and fuel savings. The IEC campaigns initiated by these nodal agencies on energy and fuel saving have covered key programmatic activities from major energy-consuming sectors:

- **Industry:** Perform, achieve, and trade (PAT) scheme for large-scale designated consumers and a national program for SMEs.
- **Transport:** Fuel efficiency standards for vehicles, capacity building, and awareness of drivers.
- **Agriculture:** Demand side management in agriculture.
- **Commercial and residential:** DSM programs for buildings and S&L program for appliances, household energy saving in cooking, residences, and so forth.

The key highlights based on our research and interaction with program managers from key nodal agencies for EE policy and implementation are summarized in Table 9.

Table 9: Highlights from Interaction with Policymakers and Nodal Agencies

Opinion on EE Communication	
<i>Effectiveness of communication</i>	<ul style="list-style-type: none"> • Respondents acknowledged that IEC campaigns on EE programs involving significant exposure to the common public are important for making informed consumer decisions while purchasing energy-consuming equipment. • It is equally important that informative and educational campaigns for raising consumer awareness are launched at regular intervals. Major EE programs with exposure to general consumer awareness earmarked almost 50% of the overall program budget for the purpose of conducting communication campaigns. • Conveying the right message through creatives is crucial for effective communication with the target audience. For this purpose, development of

<p><i>Communication research</i></p>	<p>high-quality and effective creatives or messages assumes center stage in the communication campaign for EE in general.</p> <ul style="list-style-type: none"> • Years of collective experience of the agencies rolling out and implementing educational campaigns for energy and fuel savings have revealed that innovation and creativity contribute the most towards effective outreach and will help in conveying the message to the target audience. • Educational campaigns on fuel saving have gradually shifted focus to community involvement and behavior change aspects. This includes a host of OOH measures, thematic competitions for school students, efforts towards including energy-saving in the school curriculum, training activities for drivers, and on-site demonstrations of fuel saving by adopting better practices. • On the importance of a scientific and planned approach: Communication research must be conducted thoroughly for each distinct objective, and proper segregation and matchmaking of the communication footprint and media vehicles must be developed beforehand, including the slots for creative insertions in print and electronic media. • On what are the best motivators for people to connect with EE: There can be a variety of factors that motivate people to conserve and use energy efficiently. These factors could range from monetary benefits related to conservation, reduced pollution in pollution-prone areas, such as rural households using firewood for cooking, and the aspiration for a clean environment.
<p><i>Sourcing and administrative procedures</i></p>	<ul style="list-style-type: none"> • PCRA revises or newly develops its promotional material every three years. However, the frequency of revision is felt to be too low and may need to be increased. • Quality parameters should be given significant weightage while sourcing resources for the communication campaign development and roll-out, including development of messages and creatives. • Communication experts should be made available to program managers to help in developing effective messages—which are not verbose and backed by adequate background communication research. • Techno-commercial organizations need to recognize and treat communication as an independent area of specialization. They need to sensitize and orient their administrative procedures on communication and publicity campaigns (such as approving creative material for circulation) accordingly. For example: <ul style="list-style-type: none"> ○ One of the agencies roped in an eminent expert on strategic marketing and communications as an advisor on their board—an independent expert who is best positioned to provide a fair and frank opinion on the effectiveness of creatives and campaigns.
<p>Communication channels</p>	
<p><i>Mass media –print, radio, and TV</i></p>	<ul style="list-style-type: none"> • Nodal agencies have extensively utilized mass media for disseminating generic IEC messages on EE, as well as sector-specific messaging. A few examples are as follows: <ul style="list-style-type: none"> ○ Industry: promoting energy audits. ○ Transport: promoting best driving practices and clean fuel usage. ○ Residential: promoting energy-efficient cooking practices and energy waste reduction. • Media space is sourced through the DAVP⁹ route. The DAVP policy on print media is to include 50% of big, 35% of medium, and 15% of small print media.

⁹ DAVP is a nodal agency that caters to the paid publicity requirements (multimedia advertising and publicity campaigns) of various ministries and departments of the Government of India, public sector undertakings, and government societies. Communication Research on Energy Efficiency in India:

-
- Messages are conveyed in Hindi, as well as other vernacular languages, through print (such as newspapers and magazines), radio spots, TVCs, and content integration.
 - The agencies show an inclination towards increasing the frequency of messaging.
 - Apart from educational campaigns for behavior change, nodal agencies also promote various clean and fuel efficient products, such as EE gas stoves and star-labeled mono-set water pumps, through mainly print, as well as various other forms of mass media.
- Out-of-home (OOH)*
- The OOH medium is also used extensively by nodal agencies. OOH media buying is carried out as part of the overall media plan of an educational campaign. This includes identification of important points-of-purchase, for example, **bus shelters, railway or metro stations, and trains**, as well as designated locations across various cities.
 - Every month, 35 lakh **airline boarding passes** carry print advertisements promoting star-labeled LED bulbs.
 - Various **promotional materials (such as mugs, pen stands, stationery) with generic EE messages** are distributed in exhibitions and similar events.
 - PCRA organizes an **exhibition stall at the IITF** (with footfall clocking in millions) and launches several activities for garnering the engagement of the audience, such as **interactive screens, promotional gifts, and prizes**.
- Digital space*
- Generic messages on EE are published on **high-traffic sites, such as Yahoo and Rediff.com**.
 - **Mobile applications and games** on BEE's star labeling program, and PCRA's fuel-saving tips and smart-driving tips to save fuel have been launched.
 - The **smartphone platform has been particularly effective in reaching out to the rural masses**. While the reach of other mass media, such as TV and the Web, are limited, almost every individual in the rural landscape owns a mobile phone and is connected to the Internet through their smartphones.
 - The agencies also maintain a presence on **social media, such as Facebook**, and stay connected to target audiences through regular announcements, organizing quizzes, and the like.
 - PCRA has attempted to utilize the **platform of Digital India (mygov.in) for crowdsourcing creative messages** for its educational campaign.
 - **SMS campaigns** are regularly held for outreach and dissemination.
- Celebrity endorsements*
- Both, **BEE and PCRA have roped in several celebrities from the sports and film fraternity**, with an objective to effectively convey EE messages.
- Community mobilization*
- The agencies have gradually shifted their focus on educational and BCC campaigns through community mobilization activities.
 - Painting competitions on energy conservation (conducted by BEE) and **painting and essay competitions** (conducted by PCRA) are the front running campaigns **for involvement and mobilization of students**.
 - The objective is to introduce and **inculcate the habit of energy conservation at a young age. Children are the best agents of change**, and the painting competition serves to equip them with information and knowledge on energy conservation and engage their interest on this important subject.
-

