Department of Energy

The DOE logo is represented by a shining sun with eight rays hosting a star with 13 spikes. The rays symbolize the eight major sources of energy:

oil, gas, geothermal, coal, hydro, nuclear, biomass, and municipal waste. The 13 spikes stand for the 13 regions of the country.

The colors in the logo are representation of what DOE harnesses to fulfill its mandate: yellow, for energy; inner blue, for the ocean; outer blue, for the wind; and white, for environmental sustainability.

Legal Basis

Republic Act. No. 7638 (December 9, 1992) created the Department of Energy and rationalized the organization and functions of government agencies related to energy.

Republic Act No. 9136 (June 8, 2001), Electric Power Industry Reform Act (EPIRA), expanded the functions of DOE to include the supervision of the restructuring of the electricity industry.

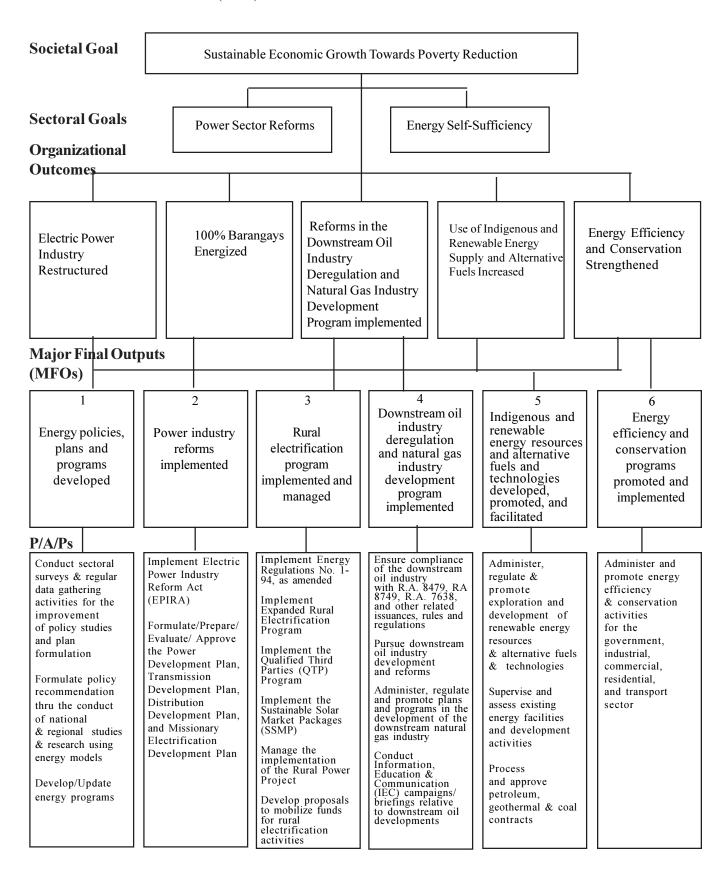
Administrative Order 38 (August 23, 2002) provided for the institutional strengthening of the DOE redefining the functions and services of its bureaus, service units, and offices.

Mandate

The Department of Energy (DOE) ensures a continuous, adequate, and economic supply of energy to keep pace with the country's growth and economic development with the end view of ultimately achieving self-reliance in the country's energy requirements. This will be done through the integrated and intensive exploration, production, management, and development of the country's indigenous energy resources; and through the judicious conservation, renewal, and efficient utilization of energy, taking into consideration the active participation of the private sector in the various areas of energy resource development. The DOE rationalizes, integrates, and coordinates the various program of the Government towards self-sufficiency and enhanced productivity in power and energy without sacrificing ecological concerns.



LOGICAL FRAMEWORK (DOE)



SECTOR GOALS

The Philippine Energy Plan (PEP) embodies the sector's policies, plans and programs for a tenyear plan horizon towards the attainment of the desired outcomes. It serves as the sector's investment portfolio for the private sector as it showcases "windows of opportunities" for potential investors in the energy sector. The continued implementation of the restructuring of the power sector will spur the development of a market-based environment conducive to local and international investors.

Power sector reforms

Electricity is one of the key inputs for socio-economic development. Efficient provision and improvement of access to electricity contribute to economic growth and poverty reduction. Power sector reforms generally involve commercialization, setting up of independent regulators, restructuring and privatization of the electricity sector.

