

## ANNEX E: Detailed implementation plan

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>PUBLIC SECTOR</b>					
<b>P1.1</b>	The introduction of mandatory EPC certificates in all rented properties and publicly accessible buildings	<ul style="list-style-type: none"> <li>• Designate responsibility for management of EPCs at national, provincial and municipal levels</li> </ul>	DPW/ Local government	DOE, national, provincial departments, municipal government, SANEDI	3 months
		<ul style="list-style-type: none"> <li>• Define the framework &amp; regulations for EPCs in rented properties</li> </ul>	DOE	DPW, CIDB, National Treasury	1 year
		<ul style="list-style-type: none"> <li>• Consult with property owner representatives to agree roll out timeframe &amp; on regulation</li> </ul>	DOE	DPW & CIDB, SALGA, SAPOA, other commercial property representatives	1 year
		<ul style="list-style-type: none"> <li>• Develop database to centrally capture data on rented properties &amp; establish administrative structures</li> </ul>	DOE/ DPW	DOE, National, provincial, municipal government departments, SANEDI	2 years
<b>P1.3</b>	Develop the public sector awareness raising campaign to facilitate the “leading by example” approach.	<ul style="list-style-type: none"> <li>• Establish the brand cross-departmental working group</li> </ul>	DOE	Selected government representatives	6 months
		<ul style="list-style-type: none"> <li>• Develop the cross-governmental “leading by example” brand</li> </ul>	Brand cross-departmental working group	Marketing experts, national & provincial government departments, municipalities, and agencies	1 year
		<ul style="list-style-type: none"> <li>• Produce a brand business plan to identify greatest priorities and gains</li> </ul>	Brand cross-departmental working group		1 year
		<ul style="list-style-type: none"> <li>• Define target audiences,</li> </ul>			

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		media to be used and necessary materials		Marketing experts	1 year
		<ul style="list-style-type: none"> <li>• Roll out the brand business plan</li> </ul>	Brand cross-departmental working group	Marketing experts	5 years
<b>P1.6</b>	Introduce standards and labelling relevant for public sector appliances and equipment	<ul style="list-style-type: none"> <li>• Undertake a sectoral study of energy consumption by activity across the sector (baseline)</li> <li>• Define priority energy-intensive equipment categories for labelling and MEPS where relevant</li> <li>• Expand current systems for standards and labelling (including change to SANS)</li> </ul>	DOE	DOE, SANEDI, national, provincial, municipal government departments	1 year
			DOE	SABS, DPW, SANEDI	18 months
			SABS	SABS, DOE, SANEDI	2 years
<b>P1.7</b>	Announce a 15-year trajectory for the successive tightening of the energy performance component of building standards	<ul style="list-style-type: none"> <li>• Finalise trajectory for standards</li> <li>• Inform sector stakeholders in advance of requirements</li> <li>• Extend current systems to include new standards in line with trajectory</li> </ul>	DOE	DPW/ CIDB, CSIR, construction industry representatives	6 months
			DOE	DPW/ CIDB	1 year
			SABS		5 years
<b>P1.9</b>	Roll-out of the provision of energy and activity data from the public sector	<ul style="list-style-type: none"> <li>• Define the strategy for the EETMS going forward.</li> <li>• Outsource the management of the system.</li> <li>• Support its implementation in relation to the mandatory provision of data.</li> </ul>	DOE	SANEDI	6 months
			DOE		1 year
			DOE		6 months