- A **significant share of IEC campaign's focus is towards school students** in the form of painting and essay competitions. The number of participants has risen from 25,000 during earlier attempts to more than 500,000 at present, and is targeted at 10 million in the immediate future. PCRA involves the existing administrative network within the education system to implement activities on a relatively large scale.
- PCRA has participated in **Rahgiri events (community street event)** and organized **Nukkad Nataks (roadshows or street plays)** as part of the awareness-raising campaigns for fuel efficiency and best driving practices.
- Events **reinforcing the concept of driving at a speed of 45–55 kmph for best fuel efficiency** are organized at such venues.
- PCRA added a **hands-on or touch-and-feel element** in the educational campaign for drivers to leverage the credibility and convincing power associated with such elements. They **measured particulate matter emissions** and demonstrated the difference between suspended particulate matter levels **at traffic signals with vehicle ignition in the ON and OFF position**.

Impact assessment of the communication campaign

- Impact assessment, in terms of **reach, is measured by DAVP for print media** as part of the media buying activity.
- For the rest of the communication channels, and to assess the effectiveness of its communication, **PCRA undertakes regular consumer research** (on the behavioral aspect of consumers and their media switching pattern) **and periodic impact assessments through professional service providers**. The **feedback** from the impact assessment activity is said to be **incorporated in the subsequent cycles of the educational campaign**.
- **Apart from the above practice** by PCRA, most other agencies undertake impact assessments of communication campaigns as part of the overall program evaluation only. There are **no formal and consistent channels for measuring the impact of communication campaigns** in terms of the effectiveness of messages, reach of media vehicles, and feedback from the target audience. There has been no separate activity dedicated for assessing the impact of specific paid media campaigns.
- **As an indicative measure** of the target audience's involvement in the communication campaign, the **popularity is judged based on the quantum of responses and feedback from the audience**.
- Many campaigns have incorporated various **mechanisms for feedback, such as quizzes** with prizes to win and a **dedicated email for participant responses** (such as sitara@beenet.in).

Businesses—Banks, Financial Institutions, and ESCOs

Our methodology of the communication needs assessment also includes involving the institutional stakeholders from various businesses that enable the implementation of EE initiatives. These institutions play an important role in facilitating implementation of sector-level (municipal functions, agriculture, public building, lighting, and industry) EE programs, either directly or indirectly, through various mechanisms, such as performance contracts (and linked grants), and ESCOs. , EESL and SIDBI have been instrumental in initiating and implementing communication activities on EE in their respective domains.

EESL

EESL is a joint venture between the National Thermal Power Corporation Limited, PFC, Rural Electrification Corporation, and POWERGRID to facilitate implementation of EE projects. The key objectives of EESL are implementation of EE projects for demand-side measures (including municipal functions, agriculture, public building, and lighting), and to partner with private ESCOs and other companies in order to promote EE projects. Presently, EESL is proactively implementing EE streetlighting projects across several municipal corporations along with its flagship program, DELP for the residential sector. The program has a dedicated component package to inform, educate, and communicate with the target audience on program schematics, benefits realization and myth busting, with a call to action, for replacement of existing lights with efficient LED bulbs. Under this component, EESL has launched a pan-India campaign titled ILedTheWay, under its DELP program, for promotion and distribution of LED bulbs for domestic users as a demand-side measure to reduce domestic lighting load.

SIDBI

SIDBI is the apex body for the promotion and development of MSMEs in India. SIDBI also serves as a development-oriented financing institution for MSMEs, with dedicated schemes for the financing of EE equipment and technologies. It has also been instrumental in implementing several projects and studies for EE manufacturing at MSMEs, including the GEF-World Bank project Financing Energy Efficiency at MSMEs. SIDBI is also implementing the JICA-SIDBI MSME Energy Saving Project, a unique list-based EE financing scheme for MSMEs.

The key highlights from our research and interaction with program managers at EESL and SIDBI are summarized in Table 10.

Table 10: Highlights from Interactions with ESCOs and Financial Institutions

<p>Opinion on EE communication</p> <p><i>Effectiveness of communication</i></p>	<ul style="list-style-type: none"> • EE is a relatively new concept and is not yet widely popular among the people, especially at a mass scale. Lack of adequate awareness and information among consumers is among the critical barriers to widespread implementation of EE projects. • In the context of industrial EE projects, communication is required to create a differentiation between efficiency improvement because of equipment, process, or practice-level intervention and general behavioral aspects of energy saving. • DISCOMs and municipal corporations at various district and city levels have proved effective, since they are better known to the masses and enjoy more credibility. Leveraging on this advantage has yielded good results for implementers of EE communications programs, such as EESL. • The monetary benefits from energy savings are a clear winner among the motivators, whereas the lack of awareness and capacity are the critical barriers. • Reduction in operating cost is the biggest motivator for adoption of EE measures among MSMEs, while high initial cost for technological intervention is one of the largely perceived barriers, especially in the case of competing requirement of capital for business or capacity expansion.
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<p><i>Key observations</i></p>	<ul style="list-style-type: none"> • EE communications must entail a coordinated approach among all stakeholders within the MSME ecosystem, such as entrepreneurs, vendors, technical or financial consultants and banks. • DELP is one of the largest EE projects targeting the residential sector in India. In the absence of any given precedent, there were no set standards for a nationwide roll-out of the IEC campaign for DELP. Therefore, the implementation experience of the DELP communication campaign was a steep learning curve. • There is a lack of geographic or state-specific guidelines on OOH that can be followed, such as details on the adequate size, number, and locations of the hoardings within a city or an area. • It will be interesting to conduct an in-depth analysis of barriers and motivators to EE perceived across different strata of consumers, such as the urban, rural, and economic strata (rich vs. poor). This will also be beneficial for formulating effective messages in future communication campaigns. • There is a paucity of dedicated resources among stakeholders in the MSME ecosystem for developing and implementing a dedicated IEC campaign on EE. • One-to-one communication, such as through workshops, conferences, and industry meets, has been the most effective communication channel in the case of industry stakeholders. • SIDBI has organized vendor meets-cum-exhibitions in various energy-intensive MSME clusters. These events provided the requisite platform for one-to-one interaction among entrepreneurs and vendors and provided a major boost to implementation of EE technologies by ensuring a touch-and-feel demo of the desired products. A significant potential exists for similar such events across several energy-intensive MSME clusters.
<p>Communication channels</p> <p><i>Mass media– print, radio and television; OOH</i></p> <p><i>Digital space</i></p>	<ul style="list-style-type: none"> • At the outset, EESL employed multiple mass media options for their campaigns promoting LED bulbs. These options included the electronic media (TV and radio), digital media (Internet, website, and social media), outdoor media (billboards or hoardings, mobile vans, bike brigades with loud speakers, street plays, and bus back panels), and the print media (newspaper advertisements, focused press releases showcasing various milestones). • However, later on EESL chose to go ahead with mobile vans as the most effective outdoor medium from among various options implemented before, including bike brigades with loudspeakers, street plays, and bus back panels. • EESL has developed and hosted a website (www.iledtheway.in) displaying all the information regarding the DELP scheme, tweets, videos developed, and facts about the benefits of LED bulbs over incandescent ones and a national DELP dashboard (www.delp.in) displaying real-time figures of bulbs distributed all over the country and within different states. This is particularly targeted at the audiences in the digital space, as well as at policymakers.
<p>Impact assessment of the communication campaign</p>	<ul style="list-style-type: none"> • On impact assessment, structured and formal studies to assess the impact of paid mass media campaigns were not evident. However, EESL has experienced a strong and positive correlation between their IEC campaign and the uptake of LED bulbs at the city or district level. • In terms of effectiveness, the OOH publicity on mobile vans seems to work best, followed by TV and newspaper advertisement. In the digital space, the

