



Swiss Working Paper on Energy in the Post-2015 Agenda

1. Background

- 1.3 billion people have no access to electricity.
- 2.7 billion people use traditional biomass for cooking.
- Global sustainable development, including social and climate-friendly economic development, is impossible without improved access to sustainable energy for everyone.
- Poverty, health problems and hunger cannot be combated without improved energy provision (access and quality).
- There was no Millennium Development Goal (MDG) for energy.
- A goal on energy is urgently needed and should be included in the post-2015 agenda.

2. The Swiss Energy Strategy until 2050

- With the focus on security of supply, cost-effectiveness and environmental sustainability, the Federal Council's Energy Strategy aims to make considerable reductions in electricity consumption and final energy use by 2050 all while phasing out nuclear electricity production.
- This means improving efficiency and creating an energy mix with more renewable energies - hydropower, solar, wind and biomass.

3. Brief analysis of the SE4All objectives

The Sustainable Energy for All (SE4All) Initiative of the UN Secretary General – in line with the aim of limiting global warming to less than 2 degrees Celsius above the level at the beginning of industrialization – has already formulated three energy objectives for 2030.

1. Ensuring universal access to modern energy services
2. Doubling the global rate of improvement in energy efficiency
3. Doubling the share of renewable energy in the global energy mix

This widely (although not universally) supported framework of objectives is having a decisive impact on discussions surrounding a future goal on energy in the post-2015 agenda.

A. Ensuring universal access to modern energy services

Explanation: It is particularly important to move away from the still widespread use of traditional biomass (wood fires) and of kerosene lamps and candles for lighting. The term "modern" refers on the one hand to electricity. In cases where universal connection to the grid is either not possible or does not make sense, the emphasis will be on local mini-

networks (e.g. powered by small-scale hydroelectric or photovoltaic power plants) and on standalone systems such as solar home systems for lighting and small appliances (cell phones, radio, TV). On the other hand, there will also be a focus on off-grid deployment (e.g. "clean" cooking infrastructure based on efficient biomass combustion, biogas or mini solar cookers).

Evaluation:

- ↑ This is a fundamentally worthwhile objective, contributing to social, economic and environmental sustainable development.
- ↑ Universal access to modern energy sources would be a major milestone in development policy in many respects.
- ↑ Switzerland has contributed to efforts supporting this objective (e.g. contribution to the Energizing Development Partnership [EnDev]).

CONCLUSION: This would be a suitable objective for inclusion in the Swiss proposal.

B. Doubling the global rate of improvement in energy efficiency

Explanation: The SE4All uses energy intensity¹ as a proxy for measuring energy efficiency. From 1990 to 2010, energy intensity worldwide decreased annually by 1.3% on average. This means that energy is being used more efficiently throughout the world. The aim of this objective is to increase the speed of these efficiency gains to 2.6% per year for the period 2010-2030.

Evaluation:

- ↑ This is fundamentally worthwhile objective contributing to social, economic and environmental sustainable development.
- ↑ As a pioneer in the field of energy efficiency, Switzerland could be a credible advocate of this proposal.

CONCLUSION: This would be a suitable objective for inclusion in the Swiss proposal.

C. Doubling the share of renewable energy in the global energy mix

Explanation: The share of renewable energy in the global energy mix should be raised from its present level of 15% to 30% by 2030.

Evaluation:

- ↑ An increase in the share of renewable energy in the global energy mix appears as a highly desirable objective for decreasing environmental impact in general and climate change in particular.
- ↑ This objective is in line with the new national Energy Strategy 2050 and corresponds to Switzerland's aspirations.
- ↓ Opponents of this idea (including the large transitional country India) argue that this objective restricts their energy policy options.
- ↓ On top of this, renewables are by no means exempt from criticism (e.g. biofuels, large-scale dam projects).

¹ Energy intensity is a measure of the relationship between energy use and economic performance (GDP). It states how many units of primary energy are necessary to produce a given inflation-adjusted monetary unit of gross domestic product.

- ↓ With the exception of hydroelectric energy, Switzerland is not a pioneer in the field of renewable energy

CONCLUSION: *This would be a suitable objective for inclusion in the Swiss proposal.*

4. Other possible objectives

A) Reducing worldwide expenditure on fossil fuel subsidies by 50% by 2030 (base year 2015)

Explanation: *The reduction of inefficient subsidies for fossil fuels and the resulting price rise for fossil energy would have several positive effects in economic, energy, climate and development policy:*

- *Indirect promotion of the use of non-fossil energy sources and of efficient energy use (low carbon economies).*
- *Reduction of greenhouse gas emissions that are responsible for climate change.*
- *Easing of the burden on public finance and therefore freeing up financial resources for other purposes (e.g. targeted fight against poverty, education, etc.).*

Evaluation:

- ↑ Switzerland has only very limited subsidies for fossil fuels in form of fossil fuel tax exemptions. Since 2010 it has been active in the Friends of Fossil Fuel Subsidy Reform (FFFSR) group. It would therefore be able to credibly advocate for this proposal.
- ↓ This measure is only one (i.e. fiscal system) in a larger context of strengthening national framework for promoting universal access to sustainable and renewable energy.
- ↓ This measure is controversial, as the direct impact on the poor is negative without accompanying measures.