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<b>MUNICIPAL SECTOR</b>					
<b>P2.1</b>	Develop municipal energy efficiency strategies	<ul style="list-style-type: none"> <li>Support comprehensive baseline assessments (including vehicle fleets) of energy savings potentials and cost-benefit analysis of specific measures.</li> </ul>	DOE	SALGA, municipalities, private sector ESCOs	3 years
		<ul style="list-style-type: none"> <li>Support development of energy efficiency strategies per municipality</li> </ul>	DOE	SALGA, municipalities	3 years
		<ul style="list-style-type: none"> <li>Support knowledge sharing across municipalities in order to scale up the good examples.</li> </ul>	Innovation hub	SALGA, municipalities	3 years
<b>P2.2</b>	Support the implementation of energy savings measures	<ul style="list-style-type: none"> <li>Identify high priority measures with payback periods of less than 10 years including undertaking refurbishments, reviewing operating procedures, and increasing community awareness.</li> </ul>	Municipalities	DOE, ESCOs	3 years
		<ul style="list-style-type: none"> <li>Assist municipalities in developing financing proposals based on a variety of options</li> </ul>	DOE	Municipalities, ESCOs, financing institutions	4 years
		<ul style="list-style-type: none"> <li>Monitor savings from implementations</li> </ul>	DOE	Municipalities, ESCOs	5 years

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>RESIDENTIAL SECTOR</b>					
R1	Announce a 15-year trajectory for the successive tightening of minimum energy performance standards for household appliances	<ul style="list-style-type: none"> <li>• Finalise trajectory for standards on appliances</li> <li>• Inform sector stakeholders in advance of requirements</li> <li>• Extend current systems to include new standards in line with trajectory</li> </ul>	DOE	Manufacturing and commercial sectors, Consumer Goods Council SABS	6 months
			DOE		1 year
			SABS		5 years
R2	Develop a strongly branded energy performance <b>certification</b> mark for household appliances (modelled on the 'Energy Star' brand), in addition to the planned EE labels.	<ul style="list-style-type: none"> <li>• Develop specific brand of certification mark to be exhibited on appliances</li> <li>• Mandate all suppliers to use certification mark on EE verified appliances (under standards and labelling programme)</li> <li>• Strong public awareness campaigns to educate on the brand</li> </ul>	DOE	Marketing experts, Consumer Goods Council, consumer focus groups	6 months
			DOE/ SABS	Manufacturing and commercial sectors	1 year
			DOE	Media, Eskom	5 years
R3	Announce a 15-year trajectory for the successive tightening of the energy performance component of building standards for residential buildings	<ul style="list-style-type: none"> <li>• Finalise trajectory for standards</li> <li>• Inform sector stakeholders in advance of requirements</li> <li>• Extend current systems to include new standards in line with trajectory</li> </ul>	DOE	DPW/ CIDB, CSIR, construction industry representatives DPW/ CIDB	6 months
			DOE		1 year
			SABS		5 years
R7	Build on the existing awareness-raising activities targeting households and the school curriculum	<ul style="list-style-type: none"> <li>• Establish an MOU with the Department of Education &amp; Eskom</li> <li>• Jointly define awareness</li> </ul>	DOE	Department of Education & Eskom	6 months
			DOE		1 year

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
		<ul style="list-style-type: none"> <li>raising strategy</li> <li>• Develop curriculum objectives, activities and materials</li> <li>• Roll out programme</li> </ul>	DOE Dept of Education/ Eskom	Department of Education, Eskom & education experts Department of Education, Eskom & education experts DOE	2 years 5 years
R10	Roll-out of the provision of energy and activity data from the residential sector	• Define the strategy for the EETMS going forward.	DOE	SANEDI	6 months
		• Outsource the management of the system.	DOE		1 year
		• Support its implementation in relation to the mandatory provision of data.	DOE		6 months
R11	Support technology innovation and dissemination of energy efficient cookstove technologies	• Identify appropriate, high performing and socially acceptable technologies	EE Technology Hub	SANEDI/ DOE	1 year
		• Introduce a subsidised roll out programme for low LSM houses	DOE	National Treasury, SANEDI, Department of Human Settlements	2 years

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<b>COMMERCIAL SECTOR</b>					
C1	The introduction of mandatory EPC certificates in all rented properties and publicly accessible buildings.	• Designate responsibility for management of EPCs within commercial sector	DOE	SANEDI	6 months
		• Define the framework &	DOE	CIDB, National Treasury	