website and DELP dashboard provide informative and credible sources of information.

Media Agencies in EE Communications

Media agencies are one of the most important links in the overall IEC campaign, since their expertise plays an important role in the development of the overall campaign, as well as capacity building on both the upstream (EE program managers and institutions) and downstream (target audience and implementers) side. Our team approached media agencies involved in several successful IEC campaigns on EE to understand their perspectives on interaction and experience with program managers working on the EE theme, and the issues, barriers, learning, and achievements encountered during the course of developing or implementing the communication campaign on EE. Following are the highlights (see Table 11) of our interaction with two media agencies:

- **Edelman India:** Currently working for EESL to develop and implement a 360 degree communication strategy on EESL's programs in DELP, agriculture DSM, and ESCO financing mechanisms. The agency previously worked with BEE for communication on EE.
- **Comfed Productions:** Experience in communication and outreach programs on EE and clean energy for the World Bank, JICA, British High Commission, and other development agencies and public sector undertakings.

Table 11: Highlights from Interaction with Media Agencies

<p>Opinion on EE communication</p>	<ul style="list-style-type: none"> • It is crucial to have a close integration of program managers with the communications team. This is critical to the success of the communication campaign since it contributes significantly to a clear segmentation of the target audience, development of effective messages, seamless roll-out of the campaign, and fruitful incorporation of feedback from the field. • Edelman mentioned that their team members are permanently stationed at the program manager's (EESL) site for bringing in such close integration and quick turnaround times. • Another important success factor for effective development of the IEC campaign is clear and unambiguous briefing (of the expectations, vision, and boundaries) by the program managers to the communications team. <ul style="list-style-type: none"> • A series of service providers in the EE supply chain—from dealers or sellers to electricians or installers—have been inadvertently excluded from the footprint of existing communication campaigns. These stakeholders must be included within the ambit of the EE communication strategy for substantiating word-of-mouth publicity and adding credibility to the communication. • The program manager must be able to deploy one agency on a turnkey basis—responsible for creatives, media (procurement), planning, and execution, as well as impact assessment. Provision of an agency on a turnkey basis will go a long way towards streamlining coordination activities and eliminating various inefficient junctions. • Communication agencies highlighted the need for educating the communication-related service providers on the issues of EE. Conducting one-hour sessions for top media professionals can be an effective strategy in this context.
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<p><i>Key observations</i></p>	<ul style="list-style-type: none"> • As a cost-effective measure, advocacy of a cause, such as EE, needs to be targeted to the implementers and the media, as well as the general public (that is, end user community), since advocacy may optimize the media-buying cost substantially. • There is a vital need to assess consumer behavior, as well as to understand the reasons behind certain habits of consumers vis-à-vis adoption of EE equipment or practices. A research on these aspects will be an enlightening study apart from the other known rationale that consumers merely think about monetary savings. • The campaign on EE needs to be conducted at two levels: national and regional. Considering a typical campaign on LED lighting: <ul style="list-style-type: none"> ○ The national campaign can focus on the concept of LED, benefits, and an introduction about relevant agencies, such as BEE and EESL. <ul style="list-style-type: none"> ○ The regional campaign can focus on the details of the scheme—for example, how and where the bulbs can be purchased. • Lack of close coordination between the technical and communication teams at all levels is one of the key barriers facing the EE communications agenda in the country: <ul style="list-style-type: none"> ○ Presently requests for proposals (RfPs), for projects involving an EE communication component are usually designed by teams consisting mostly of subject matter specialists who do not understand the finer nuances of the communications domain. ○ Media specialists need to be involved at the RfP development stages itself. • Communication involving the pan-India campaign on EE needs to be endorsed by a politically neutral entity or person.
<p>Communication channels</p>	<ul style="list-style-type: none"> • All communication channels are essentially required in a proper mix based on the individual needs of the campaign, the objectives, and budget. • For projects with a wide geographic footprint, both national as well as local communication channels must be deployed.
<p>Impact assessment of the communication campaign</p>	<ul style="list-style-type: none"> • Impact assessment of EE communication campaigns is not prioritized by program managers currently. • The impact is estimated by analyzing parameters such as the trend of sales, number of calls on the helpline number, and the number of followers and questions asked on Twitter, all of which imply involvement of the target audience with the campaign.

Industry Associations

Industry associations are a conducive forum for deliberation and addressing any industry-related issues that require collective focus and efforts for positive transformation. In the context of communication needs assessment on EE, we have covered the following three industry associations: FICCI, Northern India Textile Research Association, (NITRA), and IamSMEofIndia.

