

ENERGY COSTING TOOL

for use in costing MDG-based national energy needs

User Guide

Version 1.0

This **User Guide** is designed to be used in conjunction with the **Energy Costing Tool** available at:

<http://www.undp.org/energy>

or

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The **UN Millennium Project** is an independent advisory body commissioned by the UN Secretary-General to propose the best strategies for meeting the Millennium Development Goals (MDGs). The bulk of its analytical work is performed by 10 thematic task forces, each composed of scholars, policy makers, civil society leaders, and private-sector representatives.

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Table of contents

Overview.....	4
1. Introduction.....	6
2. Identifying interventions to expand energy access	10
3. Setting MDG-based national energy access targets	12
4. Using the Energy Costing Tool to estimate the costs of meeting national energy needs.	15
5. Conclusion and next steps	47
References and additional reading	48
Appendix A: Data Collection Checklist.....	49
Appendix B: Senegal Country Case Study (in PowerPoint format)	54

Overview

At the 2005 World Summit, world leaders reiterated their support for the Millennium Development Goals (MDGs) by committing to support the development and implementation of MDG-based national development strategies.

In response, the United Nations Development Programme (UNDP) is embarking on an ambitious plan to support countries in preparing long-term, results-based development strategies in line with the MDGs. At the heart of the plan is an integrated package of policy advice and technical support, known as “MDG Support Services”, aimed at strengthening countries’ capacity to achieve the MDGs. UNDP is rolling out its MDG Support Services initially in 19 countries during 2006 with the target of reaching a total of 60 countries by the end of 2007.

In recognition of the critical role that energy and the environment play in reaching the MDGs, UNDP’s Energy and the Environment Group is developing a set of tools for helping mainstream energy and environmental considerations into MDG-based national development strategies. The Energy Costing Tool is one of these tools.

The Tool is designed to be used by government planners and decision-makers as they adapt their national development strategies to meet country-specific targets for the year 2015 based on the MDGs. A crucial part of this process is MDG costing, which quantifies the specific financial and human resources needed, as well as infrastructure required, to meet the MDGs. Costing is part of a larger needs assessment process in which countries define specific interventions and outcome targets consistent with the MDGs.

Thanks to the UN Millennium Project, a number of tools for assisting governments in estimating costs for the many inter-related actions needed to achieve the MDGs already exist. However, until now there has not been a methodology available that would allow countries to estimate the amounts and types of investments in energy access required to meet their nationally tailored MDG targets. That is the gap that the Energy Costing Tool is meant to fill.

The Tool was developed by UNDP and the UN Millennium Project. It was applied and tested in Senegal, one of eight Millennium Project pilot countries, and then further refined. It is meant to be used as part of a comprehensive national planning process, in combination with other MDG costing and needs assessment tools.

Although there is no specific MDG dealing with energy, increased access to energy services is a prerequisite for meeting all eight MDGs. Expanded energy services are essential in order to meet the MDGs for reducing hunger and poverty, improving health care and educational opportunities, and addressing gender equity. However, few national Poverty Reduction Strategy Papers or other National Development Plans set explicit targets or budgets for expanding energy access and affordability. Moreover, sector-specific plans for improved health services, for example, or greater

access to education, rarely take into account or plan for the associated investments in energy that are needed for additional health care and educational facilities. Therefore, this Guide emphasizes the need for an integrated, multi-sectoral approach to energy needs assessments and cost estimates.

The remainder of this Guide is split into five chapters. The first chapter provides a brief introduction to the context in which this Tool was developed. Chapters 2 and 3 outline the national decision-making process that must underpin an energy costing exercise. This process entails identifying MDG-compatible energy interventions and setting long-term energy access targets. Chapter 4 provides a detailed introduction to the Energy Costing Tool itself, including an outline of the data inputs needed, a description of the calculations performed by the Tool and instructions for adapting it to national circumstances. The fifth and last chapter is dedicated to discussing next steps.

Chapter

1

Introduction

The Energy Costing Tool was prepared as part of a broader UNDP effort to offer practical guidance to developing countries for integrating the Millennium Development Goals (MDGs) into their national poverty reduction and development plans. It was designed to support the formulation and implementation of comprehensive MDG-based national development strategies, especially for those countries where efforts to address widespread poverty are hampered by a lack of modern energy services.