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		<ul style="list-style-type: none"> <li>regulations for EPCs in rented properties</li> <li>• Consult with property owner representatives to agree roll out timeframe &amp; on regulation</li> <li>• Develop database to centrally capture data on rented properties &amp; establish administrative structures</li> </ul>	DOE	CIDB, SAPOA, other commercial property representatives	1 year
			DOE/ DPW	DOE, national, provincial, municipal government departments, SANEDI	2 years
<b>C2</b>	Revision of 12L to ensure it provides an incentive to commercial property owners	<ul style="list-style-type: none"> <li>• Undertake a study to identify the challenges of 12L for the commercial sector &amp; propose solutions</li> <li>• Implement revisions to the legislation/ regulation</li> <li>• Market the facility to the sector</li> </ul>	SANEDI	DOE, National Treasury, sector representatives, including SAPOA	1 year
			DOE	Parliament, National Treasury	2 years
			SANEDI	DOE, sector representatives, including SAPOA	4 years
<b>C6</b>	Introduce standards and labelling relevant for commercial sector appliances and equipment	<ul style="list-style-type: none"> <li>• Undertake a sectoral study of energy consumption by activity across the sector (baseline)</li> <li>• Define priority energy-intensive equipment categories for labelling and MEPS where relevant</li> <li>• Expand current systems for standards and labelling (including change to SANS)</li> </ul>	DOE	DOE, SANEDI, sector representatives	1 year
			DOE	SABS, SANEDI	18 months
			SABS	DOE, SANEDI	2 years
<b>C9</b>	Roll-out of the provision of	<ul style="list-style-type: none"> <li>• Define the strategy for the</li> </ul>	DOE	SANEDI	6 months

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
	energy and activity data from the commercial sector	EETMS going forward.	DOE		1 year
		<ul style="list-style-type: none"> <li>• Outsource the management of the system.</li> <li>• Support its implementation in relation to the mandatory provision of data.</li> </ul>	DOE		6 months

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>INDUSTRY AND MINING SECTOR</b>					
<b>I1</b>	Adjustment of the 12L tax incentive scheme	<ul style="list-style-type: none"> <li>• Undertake a study to identify the challenges of 12L for the industrial sector &amp; propose solutions</li> </ul>	SANEDI	DOE, National Treasury, sector representatives, including BUSA	1 year
		<ul style="list-style-type: none"> <li>• Implement revisions to the legislation/ regulation</li> </ul>	DOE	Parliament, National Treasury	2 years
		<ul style="list-style-type: none"> <li>• Market the facility to the sector</li> </ul>	SANEDI	DOE, sector representatives, including BUSA	4 years
<b>I2</b>	Minimum energy performance standards for motors and motor-driven systems	<ul style="list-style-type: none"> <li>• Undertake a cost-benefit analysis of introducing MEPS for motors</li> </ul>	DOE	Industrial sector representatives, innovation hub	2 years
		<ul style="list-style-type: none"> <li>• If a net benefit is expected, develop standards and introduce regulation.</li> </ul>	DOE	SABS, industrial sector representatives, innovation hub	3 years
		<ul style="list-style-type: none"> <li>• Incorporate management, administration and monitoring into existing</li> </ul>	SABS		4 years