FICCI

FICCI is one of the apex industry bodies in India, with memberships comprising industry, industrial bodies, service sector companies, and related stakeholders, through which the organization reaches out to more than 250,000 entities on issues of efficiency, global competitiveness, consensus building by engagement with policymakers and civil society. Industry members of FICCI include corporates from several energy-intensive sectors, such as Iron and Steel, Power, Cement, Agriculture, and Food Processing.

Northern India Textile Research Association

Northern India Textile Research Association (NITRA) is an association for the textile industry, covering the entire value chain of processes—including spinning, weaving or knitting, processing, and garments. NITRA provides a range of research and professional services to its members, including services for EE improvement. Strong membership of textile companies, along with hands-on experience in various techno-commercial issues faced by the industry, positions NITRA as one of the insightful entities for textile sector research.

IamSMEofIndia

IamSMEofIndia is one of the most dynamic industry associations in the MSME segment. The association provides an impressive array of services to MSMEs, such as credit facilitation, technology transfer, IT solutions, e-commerce, mobile apps development, skill development, EE, lean manufacturing, facilitating participation in international exhibitions and training, and sharing best practices. It has also provided services as Cluster Coordination Consultant in the Faridabad industrial cluster as part of the GEF-World Bank project Financing Energy Efficiency in MSMEs.

Thus, this selection of industry associations covers cross-sector and sector-specific, as well as MSME-focused, associations to holistically cover the entire spectrum.

Key highlights of our interaction with these industry associations are shown in Table 12.

Table 12: Highlights from Interactions with Industry Associations

<p>Opinion on EE communication</p>	<ul style="list-style-type: none"> • FICCI provides platforms for business-to-business (B2B) and business-to-government (B2G) communications for industry representations or feedback; sector roadmaps; policy consultation; and advocacy. • FICCI also organizes communication avenues, such as national workshops and conferences, which facilitate focused one-to-one communication among various interrelated stakeholder groups, of which energy-efficient technologies are a usual feature. • IamSMEofIndia has been engaged in a host of activities for communication and mutual information exchange among MSMEs on EE initiatives. • The majority of technology-oriented discussions on IamSMEofIndia's platform cover EE as a subject in their agenda. • Credibility of communication on EE interventions increases when it is routed through vendor-neutral channels, such as industry associations. • The MSME sector consists of a large number of relatively small industries, wherein the culture of information sharing is not yet prevalent. When
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<p><i>Key observations</i></p>	<p>it comes to sharing data on EE, such industries are often reluctant to share the information to gain maximum benefit in a competitive landscape.</p> <ul style="list-style-type: none"> • Bigger groups do share information selectively at forums perceived as appropriate. • The concept of EE, though financially attractive for MSMEs, typically does not elicit adequate interest among the target audience, since these industries usually operate with limited resources and are engrossed in typical day-to-day operational challenges and market challenges. • Presence or participation of policymakers and/or high-level executive officers is a motivator for industry members, especially the decision makers, to participate in various avenues for communication on industry-related issues. • A dedicated team catering to communications is required to consistently maintain communication on EE activities. • The management's focus and commitment is essential for maintaining communication channels. These can also be useful as an effective marketing tool for the activities of an industry association. • It is necessary to develop programs for MSMEs for increased awareness on EE-related issues. At the same time, the program organizers must essentially factor in such elements that make these events interesting. • At majority of the events on EE, the speakers do not possess adequate communication skills to create a motivational (call to action) environment. • In the context of MSMEs, it is important to take the local industry on board while designing activities for local consumption.
<p>Communication channels</p>	<ul style="list-style-type: none"> • Focused and short documentaries, digital media, and platforms, such as sector-specific conferences or workshops, are considered the most effective medium of interaction with the industry and relevant stakeholders. • Technology-related communication needs to be targeted at vertical heads and/or the senior management level for building up the case for EE, which generally moves upstream to the board or CxO level after due diligence and endorsement by vertical heads. • Communication is often routed with help of a database of personnel from the industry at different levels within the respective organizational structure. • In order to reach the appropriate strata of stakeholders within textile industries, NITRA has its own database, as well as access to the Confederation of Indian Textile Industry database. • The Confederation of Indian Textile Industry database is stratified into management level contacts, department heads at industries (such as spinning and yarn processing), supervisors, and engineers, so that it is usually feasible to reach out to the desired strata of contacts within the textile industry, especially up to the head-of-department level. • On channels to achieve a deeper reach to industries across different clusters and for reaching out to the operator levels within the textile industry, there are two sources of information: <ul style="list-style-type: none"> ○ Forum, as well as data available with trade associations (downstream), such as those for the Bhilwara and Banswara regions. ○ NITRA has a network of power loom testing centers across different textile clusters and industrial areas. Staff at these centers provide routine support to industries and transfer queries to the headquarters in a situation where they are not able to resolve the queries.

<p><i>Digital space</i></p>	<ul style="list-style-type: none"> • NITRA does not resort to mass media buying for areas of core activity, including EE services. Mass media campaigns are focused on the promotion of NITRA’s educational and skill development activities. • One-to-one communication through workshops, industry meets and exhibitions is considered the most effective communication channel. • Within MSMEs, word-of-mouth publicity is often the most credible communication channel. There have been instances of participation in EE improvement activities on the basis of such information sharing. • SMS campaigns have proved to be a successful communication channel with MSMEs. • IamSMEofIndia makes excellent use of the digital platform, including Facebook, with regular posts covering useful information for MSMEs and daily updates on various activities of the association. • The association also sends regular e-direct mailers to member industries, thereby sharing useful information on the associations’ activities, beneficial schemes for industries, and updates on representations to government bodies. • NITRA has dedicated Facebook and LinkedIn pages. An agency was hired for a one-year Internet campaign. Of late, there have been no regular postings on the activities in the EE space. Possibilities include updating information on energy audits and studies conducted, and savings achieved through implementation.
<p>Impact assessment of the communication campaign</p>	<ul style="list-style-type: none"> • There is no sustained and formal mechanism for assessing the impact of communication activities and/or seeking feedback from the target audience. • Industry associations regularly organize conferences for various industrial sectors on areas such as new and emerging technologies and EE best practices, wherein industry members get a platform to communicate with technology suppliers, subject-matter experts, and policymakers or executive members. It is claimed that sustained participation in these conferences year after year, wherein participants, in many cases, pay a fee to attend, is a successful demonstration of a highly effective communication platform.