Power sector reforms are targeted to result in fair and reasonable energy prices in a competitive environment. The strategies to attain this goal include:

- Implement Wholesale Electricity Spot Market (WESM) in Luzon by end of 2006;
- Privatize 70 percent of the installed capacity of the National Power Corporation (NPC) generating assets in Luzon and Visayas by 2007;
- Privatize the National Transmission Corporation (TransCo);
- Implement continuously transmission system upgrade and expansion program;
- Attain 100 percent barangay electrification by 2008;
- Open 14 "first wave areas" of NPC-Small Power Utilities Group (SPUG) to power sector participants; and
- Achieve single-digit national average systems loss of distribution utilities by 2010.

These efforts are expected to create an investment climate attractive to private domestic and foreign investors.

Energy self-sufficiency

The efficient implementation of energy efficiency and conservation programs will ensure consumer welfare promotion and protection. This will result in energy and foreign exchange savings which can be used to support capital expenditures needed to propel the economy.

To reduce energy importation and eventually achieve a 60 percent self-sufficiency level in 2010, the following activities will be pursued:

- Increase the country's identified reserves of indigenous oil and gas by 20 percent in ten years;
- Reduce coal imports by 20 percent in ten years;
- Increase renewable energy-based capacity by 100 percent;
- Increase the use of alternative fuels: 100 percent of Metro Manila buses running on compressed natural gas (CNG) by 2010; 5 percent coco-methyl ester (CME) blend with diesel fuels for

- vehicles in 2010; 5 percent ethanol blend for vehicles by 2007 to reach 10 percent in 2010;
- Convert retired and operating oil-based power plants to natural gas by 2010; and
- Attain 19.8 million Barrels of Fuel Oil Equivalent (MMBFOE) average annual energy savings in 10 years through energy efficiency and conservation measures (17.7 MMBFOE) and use of alternative fuels for transport (2.1 MMBFOE).

ORGANIZATION OUTCOMES

In keeping with its mandate of keeping pace with the country's growth and economic development through the efficient utilization of energy, among others, the DOE seeks to achieve its five-pronged outcomes of restructuring the electric power industry, energizing 100% of barangays, implementing energy reforms, increasing the use of alternative fuels, and strengthening energy efficiency and conservation.

Electric Power Industry Restructured

The ultimate objective of the power sector reforms is to provide fair and reasonable price of electricity to end-users without sacrificing adequacy, reliability, and quality through the establishment of a market-based power industry in partnership with the private sector.

100% Barangays Energized

The rural electrification program is the DOE's contribution to the poverty alleviation program of the government. The promotion of economic development is ensured by providing electricity through line extension and decentralized energy systems.

Reforms in the Downstream Oil Industry Deregulation and Natural Gas Industry Development Program Implemented

A deregulated oil industry will provide wider access to energy products and services with the right quantity and good quality under a regime of competitive prices. The outcome also involves provision of policy and program support to promote the development of natural gas for power and non-power applications.

Use of Indigenous and Renewable Energy Supply and Alternative Fuels Increased

Increased indigenous energy supply will lessen dependence on imported fuels, thereby realizing foreign exchange savings for the country. It will likewise promote supply security and reliability, and will support the country's environmental goals.

Energy Efficiency and Conservation Strengthened

Nationwide implementation of energy efficiency and conservation programs will result in higher energy and foreign exchange savings. Energy savings will delay the need for capital investments for new power projects while foreign exchange savings will be used to fund vital social services.

MAJOR FINAL OUTPUTS

As the agency responsible for integrating and coordinating the various power and energy programs of the government, the DOE is expected to produce the following outputs:

1. Energy Policies, Plans and Programs Developed

Energy policies, plans and programs which the DOE is tasked to develop and monitor include: exploration, development, processing and distribution of energy resources; promotion of the utilization of indigenous and alternative energy resources; power reforms and electrification of the countryside; and judicious utilization of energy.

A ten-year national energy plan, complemented by regional plans, provides long-term direction and thrusts to the energy sector to ensure sustainable, stable, secure, sufficient, accessible, and reasonably priced energy.

