



# FIT OR NOT?

## UPSCALING RENEWABLES USING FEED-IN-TARIFFS

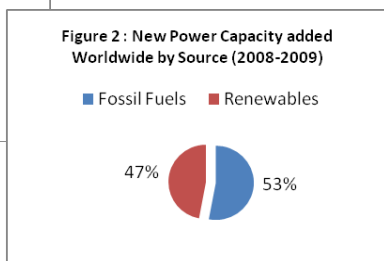
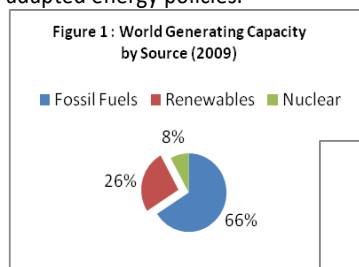
We are now in a new era, where energy is key to core development concerns ranging from environmental protection to health safeguards, from economic growth to competitiveness, from poverty alleviation to job creation. We are facing numerous daunting challenges but also wide-ranging opportunities. The accelerating threats of climate change and the heightened will to bring our growth patterns on the sustainability track converge to the immediate need to dramatically upscale the penetration of renewables across the globe, a shift from 'old' to 'new' energy.

### What is FIT?

A feed-in tariff (FIT) is an energy policy focused on supporting the development of new renewable power generation. Typically, FITs provide for eligible energy generators to receive an attractive price for their renewable energy sales, a guaranteed grid access and a long-term contract for the electricity thus produced. The two most widely used FIT payment options are fixed-price and premium-price (on top of the market price) payments.

### Energy and Climate Policy Options

Currently, 80% of global energy needs or 66% of power supply (Figure 1) are fossil fuel-based. Global energy systems currently represent some 60% of total current greenhouse gas (GHG) emissions. In a business as usual scenario, the world's energy needs will increase by almost 60% in 2030. Needless to say, this will be accompanied by an equivalent increase in greenhouse gas emissions, which is precisely what national efforts and international processes are attempting to curb down. Moving away from this alarming future revolves around the rapid deployment of new and renewable sources of energy and demand-side management measures such as energy efficiency. The global share of renewables in new power capacity added was 47% in 2008-2009 (Figure 2) and can be significantly up-scaled through adapted energy policies.



(Source : Global Renewables Status Report, 2010)

### Key Messages

- FIT is only one of the energy policy tools available to increase renewables deployment, complementing and supporting existing energy policy portfolios.
- Lessons learnt from previous FIT schemes in several developed and some developing countries can guide decision-makers in developing countries on whether, how and when to use FITs.
- FIT should be adapted to each country's specific situation, including the specific conditions and needs of developing countries and the least developed among them.
- Proper planning and design, impact assessments and institutional strengthening are needed to optimise development benefits with minimal environmental impacts.

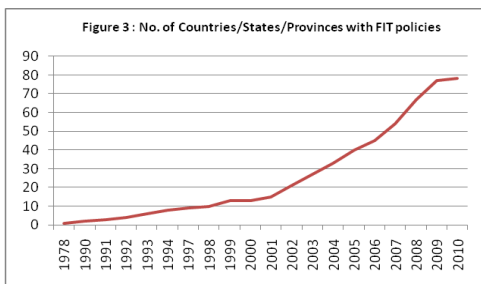
The current energy markets contain many barriers that hinder the development of renewables, such as the financing of the initial subsidies. Governments need to create the right enabling environment for the widespread deployment of renewable energies. They can do this through support for the development of adequate technologies, capacity building, and the creation of adequate legal and institutional frameworks, in order to help forge a self-sustaining renewable energy market. In many countries, the growth in renewables over the past years was catalysed by the adoption and implementation of a range of renewable energy policies, including use of feed-in tariffs amongst other policy tools. The underlying rationale is simple economics.