Development Agencies

Development agencies provide support to development-oriented activities as part of the multi- or bilateral cooperation. During our research on communication needs assessment, we approached several key development agencies that are actively supporting programs on EE improvement in various sectors of the economy, as listed below:

- United Nations Industrial Development Organization (UNIDO).
- Shakti Sustainable Energy Foundation (SSEF).
- Japan International Cooperation Agency (JICA).
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

All of above-mentioned agencies are active in the EE space in India, and we approached them to identify and learn about their existing communication channels and experiences thereof. Our interaction with these development agencies is summarized in Table 13. Table 13: Highlights from Interactions with Development Agencies

Table 13: Highlights from Interactions with Development Agencies

<p>Opinion on EE communication</p>	<ul style="list-style-type: none"> • Communication activities for development agencies, on the upstream side, include policy-level communication with the central and state governments and respective departments. On the downstream side, development agencies need to communicate with their field functionaries and end beneficiaries of their funding support. • Each and every element within a communication creative has a profound influence on the overall message that is conveyed and its effectiveness. It is important to thoroughly pre-test key communication messages before deployment. • The concept of EE is more of a cross-sectoral approach rather than limited to power, oil and gas, and renewable energy. Several ministries can potentially impact EE in their respective area of work such as railways, road transport, and urban or rural development.
<p><i>Key observations</i></p>	<ul style="list-style-type: none"> • A top-down approach to create a forum of representatives from each of such relevant ministries, supervised by a competent authority, must be formed, which will meet at regular intervals, to provide avenues for information exchange and communication on idea- to execution-level details on EE. • The importance of communication and the skillsets required for effective communication needs to be a part of the curriculum at educational institutions, especially those imparting professional education. • Likewise, the importance of EE needs to be a part of education at various levels. • Content and messages both have to be customized to reach the target audience and to achieve the objective of communication. Communication for general awareness is different from product specific awareness and call to action. • Highlighting the benefits is important for effective communication. Benefits need to be well-researched in order to map the value perception of the target audience. • One of the key barriers to effective communication in the clean energy space is the availability of communication personnel (or effective

	<p>combination of personnel) who understand the vision, objective, and market conditions, and who are also able to develop compelling messages and present them effectively.</p>
Communication channels	<ul style="list-style-type: none">• There is no media buying, and involvement with mass media is limited to inviting the press and sharing information on the programs supported and the development agenda.• Development agencies, such as the World Bank, SSEF, British High Commission, and GIZ, have supported different initiatives on effective communications in the EE and clean energy space in India.• Messages highlighting the costs and benefits of EE interventions are considered most effective, and aspects such as “call to action” and “community involvement” are the other themes mentioned, around which effective messaging can occur.
Impact assessment of the communication campaign	<ul style="list-style-type: none">• Feedback on communication activities, such as the Utility CEO Forum—a regular forum for representatives of utilities from various states—is sought from participants for continuous program improvement and development of the forum’s upcoming agenda.

Energy Consumers (General Public)

Energy consumer subgroups were selected for face-to-face interviews from different energy consuming sectors, namely, the following:

- Commercial (users of commercial buildings such as malls, shopping complexes and shops—sample size: 17 users)
- Residential (residents from urban and semi-urban households—sample size: 20 residents)
- Rural and agriculture (farmers – sample size: 3 farmers)

A substantial number of these consumers were also owners or drivers of passenger vehicles, which also brings in the coverage of the transport sector to a certain extent. Energy consumers from the industrial sector have already been covered as part of industry bodies and associations. Consumers were selected at random and were asked to respond to a questionnaire. A detailed analysis of the responses (see Table 14) is provided for energy consumers from various subgroups mentioned above.

Table 14: Summary of Survey Responses

Commercial building users	Residential	Rural and agriculture
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All the respondents informed that they are concerned about EE at their home and place or work. A clear majority responded that they are “very concerned” while a small segment mentioned “somewhat concerned.”		
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A total of 36 out of 40 respondents mentioned the adoption of the following EE measures and behavioral practices after hearing about EE communication:		
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Awareness and perceptions on EE

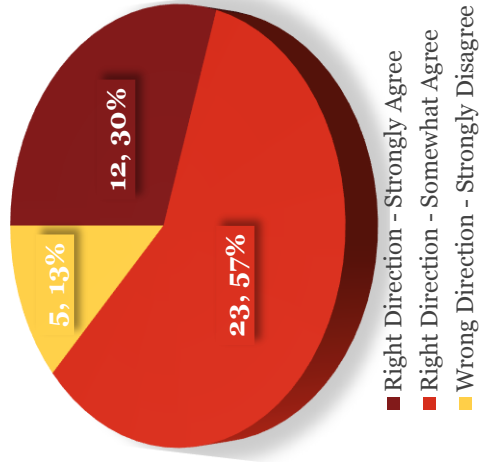
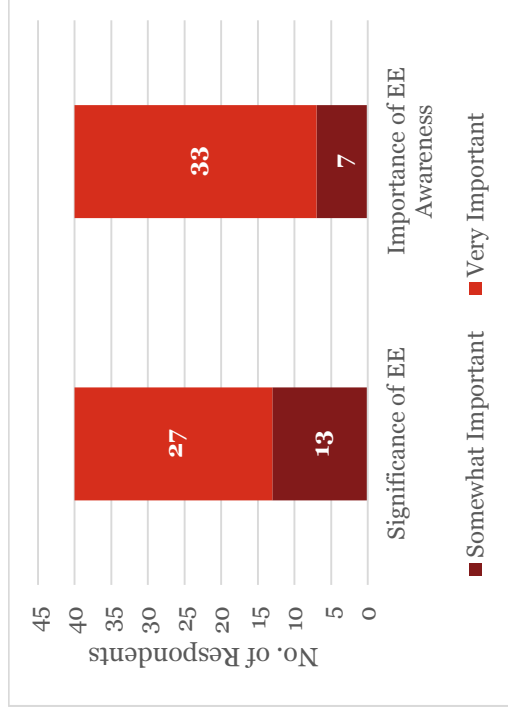
- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • Use of LED lights. • Use of BEE star-rated products. • Switching off idle lights and other equipment. • Driving vehicles at moderate speed. | | |
|--|--|--|

Importance of awareness on EE

All the respondents mentioned that it is important to spread awareness on EE at their home or workplace. A clear majority responded that it is “very important” while a small segment mentioned “somewhat important.”		
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EE policy direction

Majority of the respondents mentioned that EE policies in India are moving in the right direction.		
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Barriers
Lack of awareness, relatively expensive EE equipment, lack of political will, lack of availability of reliable EE technologies, and low confidence in EE measures are major barriers perceived in the widespread adoption of EE measures.