Associated Activities or P/A/Ps:

Energy Policy and Planning [updating of the PEP and the Regional Energy Profiles (REP) of the 16 administrative regions; sectoral surveys and regular data gathering activities to support policy studies and plan formulation; national and regional studies and research using energy models, including study on the cost of meeting 60% self-sufficiency by 2010; development of national energy models for demand and supply forecasting; information dissemination activities on energy policies, plans and programs; bilateral and multilateral cooperation activities pursuant to international commitments/agreements; position papers and reports preparation on energy issues and developments]

Energy Resource Development (research and studies, and policies and programs on petroleum, geothermal and coal, including the processing and approval of petroleum, geothermal and coal contracts and permits, and assessing the resource potential of prospective petroleum, geothermal and coal areas; exploration and production of petroleum, geothermal and coal resources in the country; and enhancement of skills and capabilities relative to energy resource development)

2. Power Industry Reforms Implemented

Power sector reforms seek to restructure the electricity industry and privatize the generation and transmission functions in accordance with the EPIRA. These reforms will provide endusers with reliable and efficient supply of electricity and ancillary services based on its true cost.

Associated Activities or P/A/Ps:

Electric Power Industry Management and Control [monitoring the implementation of EPIRA; monitoring and assessing WESM; formulating the Power Development Plan (PDP), the

Distribution Development Plan (DDP), and the Missionary Electrification Development Plan (MEDP); evaluating and approving the Transmission Development Plan (TDP); and enhancing skills and capabilities relative to electric power industry management and control

3. Rural Electrification Program Implemented and Managed

The rural electrification program is part of the ten-point legacy agenda. It provides policies, plans and programs towards the attainment of 100% barangay electrification by 2008.

Associated Activities or P/A/Ps

Rural Electrification Administration and Management [implementing Energy Regulations No. 1-94 (E.R. 1-94), the Expanded Rural Electrification Program, QTPs Program, and the Sustainable Solar Market Packages (SSMP); managing the implementation of the Rural Power Project; and developing proposals to mobilize funds for rural electrification activities]

4. Downstream Oil Industry Deregulation and Natural Gas Industry Development Program Implemented

This MFO seeks to create an investment climate conducive to investors and to improve access to the right quantity and quality energy products and services through the expansion of downstream energy facilities. It also aims to promote power and non-power use of natural gas.

Associated Activities or P/A/Ps

Downstream Oil and Natural Gas Industry Management and Control (compliance of the downstream oil industry with R.A. No. 8479, No. 8749, No. 7638, and other related issuances, rules and regulations; pursuit of downstream oil industry development and reforms; plans and programs formulation in the development of the downstream natural gas industry; enhancement of skills and capabilities relative to downstream oil and natural gas industry management and control; and IECs/briefings relative to downstream oil development)

5. Indigenous and Renewable Energy Resources and Alternative Fuels and Technologies Developed, Promoted, and Facilitated

This MFO seeks to increase indigenous energy and alternative fuels supply through energy contracting rounds, investment road shows, and other IEC campaigns. It also seeks to increase utilization of alternative fuels specifically in the transport sector through market development and the creation of investor-friendly environment by providing comprehensive incentive packages to all stakeholders, among others.

Associated Activities or P/A/Ps

Direction and Control of Renewable Energy (RE) Resources, Alternative Fuels and Technologies Development and Utilization (research and studies and policies and programs

on RE resources and technologies, alternative fuels and technologies, energy efficiency and conservation; exploration and development of RE resources and alternative fuels and technologies; alternative fuels and technologies regulation and promotion; supervision and assessment of existing energy facilities and development activities; implementing area-based energy technology and systems through the Affiliated Non-Conventional Energy Centers and Local Government Units)

6. Energy Efficiency and Conservation Programs Promoted and Implemented

To attain energy independence, the government is considering savings on energy through strong efficiency and conservation programs on fuel efficiency and conservation; and power conservation and demand-side management.

Associated Activities or P/A/Ps

Energy Efficiency and Conservation (research and studies and policies and programs on energy efficiency and conservation technologies applicable to government, industrial, commercial, residential, and transport sector, electric power industry participants, among others; energy efficiency and conservation activities for the government, industrial, commercial, residential and transport sector; including promotional campaigns on Fuel Economy Runs and energy standards and labeling program for household appliances and lighting products; enhancement of skills and capabilities relative to energy utilization and conservation)

