



Department of Energy

Briefing Session

M&V municipal EEDSM Programme

DoE Offices, Pretoria
19 September 2014

12:00 -13:00



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2013/14 municipal EEDSM Projects

Municipalities with planned projects with traffic lights	4
Municipalities with planned projects with street lights	16
Municipalities with planned projects with buildings	13
Municipalities with planned projects with waste services plants	3
Number of traffic lights to be retrofitted	1994
Number of street lights to be retrofitted	32236
Number of building lights to be retrofitted	61220
Number of waste water treatment to be retrofitted	49
Planned savings in MWh/a	29254
Planned savings in MW	6.469
Planned emissions avoided in t CO ₂ /a	29693
Planned jobs created by Programme for men	599
Planned jobs created by Programme for women	289
Planned jobs created by Programme for youth	400



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2014/15 EEDSM Outputs, Milestones & Indicators

Municipalities with baselines from 2013/14: (i) eThekweni, (ii) Mangaung, (iii) Matjhabeng, (iv) Greater Tzaneen, (v) Moqaka, (vi) Beaufort West, (vii) Swartland, (viii) Cape Town, (ix) eKurhuleni, (x) Mantsopa, (xi) Nkonkobe, (xii) Sisonke (Harry Gwala), (xiii) Rand Fontein, (xiv) Nelson Mandela, (xv) Mafube, (xvi) Midvaal, (xvii) Drakenstein and (xviii) Khaima.

Timeline	July – Sept 14	Oct 14 – June 15	July – Sept 15
Outputs	<ul style="list-style-type: none"> - Compiled business and implementation plans with verified energy consumption baselines - Confirmation of business and implementation (DoE) 	<ul style="list-style-type: none"> - Energy consumption baseline confirmed - Monthly expenditure reports - Quarterly kWh savings reports 	<ul style="list-style-type: none"> - Annual project close-up report with actual kWh savings
Milestones	<ul style="list-style-type: none"> - Baseline Determination - Inventory compilation - Measurement of energy consumption - Formulation of business plan 	<ul style="list-style-type: none"> - Retrofitting process starts - M&V Process starts - Awareness & capacity building starts 	<ul style="list-style-type: none"> - Closing up of retrofits - M&V Process - Awareness process
Indicators	<ul style="list-style-type: none"> - Baseline (Energy Audit) Reports - Inventory Lists/Asset Registers - Business and Implementation Plans - 0% project costs 	<ul style="list-style-type: none"> - Monthly and quarterly retrofits - Quarterly M&V reports with kWh savings - Awareness and capacity building reports - 70% project cost 	<ul style="list-style-type: none"> - Total number of retrofits - Annual M&V Reports, kWh savings - Final project performance report - 100% project costs



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2014/15 EEDSM Outputs, Milestones & Indicators

Municipalities without baselines (to be completed in 2014/15: (i) Mogale City, (ii) Thulamela, (iii) Khara Hais, (iv) Hassequa, (v) Kannaland, (vi) Greater Tzaneen, (vii) Moses Kotane, (viii) Mossel Bay, (ix) Alfred Nzo, (x) Nelson Mandela, (xi) Merafong, (xii) Newcastle, and (xiii) Capricon.

Timeline	July – Sept 14	Oct 14 – June 15	July – Sept 15
Outputs	<ul style="list-style-type: none"> - Business plans with projected energy consumption baselines - Asset Registers - Monthly reports 	<ul style="list-style-type: none"> - Energy consumption baseline confirmed - Monthly expenditure reports - Quarterly kWh savings reports 	<ul style="list-style-type: none"> - Annual project close-up report with actual kWh savings
Milestones	<ul style="list-style-type: none"> - Baseline Determination - Inventory compilation - Measurement of energy consumption - Formulation of business plan 	<ul style="list-style-type: none"> - Retrofitting process starts - M&V Process starts - Awareness & capacity building starts 	<ul style="list-style-type: none"> - Closing up of retrofits - M&V Process - Awareness process
Indicators	<ul style="list-style-type: none"> - Baseline (Energy Audit) Reports - Inventory Lists/Asset Registers - Business and Implementation Plans - 8% project costs 	<ul style="list-style-type: none"> - Monthly and quarterly retrofits - Quarterly M&V reports with kWh savings - Awareness and capacity building reports - 80% project cost 	<ul style="list-style-type: none"> - Total number of retrofits - Annual M&V Reports, kWh savings - Final project performance report - 100% project costs



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Group of 2014/15 EEDSM Municipalities

Nr	Province	Municipalities	Projects Value
1	<u>Free State, KwaZulu Natal, northern part of the Eastern Cape</u>	<u>Mantsopa (FS), Moqhaka (FS), Mangaung (FS), Matjhabeng (FS), eThekwini (KZN), Newcastle (KZN), Harry Gwala (KZN) and Alfred Nzo (EC).</u>	R40, 905 million
2	<u>Gauteng, North West, Limpopo</u>	<u>Tshwane (GP), Ekurhuleni (GP), Mogale City (GP), Merafong (GP), Moses Kotane (NW), Thulamela (LP), Capricorn District (LP), Greater Tzaneen (LP) and Lephalale (LP)</u>	R48 million
3	<u>Western Cape, Eastern Cape, Northern Cape</u>	<u>Cape Town (WP), Beaufort West (WP), Mossel Bay (WP), Kannaland (WP), Hessaque (WP), Swartland (WP), Nelson Mandela (EC), Nkonkobe (EC), and Khara Hais (NC)</u>	R48 million

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SCOPE OF WORK

- Experienced and qualifying ESCOs or companies shall be required to conduct the following activities in only one of the three municipal groupings (**see Annexure A**).
- Rendering of measurement and verification services for analysis of energy efficiency and demand side management or related initiatives.
- Perform full and detailed investigations regarding energy efficiency and demand side management projects and initiatives.
- Perform and provide to DoE scoping study and report.
- Development of M & V plan.
- Verify and certify electricity baseline data determined by municipalities prior to commencement of the programme and upon consultation with the DoE.
- Conduct the technical audit of technology retrofit.



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SCOPE OF WORK...cont'

- Provide a survey report of the key participants and or stakeholders associated with this programme. These should at least include suppliers (e.g. manufacturers, distributors, installers and ESCOs). The aim should be to obtain an understanding of the key constraints and opportunities that should be considered, based on the experience gained during the implementation of this programme.
- Produce post implementation report showing the details of the implementation of the project and its benefits.
- Produce a final performance assessment certificate.



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