Motivators
High energy cost (electricity tariff), resultant monetary savings, and access to better technology (enhanced user experience) are the major motivators for the adoption of EE measures.

Four participants (two from the commercial sector and two from the agriculture sector) provided a negative response when asked to recall any information they might have come across on ongoing reforms in the energy sector initiated by the government.

The following messages were specifically recalled by respondents:

Recall value

- Use of LED (promotional TVC by Syska LED) for monetary saving.
- Energy or money-saving features of inverters (TVC by Luminous or Microtek).
- Fuel saving by driving at an optimal speed (PCRA TVC).
- One respondent from the agriculture sector recalled a communication on star-rated pumps (newspaper advertisement possibly by BEE or PCRA).

The recall was associated with TV, newspaper, Internet, radio, and word-of-mouth publicity. These have also been mentioned as trusted sources of information for decision making.

Media preferences

5. Communication Needs Assessment and Recommendations

This chapter presents deeper insights towards identification of communication needs and opportunities of various groups and subgroups of the target audience based on the qualitative and quantitative responses discussed in the previous chapter. Specific insights from the analysis of responses have been identified and presented with relevant communication opportunities in Table 15: Communication Needs Assessment.

Table 15: Communication Needs Assessment

Insights from the research	Communication need or opportunity
Common across all stakeholder groups	
<p>Significance of EE and spreading awareness of EE are acknowledged uniformly across institutional stakeholders, as well as end users.</p> <p>It is uniformly acknowledged by institutional stakeholders that the EE policy in India is moving in the right direction. A majority of the end users also acknowledged the same in the affirmative.</p>	<ul style="list-style-type: none"> • Provide avenues for continuous recall on the significance of EE so as to create top-of-mind awareness and to position EE as one of the prime factors during decision making. • Leverage the general acceptance of EE policies and programs across stakeholder groups. In view of the widespread public acceptance, the coverage of EE policies and programs can be expanded within and across energy-consuming sectors. <p>EE communication campaigns can support both the broadening of the reach of EE policies and programs to new energy-consuming sectors, as well as deepening their coverage in the energy consuming sectors that they presently cater to.</p>
Policymakers	
<p>Need of a dedicated IEC campaign for the interministerial audience in order to understand, accept, and include the application of EE as part of their respective area of activities. The direct and co-benefits of EE with respect to finance, commerce, economy, infrastructure, and transport, as well as possible roles to be played by respective ministries, need to be explored and understood well.</p>	<ul style="list-style-type: none"> • A top-down approach to create a platform or forum of representatives from each of such ministries, supervised by a competent authority, must be formed, which will meet at regular intervals to provide avenues for information exchange and communication of idea-to-execution level details on EE. • The forum needs to be convened under the leadership of a relevant opinion leader or a competent authority, managed appropriately with clear statements of purpose, a defined agenda, and consistent follow-ups to ensure action. • Niti Aayog acknowledged that such dedicated forums could be effective to reach out to policymakers on the importance of EE in a consistent way. • BEE, the Ministry of Power, and various other ministries, including the Ministry of Finance, Ministry of Information and Broadcasting, could also be important stakeholders.
Implementing agencies	
<p>Availability of communication experts to EE program managers is an often cited issue. Close collaboration between the EE program managers and the</p>	<ul style="list-style-type: none"> • Create dedicated communication cells with representation of experienced communication experts, within policymaking bodies and implementing agencies, either at the organization level or program level.

<p>communication team is one of most critical success factors for effective communication campaign.</p>	<p>This will help in providing program managers with easy access to professional communication services, close integration with communication team, clear briefing, quick feedback, and development of highly effective messages.</p>
<p>Procuring communication services</p>	<ul style="list-style-type: none"> • Communication services are specialized professional services and due weight must be given to quality-based selection. <p>Even with a typical 70:30 (quality:cost) implementation of the QCBS system, program managers have often faced the issue of leaving out the T1 (technically best) offer, since the optimal balance of quality and cost is offered by the T2 or T3 bidder.¹⁰</p> <p>Thus the highest possible weight must be given to the quality parameters, while using the QCBS system for procuring communication services. In cases such as those above, it will be useful to a make provision in procurement guidelines to allow the T1 bidder to match the cost offered by the otherwise qualified bidder.</p> <ul style="list-style-type: none"> • EE program managers, especially public sector entities, feel the need for compiling procurement guidelines and tools relevant to the procurement of communication services. For example, there is a lack of geographic or state-specific procurement guidelines on OOH media (such as the appropriate size, number, and location of the hoardings within a city or an area for optimum coverage and visibility). It will be helpful if such information is compiled from a wide array of sources, such as the public relations offices of various state governments.
<p>Communication research must be conducted thoroughly in terms of behavior aspects, motivators, and benefits value mapping</p>	<ul style="list-style-type: none"> • Emphasize the importance and need for research on behavioral aspects influencing energy consumption patterns across different strata of society. <p>As of now, a large number of behavioral aspects remain unexplored in terms of benefit realization of EE. For instance, benefits or motivators and barriers in EE adoption are heavily based on individual lifestyle and sociocultural factors, which need to be explored, for instance, for households in urban locations versus those in rural locations.</p> <p>Information and education needs of several distinct target groups may be different even for promoting the same product or service or best practice. Hence, communication must be designed, keeping in view the target user group or subgroup.</p>
<p>Administrative barriers on clearances of creatives</p>	<ul style="list-style-type: none"> • Approvals of creatives (for use in communication campaigns) must be smooth and backed by communication professionals.