Energy Research and Testing Laboratory Services (geo-chemical/geological sampling and/ or analysis of coal, geothermal and petroleum samples to help assess energy resource prospectivity; alternative fuels analysis to determine their compliance with approved PNS; analytical and technical services to support petroleum product quality monitoring, i.e., field sampling and/or laboratory services; energy performance testing and labeling for:appliances and equipment, and lighting and related fixtures and accessories, and other household electrical products; formulation/implementation/review of standards on fuel quality; and labeling program for household appliances and lighting products; implementation of the Philippine Efficient Lighting Market Transformation Project; and enhancement of skills and capabilities relative to energy research and testing)

Performance Measures and Targets

Particulars	2007 Targets	Remarks
MFO 1		
Energy Policies, Plans and Programs Developed		
No. of energy plans formulated/updated and adopted		
Ten-year Philippine Energy Plan	1	
Regional Energy Profiles	16	
Power Development Plan	1	
Distribution Development Plan	1	
Missionary Electrification Development Plan	1	

Particulars	2007 Targets	Remarks
Oil Contingency Plan		Update as necessary
No. of policy recommendations adopted Department Orders/Circulars/other Issuances, and Executive/Administrative Orders/Circulars covering energy policies approved by the President	12	
Bills/position papers on energy policies endorsed to OP/ Congress	11	
Position papers/agreements relative to international commitments (APEC, ASEAN, ACD, WTO and other Free Trade Agreements, among others) facilitated and endorsed to OP/Congress/Executive Offices	48	
Resolutions endorsed to concerned agencies Coal to Market Linkage Coal importation Coal plant technology and consumption study	100 2	
Development of web-based database system for the distribution utilities No. of issuances on natural gas in preparation for the	1	
passage of the Natural Gas (NatGas) Law Transmission Code Distribution Code Supply Code NatGas Law Implementing Rules and Regulations	1 1 1 1	
Impact studies on Gender and Development, i.e., employment profiling in energy activities, assessment on effects of rural electrification on women	Conduct of surveys	
No. of energy programs formulated, adopted, and promoted Power/Electrification Program	-	
Upstream Energy Program (Petroleum/Coal/ Geothermal) Upstream samples processed/ tested/correlated	Conduct of PECR 20	
Alternative Fuels Programs Sites for CNG refueling station and bio-fuel manufacturing/production plants inspected/monitored	4 (bio-diesel); 2 (ethanol)	
Alternative fuel vehicles tested Alternative fuel samples tested	8 40	
Natural Gas Development Program (NGDP)	Finalized NGDP requirement of NatGas Law	

Particulars	2007 Targets	Remarks
Downstream Oil Industry Program	LPG Cylinder Improvement Program; Gasoline Station Lending and Financial Assistance Program (GSLFAP); IEC campaign program on LF and LPG safety rules and regulations	
Environmental Management Program No. of power plants complying with environmental standards Reports on oil spill incidence and other environmental	24	As the need arises
issues/concerns Conduct of annual oil spill seminar-workshop Environmental and National Commission on Indigenous People (NCIP) permits and certificates	1 4	As the need arises
obtained prior to project implementation Fuel samples tested for Clean Air Act compliance Energy Information Management Program	2,250	
Enhancement/upgrading of DOE Portal, DOE Intranet No. of web pages updated No. of data sets validated/uploaded	24 20	
Enhancement of Energy Information Center Intranet No. of data sets validated/uploaded	12	
Digitization of existing analog data at the EDCP No. of analog data digitized Establishment of the Energy Net	2,000	
No. of players connected MFO 2	4	
Power Industry Reforms Implemented		
No of IEC/consultations conducted and participants covered Power sector reforms E.R. 1-94	16	200 participants each
Semi-annual reports submitted to the JCPC on the status of the overall implementation of the EPIRA	2	10th & 11th EPIRA Implementation Status Report
No. of pertinent WESM documents prepared to address emerging market performance issues		