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
		structures			
14	Provision of targeted support and advice on energy efficiency to enterprises	<ul style="list-style-type: none"> <li>• Undertake a market assessment for the type of support required by types and sizes of business</li> <li>• Define a strategy for support reflecting these needs</li> <li>• Source funding for the provision of grants</li> <li>• Launch and administer the programme</li> </ul>	DOE	Innovation hub, sector representatives	2 years
			Innovation hub	DOE, sector representatives	30 months
			DOE	National Treasury, international donors	3 years
			DOE	Innovation hub, SANEDI	42 months
15	Incentivise enterprises to introduce EnMS and achieve ISO50001 certification	<ul style="list-style-type: none"> <li>• Design and define incentive mechanism for the development of EnMS of a quality compatible with ISO50001</li> <li>• Secure financing for subsidies/ rebates</li> <li>• Monitor implementation and administer programme</li> </ul>	DOE	DST, DTI industry representatives	2 years
			DOE	DST, DTI, National Treasury, international donors	2 years
			SANEDI	DOE, DST, DTI	5 years
16	Roll-out of the provision of energy and production data from the manufacturing sub-sector	<ul style="list-style-type: none"> <li>• Define the strategy for the EETMS going forward.</li> <li>• Outsource the management of the system.</li> <li>• Support its implementation in relation to the mandatory provision of data.</li> </ul>	DOE	SANEDI	6 months
			DOE		1 year
			DOE		6 months
17	Develop standardised tools for voluntary reporting of	<ul style="list-style-type: none"> <li>• Undertake extensive consultations within the</li> </ul>	DOE	Innovation hub, mining representatives	1 year



Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
	energy savings from specific initiatives in the mining sector	sub-sector • Devise a tool for the reporting of savings based on best practice • Maintain the tool and make use of the data	Innovation hub	DOE, mining representatives	2 years
			DOE	SANEDI	2 years
<b>I8</b>	Creation of technology/ learning hubs for energy efficiency	• Define the role of the technology hub and their scope of work • Identify funding for the hub • Establish the hub with appropriate management/ administration framework, and technical, sectoral expertise	DOE	DTI, DST, sector stakeholders, academia, technical experts	6 months
			DOE	National Treasury, international donors, sector associations	6 months
			DOE	Nominated hosts of hub	18 months

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>AGRICULTURE SECTOR</b>					
<b>A1</b>	Explore the potential for savings in agricultural vehicle use, and develop appropriate awareness-raising material	• Undertake sector specific study to establish potential savings from vehicle use • Produce and distribute awareness raising materials through sector representatives	DOE	Department of Agriculture, Forestry and Fisheries, sector associations and experts	1 year
			DOE	Department of Agriculture, Forestry and Fisheries, sector associations and experts	18 months

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>A2</b>	Development of targeted awareness-raising and training material on potential savings in motor-driven systems	<ul style="list-style-type: none"> <li>• Undertake sector specific study to establish potential savings from motor-driven systems</li> <li>• Produce and distribute awareness raising materials through sector representatives</li> </ul>	DOE	Department of Agriculture, Forestry and Fisheries, sector associations and experts	1 year
			DOE	Department of Agriculture, Forestry and Fisheries, sector associations and experts	18 months
<b>A3</b>	Provide direct grants to small farmers / smallholders for all or part of the cost of interventions	<ul style="list-style-type: none"> <li>• Define and design grant mechanism, including technologies and activities covered, and exclusions</li> <li>• Source financing for the grant mechanism</li> <li>• Establish the management and administration function</li> </ul>	DOE	Department of Agriculture, Forestry and Fisheries, sector associations and experts	3 years
			DOE	National Treasury, international donors DOE	3 years
			SANEDI		4 years

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>TRANSPORT SECTOR</b>					
<b>T1</b>	Develop fuel efficiency standards for light and heavy vehicles to improve the overall efficiency of the vehicle stock	<ul style="list-style-type: none"> <li>• Undertake a study to establish appropriate vehicle MEPS for various classes of vehicles, establishing a trajectory for successive tightening</li> </ul>	DOE	DOT, automotive industry	4 years