¹⁰ Under the typical QCBS system for awarding tenders, the bidder scoring the highest points in the technical evaluation is designated as the T1 bidder. Similarly, the bidders scoring the second and third highest scores in the technical evaluation are designated as the T2 and T3 bidder, respectively.
 Communication Research on Energy Efficiency in India:

It is desirable that the governing council or the board of key implementing agencies (with a dedicated IEC campaign budget) should have a senior representative from a communications background in order to facilitate early clearance on creatives with useful and productive feedback.

Impact assessment of the EE communication campaigns is practically nonexistent

- Apart from PCRA’s educational campaign, the rest of the communication campaigns make an attempt to assess their respective effectiveness on the basis of indicators of the target audience’s involvement or engagement.

Industry

Inertia on adopting or implementing EE measures: In spite of general residual awareness on the importance of EE, significant inertia exists with respect to EE-related activities (not being on priority). Competing capex proposals are often awarded in favor of capacity and business expansion rather than EE.

- Regular communication and identification of preferred communication channels are critical for engaging industrial stakeholders consistently on the EE agenda.
- Avenues for consistent communications to and among industries also include compliance with EE regulations—for instance, requirement of large-scale industries for compliance with EE regulations, such as the PAT scheme.
- As an indirect advocacy measure, there is a need for the creation of consumer preference for goods produced by those industries that have opted for greener production processes having a low carbon footprint.

- One-to-one interaction of technology suppliers or consultants with relevant personnel in the industry is among the most preferred and sustained communication channels for this stakeholder group.

There is a need to promote, encourage, and provide avenues for such interactions. These interactions can be organized as B2B meetings during sector-specific industrial meets.

- The level and nature of relevant personnel within the industry varies according to industry size.

Preferred communication channels

For a large-scale corporation, the middle management level (such as head of department and VP) to the senior management level (such as CFO, CTO and CEO) needs to be the preferred entry point for initiating the case for EE intervention, who in turn will build up the case before the governing board for decisions involving capital expenditure and/or major process intervention.

For MSMEs, the partner, director, or proprietor is the decision-making authority, and all communication regarding investment or process change needs to be targeted at this level only.

Credibility of communication

- It is strongly recommended to ensure credibility of communication. One of the most compelling and effective means of achieving this is to ensure independence of communication from biases related to vendors, suppliers, or territories.

Credibility plays an important role when it comes to conveying a message effectively with the industrial sector.

Given its fair share of technological failures and inappropriate procurement choices, the industry finely scrutinizes incoming messages for any hidden interests and linkages.

Word-of-mouth publicity plays an important role in making or breaking an intervention in the industrial sector.

Top management or decision makers are often not available during events, such as seminars and workshops for one-to-one communication

- The presence of policymakers is an important motivating factor for attracting participation from the senior management and decision makers from industry, and it needs to be encouraged.
- The participation by someone who is perceived as a significant achiever in his or her area of work (relevant to industry) is also identified as a key motivator for senior industry stakeholders, and needs to be encouraged.

Effective messaging

- Industry leaders who have worked on EE messaging have often highlighted the need to remove repetitiveness from communication and to make it interesting for consumers.

The concept of EE, in spite of being an attractive proposition for the industry, often gets omitted as a dry and technical subject that is always “the other person’s job” within the organizational structure.

One of the ways to achieve this is to organize challenges or quizzes with respect to assessing the existing knowledge levels on EE, and clubbing EE with motivational lectures on individuals’ aspirations.

Communication infrastructure

- Conveying messages among industrial stakeholders is required at a number of hierarchical levels across the industrial spectrum. At the same time, the message conveyed will be impactful only when the right set of messages reaches the relevant strata within organizations.
- This being case, it is important for industrial bodies or associations to develop and maintain a database of communication contact points for each of such strata, along with the identification of relevant roles and responsibilities.
- Establishing dedicated communication teams at key industry bodies and apex sector-specific associations will also provide avenues for regular communication in an effective messaging style relevant for that sector.

End users : Transport, appliances and buildings

- Educational campaigns and activities targeting schoolchildren for awareness on EE must be promoted, scaled up, and percolated to the state level.

Educational campaigns rolled-out by PCRA and BEE have successfully demonstrated that children can be an effective means to bring about behavioral changes at the family level, as well as sustained behavior towards energy savings in times to come.

Educating children on EE from an early age: Catch them young! Behavioral change complexity increases with age.

Engagement of school students has shown an encouraging response, wherein PCRA targets to increase the outreach to 10 million students from the existing number of approximately half a million.

As brand ambassadors of educational messages, schoolchildren may be considered one of most significant target audience for educational campaign on EE.

- Campaigns for training teachers towards increasing the EE awareness levels among children can also be effective in scaling up and replicating the efforts in this area.

EE in curriculum of schools and educational institutes

- PCRA has already collaborated with the National Council of Educational Research and Training to develop a chapter on energy conservation for inclusion in the curriculum of schools. This has been developed as a single big chapter, which can be divided into smaller parts and incorporated in the curriculum for different grades. The content is presently under review by the Ministry of Human Resource Development.
- Niti Aayog is disseminating information on the India Energy Security Scenarios (IESS) tool to various educational institutions. Indian Institutes of Technology (IITs) are already using the IESS platform for their educational and research-based activities.
- It needs to be explored if communication on EE is more effective as part of the extracurricular activities, or as part of the educational curriculum.
- In either case, role of school functionaries, especially teachers, assumes significant importance as nodal center of implementation.

Communication channels

- A communication campaign for the general public needs to be implemented as a two-tier campaign—national and regional or local—for improved credibility and recall value of messages. The association with the broader national campaign adds to the credibility of the initiative among end consumers.
- Media agencies in EE communications highlight the use of OOH media and community involvement as the most effective means to convey the EE messages.

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- Among mass media options, TV, radio, newspapers, mobile messages, and the Internet have been identified as the most frequented and trusted sources of information for decision making.
 - Innovation and creativity, together with community mobilization, can most effectively convey the educational message and integrate the same with user's lifestyle.

Innovation

- Use of innovation and creativity can help to identify highly effective (communication-wise and cost-wise as well) points-of-purchase for the IEC campaign.
- For example, PCRA planted IEC creatives for the rural audience in between the hold-tunes of Kisan call centers (farmers' helplines).
- Similarly, PCRA roped in district and school-level administration and state education boards for scaling up school students' outreach programs. This resulted in reaching out to more than half a million students in comparison with 25,000 in the previous year.
- EESL roped in public relations offices of DISCOMS and municipal corporations in the city-level campaign, thus leveraging the familiarity and trust enjoyed by these organizations among the end consumers.
- Engaging stakeholders and building up their respective capacity by making them voluntarily participate in EE implementation, for example, crowdsourcing of communication messages, adoption of villages by petroleum companies for conveying conservation messages, and inclusion of para-teachers or paramedics, for outreach activities.