At the 2005 World Summit, governments committed themselves to turning their national development plans into MDG-based strategies. This involves looking beyond yearly or short-term economic plans and budgets, and placing greater emphasis on the types of long-term policies and investments needed for reducing poverty and hunger and promoting health, education, gender equality and environmental sustainability by 2015.

One of the challenges of formulating effective MDG-based development strategies, especially in poorer countries where Poverty Reduction Strategy Papers (PRSPs) are used as the key instrument for development planning, is assessing the fiscal implications of reaching medium and long-term poverty reduction goals. A common criticism of PRSPs, for example, is that they are too often de-linked from availability of financial resources in the national budget. Few PRSPs attempt a comprehensive costing of their priority actions or use cost estimates as the basis for allocating resources for development priorities in national budgets or mid-term expenditure frameworks.

It was with this in mind that UNDP and the Millennium Project developed the Energy Costing Tool. The Tool is meant to assist countries in assessing the fiscal implications of reaching their development goals and help develop stronger linkages between policy, planning and budgeting by providing them with a methodology for estimating the costs of expanding access to basic energy services in line with medium and long-term development priorities.

In preparing the Energy Costing Tool, UNDP worked with the UN Millennium Project, which was commissioned by UN Secretary-General Kofi Annan to identify practical ways for countries to achieve the MDGs. The Project brought together a team of experts who recommended that countries adopt a bold 10-year investment framework for meeting the quantitative targets set out in the MDGs, rather than merely considering how to gradually accelerate progress towards the goals. "Instead of asking 'How close can we get to the Goals given current financial and other constraints?' countries should ask the question 'Which investments and policy changes are needed to meet the Goals?' " (World Bank/ESMAP, UNDP and UN Millennium Project, 2005). The approach involves working backwards from the outcome targets for each MDG to identify what actions and resources are needed now to reach those outcomes by 2015.

This is particularly relevant to energy, as current approaches to energy planning by government agencies and utilities tend to focus on short-term responses to pressures for urban and industrial

growth. Possibilities for expanding energy access to sparsely populated rural areas or poor urban settlements are generally considered only when specific project resources are made available, or when there has been a detailed study in a specific area demonstrating that there are enough customers able to pay for energy services. The Energy Costing Tool, however, provides a methodology for calculating the cost of the overall, long-term investments in energy access required for national development and poverty alleviation. It is meant to show national decision-makers what is needed to meet the MDGs by 2015, rather than focusing just on what can be accomplished based on current budget projections.

Using the Energy Costing Tool, governments and utilities can formulate 10-year plans that incorporate quantitative estimates of the energy requirements and costs associated with national strategies to meet the MDGs. Those numbers can then be integrated into long-term development plans, budgets and requests for financial assistance.

To better understand how to use the Energy Costing Tool, it is useful to consider, in more detail, its role within countries' efforts to move toward MDG-based national development planning, including national needs assessments.

What is an MDG-based National Development Strategy?

Turning national development plans into MDG-based strategies involves not only longer-term planning – based on targets for 2015 – but also results-oriented planning. With the promise of increased Official Development Assistance (ODA) for meeting the MDGs, governments have an opportunity to put together multi-year national budgets based on what is needed to meet the MDGs, rather than only considering shorter-term budgets based on resources they already have available. The current challenge is to get these MDG-based strategies set up and funded in the short term, with continuous resource allocations over the next 10 years, so that countries can get on track early enough to make significant progress by 2015.

For poorer countries, national planning has become primarily focused on the preparation of PRSPs, based on a process of consultations with stakeholders within the country, including civil society groups. The PRSPs are intended to formally incorporate poverty reduction measures into three- to five-year public expenditure plans adopted by governments and international donors. Given the strategic importance of the PRSPs for the countries most affected by poverty, hunger, health crises and environmental degradation, it is critical to link PRSPs with longer-term National Development Strategies to achieve the MDGs using Mid-Term Expenditure Frameworks and other budgeting mechanisms.

Because of the crucial need for energy services in poor communities, it is important to enhance the attention given to energy planning within the PRSPs and MDG processes. UNDP has therefore

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