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
		<ul style="list-style-type: none"> <li>Implement the new standards with sufficient warning to the automotive industry</li> </ul>	SABS	DOE, DOT, automotive industry	5 years
T2	Improve systems for ensuring road worthiness	<ul style="list-style-type: none"> <li>Undertake a cost-benefit analysis of incorporating an environmental fitness check in the standard roadworthiness test</li> </ul>	DOE	DOT, sectoral experts municipalities	3 years
		<ul style="list-style-type: none"> <li>Incorporate testing, assuming benefits warrant it, develop guidance, provide training and produce awareness raising materials</li> </ul>	DOT	DOE, SANRAL	5 years
		<ul style="list-style-type: none"> <li>Undertake regular spot checks to ensure compliance</li> </ul>	DOT	DOE, SANRAL	5 years
T7	Roll-out of the provision of energy and activity data from the transport sector	<ul style="list-style-type: none"> <li>Define the strategy for the EETMS going forward.</li> </ul>	DOE	SANEDI	6 months
		<ul style="list-style-type: none"> <li>Outsource the management of the system.</li> </ul>	DOE		1 year
		<ul style="list-style-type: none"> <li>Support its implementation in relation to the mandatory provision of data.</li> </ul>	DOE		6 months

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
<b>PRODUCTION AND DISTRIBUTION SECTOR</b>					
<b>G1</b>	Developing the enabling framework for cogeneration and trigeneration	<ul style="list-style-type: none"> <li>Undertake a feasibility study of the potential for cogeneration and trigeneration and possible models</li> </ul>	DOE	NERSA, Eskom, industry and public sector representatives	1 year
		<ul style="list-style-type: none"> <li>Work with potential producers to define criteria for classifying co-/ tri-generation as high efficiency</li> </ul>	DOE	NERSA, Eskom, industry and public sector representatives, academia, technical experts	2 years
		<ul style="list-style-type: none"> <li>Identify legislative and regulatory barriers and proposed adjustments</li> </ul>	DOE	NERSA, Eskom	2 years
		<ul style="list-style-type: none"> <li>Continue to issue invitations for bids</li> </ul>	DOE	Eskom	30 months
<b>G3</b>	Expansion of internal efficiency programmes for producers	<ul style="list-style-type: none"> <li>Adjust the legal and regulatory framework for all power producers to obligate them to produce annual energy management plans.</li> </ul>	DOE	NERSA	2 years
		<ul style="list-style-type: none"> <li>Require IPPs to undertake comprehensive assessment to inform the energy management plans, identifying potential for energy efficiency.</li> </ul>	DOE	NERSA, IPPs	3 years
		<ul style="list-style-type: none"> <li>Assess whether IPPs could access 12L to improve their efficiency (internal consumption) as an incentive.</li> </ul>	SANEDI	DOE	2 years
		<ul style="list-style-type: none"> <li>Obligate state-owned power producers to set targets for</li> </ul>	DOE	NERSA	2 years

Ref no.	Measure	Key Elements	Lead Responsibility	Key Implementation Partners	Anticipated Timelines (from Year 0)
		energy savings and monitor progress			
<b>ENABLING FRAMEWORK</b>					
E1	Ongoing strategic planning	<ul style="list-style-type: none"> <li>• Development of NEEAP</li> <li>• Three-yearly reviews of progress and revisions where necessary</li> </ul>	DOE DOE	Cross-sectoral Cross-sectoral	Continuous Three-yearly
E2	Overcoming market barriers	<ul style="list-style-type: none"> <li>• Establishing accreditation of ESCOs</li> <li>• Developing ESCO incubator</li> </ul>	DOE DOE	SANAS Inter-departmental	2 years 3-4 years
E3	Knowledge sharing, data collection and performance monitoring	<ul style="list-style-type: none"> <li>• Establishment of innovation hub</li> <li>• Development and implementation of data collection and monitoring infrastructure, procedures, and systems</li> </ul>	DOE DOE	SANEDI Cross-sectoral	Defined per sector Continuous
E4	Monitoring compliance, enforcement and evaluating policy measures	<ul style="list-style-type: none"> <li>• Defining compliance requirements for all sectors</li> <li>• Developing regulations for the verification of compliance and enforcement procedures</li> </ul>	DOE DOE	Cross-sectoral Cross-sectoral	2 years 5 years