### Globally: FITs at a Glance

At least 83 countries (41 developed/transition countries and 42 developing countries) have some type of policy to promote renewable power generation, with FIT being one out of the 10 most common policy instruments<sup>1</sup>. After the varying and relative success of FITs across the world, countries and regions continue to be increasingly interested in their applications.

<sup>1</sup>Global Renewables Status Report 2010

The international community is also building interest in how FITs could unlock the potential of renewables in the short term. By early 2010, at least 50 countries and 25 states/provinces had feed-in tariffs, more than half of these adopted only since 2005<sup>1</sup> (Figure 3).



(Source : Adapted from Global Renewables Status Report, 2010)

## The FIT Challenge

In the renewables sector, large scale private investment, especially in developing countries, is typically hampered by policy and institutional barriers. The scale of financing calls for private investment, which itself relies on stable frameworks and financial guarantees. A well-designed and transparent FIT scheme is a valuable tool to accelerate the deployment of renewables in developing countries, by encouraging investment by independent power producers.

FITs have been mostly used in developed countries, with rising interest on the part of developing countries in FITs. However, one of the prime concerns of countries when devising or modifying energy policies is how to design the most appropriate policy mix, taking into account their level of development, social context, geographical location, renewable energy endowment, existing infrastructure and market readiness.

Developing countries contemplating FITs have capacity and resource constraints which make it difficult for them to make informed decisions. FITs, if chosen, need to be structured so

as to complement existing energy policy portfolios. Timely and appropriate support to those developing countries would enable them to choose whether, how and when to effectively use FITs.



## UNEP FIT Project

Several studies have been undertaken on FIT, but with most of them focusing on developed countries, where FITs initially originated. UNEP, with its experience in developing country interventions, and its environmental protection mandate, is uniquely positioned to address this knowledge imbalance towards developing countries. The UNEP FIT project aims at supporting developing countries to make informed policy decisions about the “whether”, “how” and “when” of FITs in their endeavour to accelerate the deployment of renewables whilst ensuring their sustainability.

## Questions UNEP FIT project aims to address

- Why FIT?
- Who pays for the FIT and how?
- How can overall costs of a FIT be kept under control, including both for Governments and final consumers?
- How can administrative burden be reduced on a country?
- How can investor certainty be balanced with policy space?
- How to manage FIT and fossil fuel subsidies?
- How can a FIT help increase installed RE capacity as well as improve energy access and grid extension in rural areas?
- How can FITs further development goals?

The project is planned to be undertaken in 2 stages, with resources already available for stage 1 but yet to be mobilised for stage 2:

### ■ Stage 1: Background Study & Toolkit Development

This study will build on previous work by complementing the knowledge gap on FITs, whilst highlighting the associated environmental and developmental benefits and impacts. The study would analyse the various models used by mostly developed countries in designing and implementing FITs and carry out a SWOT analysis, within a broader RE policy perspective. Based on the results of this study, a toolkit comprising recommendations on policy and regulatory FIT features would be developed to guide developing countries in their FIT planning process. The outputs (study and toolkit) would also be disseminated as widely as possible, including through various related capacity building activities organised by UNEP. The study will be initiated in the second half of 2010 and finalized during the first half of 2011.

### ■ Stage 2: Capacity Building & Technical Assistance

Through the use of the study and the toolkit produced in stage 1, stage 2 aims to build local capacity and provide advice to selected developing countries in designing and implementing nationally appropriate FIT

frameworks. This component will involve building on previous or ongoing projects and complementing existing national policy instruments. Upon securing of appropriate

funding, this technical assistance programme will be implemented in 2011-2012. Target developing countries will be from Africa, Latin America and Asia.

## Need for Partnerships

UNEP recognises that quicker progress can be made by valuing and mainstreaming the contribution of expert partners in its activities and in-country interventions. This project will seek to establish long-standing and fruitful partnerships with countries, regional and national institutions and other partners such as the private sector, centres of excellence and civil society.