Credibility

- One of the lessons from EESL's IEC campaign is to develop politically neutral messages—that is, endorsement of EE communication needs to be done by a well-known personality from sports, cinema, or other well-known fields, but not from the political establishment (government). Involvement of politically oriented individuals has resulted in impeding the communication roll-out in areas with alternative political ideology or alignment.
- Touch and feel communication, which includes live demonstrations, work best in conveying messages related to the transformation from existing to a better or a more energy-efficient scenario.

Benefits mapping

- Highlighting the benefits is critical to effective communication. Benefits need to be well researched to map the value perception of the target audience. For example, the ease of ignition, fuel efficiency, and suitability for cooking smaller meals were the important benefits that were highlighted while communicating on efficient low-smoke cooking stoves and were well-received by the end users.

Suitability for small meals also provided a much-needed relief in the regular lifestyle.

- The content and messages both have to be customized to the target audience, as well as to the objective of communication. Communication for general awareness is different from product-specific awareness and call to action.
- In order to be effective, communication campaigns need to target all key stakeholders, including end users, product suppliers, and financial institutions.

Seven Key Recommendations

This section presents key recommendations on the basis of communication needs assessment for all categories of stakeholders presented in the previous section. These recommendations are targeted at EE program implementers where communication plays an important role in effectively conveying the message to the target audience. The key recommendations are listed below in Table 16.

Table 16: Key Recommendations

Sr. no.	Recommendation	Explanation
1.	Develop a comprehensive communication strategy and identify a champion on EE communication.	<p>EE communication landscape in India comprises many players and several parallel activities. In addition, there is a sense of lack of a common vision and coordination among various communication programs. The communication needs assessment and stakeholder mapping provided in this report may be useful for developing a comprehensive communication strategy on EE in India.</p> <p>At the same time, with cumulative experience gathered over years of implementing communication programs on EE, an agency should be identified for implementing such communication strategy.</p>
2.	Improve effectiveness of messaging on EE behavioral change.	<p>Developing effective messages (along with creative concepts) for onward use in various creatives and media vehicles is one of the most important steps in the overall communication development. Highly effective messages are required to be developed for the following:</p> <ul style="list-style-type: none"> • Creating a clear distinction among similar-sounding concepts, for example, energy-efficient equipment for industry versus behavioral energy-saving tips. • Attracting the audience's differentiated attention on EE from among a large chunk of information they usually come across. • Associating credibility to the communication campaign and making it neutral from commercial and political biases. <p>The messages must not be verbose, and the creative concept needs to capture the intellectual and emotional connect with the target audience through adequate communication research.</p> <p>For example, GIZ's communication material for Solar Irrigation Pumps was extensively field tested before</p>

	<p>finalizing—“<i>Suraj ka bal, kheton mein jal</i>” (Hindi), as the key message for the campaign.</p>
<p>3. Conduct research on consumer behavior to understand the audience’s attitudes, preferences, and awareness levels.</p>	<p>Conduct thorough communication research focused on consumer behavior (that is, why people do what they do). Understanding consumer behavior is a must for effective communication on EE awareness campaign.</p> <p>The analysis of the responses from the EE communication program implementers and communication professionals clearly reflects that consumer awareness generation using IEC & BCC tools is different from usual media campaigns for products or services. Community involvement for a communication campaign can happen only if it is well researched and the consumer behavior traits are identified in the beginning.</p> <p>For example, one of the key links in the overall supply chain of EE appliance is resellers or distributors. Detailed consumer research on assessing their perception and opinions on EE appliances hasn’t been explored in significant detail yet.</p>
<p>4. Build the capacity of technical speakers and decision makers.</p>	<p>EE programs are implemented by teams having high leverage on technical skills and qualifications. Generally speaking, it is technology-oriented teams and team leaders who deal with various stakeholders and drive the programs forward. For several communication options, such as workshops, seminars, discussion forums, focus group meetings, press conferences, and talk shows with a variety of stakeholders, it becomes necessary to convey the right messages even without specialized communication tools.</p> <p>In this context, it is recommended to organize capacity building, media training, and message development workshops for program implementers and technical speakers.</p> <p>For example, regular industry meets for discussions on EE can be organized in the form of engaging breakout sessions. This leads to capturing a more continuous attention span from participants compared to unilateral presentations.</p>
<p>5. Streamline the implementation of communication or educational campaigns on the program implementer’s side.</p>	<p>Communication tools and messages often have to pass through the institution’s board, wherein such changes may be suggested on creatives and messages that may significantly alter the effectiveness of the message to be conveyed to specific stakeholder groups. Therefore, it is recommended to nominate a communication expert at the board level or in another senior position in the organizational structure of EE program implementers.</p>
<p>6. Promote and ensure close integration and coordination among the communications team and technical team.</p>	<p>Close integration and coordination among communication and technical staff should cover the following aspects:</p> <ul style="list-style-type: none"> • Effective and holistic debrief by the technical team to the communication team or consultants on aspects such as the program’s objectives, organization’s policy and vision, and target audience.

	<ul style="list-style-type: none"> • Quick turnaround time on creatives and other elements of communication campaign. • Clearly defined boundaries of communication in terms of messaging, audience groups, and geographies.
<p>7. Conduct impact assessments for all campaigns.</p>	<p>Of all the major EE communication programs, only PCRA consistently undertakes a detailed impact analysis of its educational campaign, as well as monitoring and evaluation of measurable positive changes in terms of fuel saved and efficiency improvement.</p> <p>One focused study conducted by EESL has also confirmed a strong correlation between increased communication campaign frequency and higher uptake of LED bulbs from a typical geography.</p> <p>In this context, it becomes imperative to include a dedicated impact evaluation component at the initial stage itself while conceptualizing and designing a communication program on EE. Provision of effective impact assessment and feedback administration (from the field) will ensure continued improvement in effectiveness of the messages, as well as highlight the ever-changing consumer trends and behaviors.</p>

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