Relevant Department Circulars issued as against proposed Market assessment reports evaluated Maintenance of database on WESM operation (365 days, 24/7) No. of non-electrification projects evaluated, processed, and approved under E.R. 1-94 MFO 3 Rural Electrification Program Implemented and Managed	12 Daily monitoring	As the need arises
and approved under E.R. 1-94 MFO 3		
No. of barangays/households electrified by DOE E.R. 1-94 Rural Electrification Program	73	
No. of coordination meetings conducted to resolve issues/ disputes/conflicts in the implementation of electrification projects		As the need arises
MFO 4 Downstream Oil Industry Deregulation and Natural Gas Industry Development Program Implemented		
No. of new players per activity monitored Oil Gas	80	
No. of monitoring reports issued/posted within target time for public consumption Oil price monitoring reports	264	
Price monitor postings at DOE website	204	
Oil Petroleum	144	No target posting adjustment
Oil situation (supply and demand) Natural gas (production, consumption, generation, utilization)	12 12	44,400
No. of facilities inspected which comply with standards Gasoline stations LPG establishments	800 1,200	
Depots/refineries Bio-fuels manufacturing plants Ethanol blending/storage facilities	120 16	
Natural gas facilities (pipeline, onshore and offshore gas plants, power plants) Government agencies	28 80% of 200	

Particulars	2007 Targets	Remarks
No. of standards developed/ reviewed/adopted and issued		
Bio-diesel	4	
Diesel Gasoline	1	
Brake fluid	1	
LPG depot	1	
Dispensing and storage systems for biofuels at retail	1	
outlets Portable Petroleum Product Containers	1	
Review of PNS/DOE FS 1 to include dispensing of bio-	1	
fuels		
LPG transport vehicles	1	
No. of certifications/accreditations/registrations/ endorsements/acknowledgments in the downstream oil		
industry		
No official additions assistant	11	
No. of fuel additives registered Accreditation of industry participants to the Fuel- Bio-	11 8	Depends on entry
Ethanol Program	o o	of new players/
Č		change of dealer-
	3. 7	ship, etc. Previous COC has
Certificate of Compliance (COC) to the Retail Rules	No target	5-year term (2009)
Endorsement/Certification of Oil Industry Participants	12	Dependent on
		application filed
		and received by
	1,000	the Bureau
Acknowledgement of prior notices	1,000	
No. of new users of natural gas monitored	2	
No. of IECs/briefings conducted and participants covered	4	100 particiapnts
110. of 1205/offerings conducted and participants covered		each
MFO 5		
Indigenous and Renewable Energy Resources and Alternative		
Fuels and Technologies Developed, Promoted, and Facilitated		
No. of service/operating contracts issued, administered, and		
monitored as complying with contract terms		
Oil and gas	28	No additional
	20	contracts for 2007
		due to conduct of
Coal	144	contracting round
Geothermal	36	
Mini-hydropower	4	January of Control
Wind	-	Issuance of wind contract under
		moratorium

Particulars	2007 Targets	Remarks
No. of projects facilitated, endorsed, and monitored Clean Coal Technologies	Coal Briquetting Project Coal Liquefaction Project Environment- Friendly Production of Carbon-Enriched Lignite	
Small-scale coal mining Energy-related projects endorsed Clean Development Mechanism Program National Vehicle Research and Testing Center Other locally-funded and foreign-assisted projects	39	
No. of affiliated Non-Conventional Energy Centers (ANECs) administered and monitored No. of IEC events (seminars, meetings, exhibits) and corresponding no. of participating stakeholders reached to promote the utilization/commercial application of alternative fuels	2	
Compressed Natural Gas	18 (consultations/	
Bio-diesel Ethanol Autogas	meetings, etc.) 60 (participants) 52 (consultations/ meetings, etc.) 108 (participants)	
MFO 6 Energy Efficiency and Conservation Programs Promoted and Implemented		
No. of energy efficiency and conservation programs promoted and implemented		
No. of energy standards/ labeling programs implemented/ reviewed (household appliances and lighting products) IEC: No. of seminars and tri-media campaigns and clients reached Voluntary Agreements Program: No. of promotional activities conducted and clients reached Government Enercon Program: No. of government agencies monitored as complying with program	5 24 (seminars) 15 (tri-media ads) 12 300	

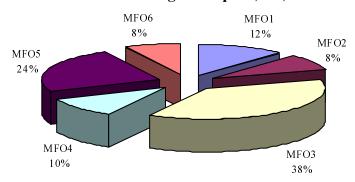
Particulars	2007 Targets	Remarks
No. of companies/power plants/ distribution utilities audited/ monitored as complying with Enercon standards and given		
recognition No. of companies audited	40	
No. of power plants monitored on heat rate improvement	20	
No. of distribution utilities monitored on systems loss reduction	120	
No. of distribution utilities monitored on demand-side management (DSM) No. of companies monitored	- 40	DSM program suspended by ERC