CONCLUSION: *In principle this objective could be suitable as a Swiss proposal. However, it is more controversial than the three objectives already comprised in the SE4All. It might be preferable to incorporate it within a more comprehensive objective such as strengthening national energy policy frameworks.*

B) Strengthening national energy policy frameworks

Explanation: *Strengthening national energy policy frameworks underlines the crucial role that national States play in implementing the goal. Without a proper and functioning framework in place, the achievement universal access to sustainable energy for all will be hard to achieve.*

Evaluation:

- ↑ The objective could incorporate further aspects such as the reduction of fossil fuel subsidies.
- ↓ The objective is difficult to quantify and to measure.

CONCLUSION: *This would be a suitable objective for inclusion in the Swiss proposal. Functioning policy frameworks in their respective areas will be important for most if not all post-2015 goals. Hence, this objective could also be suitable as a transversal theme in the overall post-2015 agenda within the Swiss proposal.*

5. Summary - Swiss post-2015 energy goal

On the basis of the above analysis, and with a view to formulating a single energy goal that is as close as possible to the SE4All goal, the working group proposes the following Swiss **stand-alone goal in the energy sector**:

Ensuring universal access to sustainable² energy

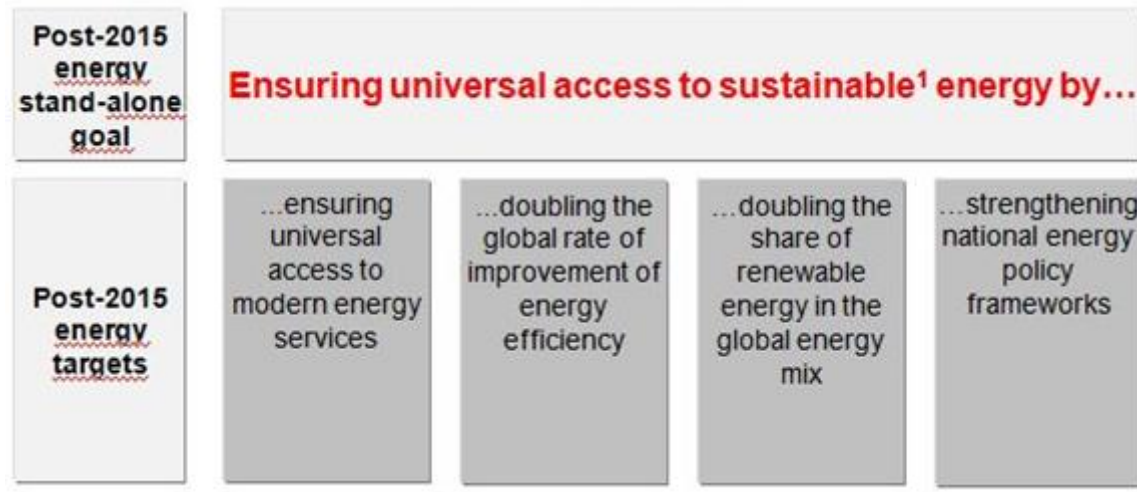
by ensuring universal access to modern energy services;

by doubling the global rate of improvement in energy efficiency;

by doubling the share of renewable energy in the global energy mix;

by strengthening national energy policy frameworks.

² *Sustainable* according to the Brundtland definition: The needs of present generations must be met without compromising the ability of future generations to meet their own needs.

Annex:Graphic representation of the proposed Swiss goalMessages

- It is virtually indisputable and – at least according to our perception of global discussions – largely undisputed that access to clean, reliable and sustainable energy sources is essential for achieving sustainable development.
- Switzerland therefore also considers that an energy-related goal was missing from the “Millennium Development Goals”.
- The question we have to answer in the ongoing consultation process is not *whether* we should formulate an energy-related objective but *how* to phrase it.
- Fortunately, the Secretary General’s Sustainable Energy for All (SE4All) initiative already provides an excellent and widely accepted basis which we can build upon.
- The three objectives put forward by the initiative offer a coherent global framework that is not excessively prescriptive.
- Against this backdrop Switzerland suggests formulating the following energy-related global sustainable development goal:

Ensuring universal access to sustainable energy

- To substantiate this general goal we propose adding the following objectives:
 - a) by ensuring universal access to modern energy services;**
 - b) by doubling the global rate of improvement of energy efficiency;**
 - c) by doubling the share of renewable energy in the global energy mix; and**
 - d) by strengthening national energy policy frameworks.**
- The objectives a) to c) consist of the SE4all objectives.
- The additional sub-target d) underlines the crucial role of national States in implementing the goal.
- We hope that this proposal will prove helpful and look forward to further fruitful discussions on this subject.