FY 2007 OPIF-Based Budget

FY 2007 Budget by Major Final Output (MFO) (in million pesos)

Particulars	PS	MOOE	CO	Total	%Share to Total
T W WORMS	1.0	1.1002		10001	to Total
MFO 1	35.438	39.343	0.016	74.797	12%
Energy policies, plans and programs developed					
MFO 2	17.619	32.517	0.017	50.153	8%
Power industry reforms implemented					
MFO 3					
Rural electrification program implemented and	20.964	213.486	0.016	234.466	38%
and managed					
MFO 4					
Downstream oil industry deregulation and natural	31.837	31.695	1.185	64.717	10%
gas industry development program implemented					
MFO 5					
Indigenous and renewable energy resources and					
alternative fuels and technologies developed, promoted, and facilitated.	34.229	92.791	20.025	147.045	24%
	34.229	92.791	20.023	147.043	24 /0
MFO 6					
Energy efficiency and conservation programs promoted and implemented	20,650	27.564	0.017	48.231	8%
promoted and implemented	20.030	27.304	0.017	70.231	0 /0
TOTAL	160.737	437.396	21.276	619.409	100%
% Share to Total	26%	71%	3%	100%	

FY 2007 Budget by MFO Total Budget = Php619,409,000



Breakdown by MFO/Fund Source (in million pesos)

Particulars	GAA	RLIP	SAGF	Total
MFO 1 - Energy policies, plans and programs developed	71.883	2.914	-	74.797
MFO 2 - Power industry reforms implemented	48.712	1.441	-	50.153
MFO 3 - Rural electrification program implemented and				
managed	55.603	1.717	177.146	234.466
MFO 4 - Downstream oil industry deregulation and natural				
gas industry development program implemented	54.929	2.595	7.193	64.717
MFO 5 - Indigenous and renewable energy resources and				
alternative fuels and technologies developed,				
promoted and facilitated.	84.720	2.772	59.553	147.045
MFO 6 - Energy efficiency and conservation programs				
promoted and implemented	34.501	1.685	12.045	48.231
TOTAL	350.348	13.124	255.937	619.409
% Share to total	57%	2%	41%	100%

Budget Highlights

Priority Programs and Projects (in million pesos)

MFO 1 –	Energy Policies, Plans and Programs Developed	<u>74.797</u>
	Formulation of short, medium and long-term national and regional energy policies, plans and programs	
MFO 2 -	Power Industry Reforms Implemented	<u>26.698</u>
	Implementation of Electric Power Industry Reform Act, including the monitoring and assessment of the Wholesale Electricity Spot Market (WESM)	
MFO 3 –	Rural Electrification Program Implemented and Managed	<u>177.146</u>
	Barangay Electrification Program Using New and Renewable Energy Remote Area Electrification Subsidy Program	76.672 100.474
MFO 4 –	Downstream Oil Industry Deregulation and Natural Gas Industry Development Program Implemented	<u>28.546</u>
	Ensuring compliance of the downstream industry with the deregulation laws and administration/regulation/promotion of plans and programs in the development of downstream natural gas industry Oil Industry Deregulation Management Program	21.353 7.193
MFO 5 –	Indigenous and Renewable Energy Resources and Alternative Fuels and Technologies Developed, Promoted and Facilitated	95.958
	Administration, regulation and promotion of exploration and development of renewable energy and alternative fuels and technologies	36.405
	Natural Gas Vehicle Program for Public Transport CME (Coco- Biodiesel) Program Autogas Program Hydrogen Program Ethanol Program Mine Safety, Rescue and Emergency Preparedness in Coal Mining Coalbed Methane Resource of Selected Philippine Coalfields: A Navy Alternative Claim Program Engel Evels	6.728 9.436 5.312 1.712 7.834 8.190
	A New Alternative Clean-Burning Fossil Fuels Resource Assessment of Low Enthalpy Geothermal Resources in the Philippines	16.841 3.500

MFO 6 –	Energy Efficiency and Conservation Programs Promoted and Implemented	<u>16.796</u>
	Administration and promotion of energy efficiency and conservation activities for the government, industrial, commercial, residential and transport sectors	4.751
	Power Conservation and Demand Management Program Fuel Conservation and Efficiency in Road Transport National Energy Efficiency and Conservation Program	3.777 3.278 4.990