

# Enhance Climate Ambition and Global Stocktake With Local Sustainable Energy

A large number of local, sustainable energy solutions are important climate solutions. Including them fully in climate plans will make it easier to reach higher ambitions in climate mitigation and adaptation. It is also essential to include the local solutions when assessing progress in climate action with the Global Stocktake (GST), in order to get a full picture of the progress of climate action, as well as the potentials for further actions. With this paper, we showcase local energy solutions that are important for climate action, with examples from South Asia, but with relevance for many world regions. We also highlight how and why to include them in climate plans and GST.

## Include local Solutions in Global Stocktake (GST)

The local solutions are often not included or only partly included in NDCs. This gives the risk that they will not be included in the upcoming GST, leaving out an important part of the climate actions that can also reduce poverty and support local development.

Therefore, we propose that in the GST, it is reported to which extent these local solutions are used in each country, how they are included in climate plans and NDCs, and which potential they have for further reductions of emissions in each country.

## Include Local Solutions in Climate Plans

When the countries are updating climate plans and increasing ambitions, an important and achievable way is to include local sustainable energy solutions. They both contribute to climate action and poverty reduction, combining targets of access to clean, renewable energy with climate targets.

Therefore, climate plans should include policies that support the local solutions, giving them equal access to funding as centralised and non-renewable solutions. Further, the plans should tailor national climate programs to local solutions, for instance with micro-finance, involving of civil society in implementations etc.

## Successes with Local Sustainable Energy Solutions

### Cooking efficiently

There is a great potential in South Asia and other regions to reduce burning of firewood to reduce emissions of CO<sub>2</sub> and black carbon. In India alone there are around 150 million families using traditional fires for cooking, where improved cookstoves can save them annually around 300 million tonnes of firewood and 340 M tonnes of CO<sub>2</sub> emissions.



## POLICY BRIEF

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INFORSE –

[www.inforse.org](http://www.inforse.org)

INFORSE-South Asia –

[www.inforse.org/asia](http://www.inforse.org/asia)

CAN South Asia -

[www.cansouthasia.net](http://www.cansouthasia.net)

INSEDA India –

[www.inseda.org](http://www.inseda.org)

CRT Nepal -

[www.crtnepal.org](http://www.crtnepal.org)

IDEA Sri Lanka –

[www.ideasrilanka.org](http://www.ideasrilanka.org)

Grameen Shakti,

Bangladesh –

[www.gshakti.org](http://www.gshakti.org)

DIB, Denmark –

[www.dib.dk](http://www.dib.dk)

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Background:

The organizations behind this document work together on promotion of local eco-village developments (EVD) solutions to reduce poverty and improve livelihoods. The proposals in this brief are based on our experiences and successes.

References:

[inforse.org/asia/EVD.htm](http://inforse.org/asia/EVD.htm)

[ecovillagedevelopment.net](http://ecovillagedevelopment.net)



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There are an increasing number of high-efficient and low polluting cookstoves for families, institutions, and commerce. A modern designed efficient two-pot stove with a chimney can a family save 3 to 4 kg of firewood per day and clean the air in the kitchen. *Photo: JWALA Improved Cookstove by INSEDA, India*

### **Biogas to Replace Wood and Dung for cooking**

Biogas plant converts dung and organic waste into methane gas and good quality manure. In South Asia, already millions are cooking with biogas as a smokeless, high efficiency clean fuel in rural areas. The biogas helps in reduction of drudgery among women in collection of fuelwood and provide cleaner air in kitchens, which improves health of women and children.



In India alone there is a potential of constructing additional 75 million biogas plants of 2 m<sup>3</sup> which can save 200 million tonnes of fuelwood and 300 million tonnes of CO<sub>2</sub> a, as well as reducing black carbon emissions.

*Photo: Grameenbhandu biogas plant by INSEDA, India*

### **Solar home systems**

Since 1996, Bangladesh has installed nearly 6 million Solar Home Systems (SHS), to meet the basic electricity demand in an affordable way in rural areas, providing power for lights & fans, mobile phone charging, and powering TVs and radios. SHS are also powering around 200,000 rural businesses, light up religious facilities, and others.



The SHSs are benefiting around 24 million peoples, which accounts for 14% of Bangladesh's population. Between 1996 to 2022, the SHSs have reduced greenhouse gas (GHG) emissions by approximately 10 million tonnes of CO<sub>2</sub> equivalent and offset nearly 4.4 billion litres kerosene through SHS.

*Photo: Solar home system panel by Grameen Shakti, Bangladesh.*

### **Planning the transition of villages**

Combining the solutions in cooperation with the users can reduce emissions and provide local development including improved livelihood. This is the main rationale behind the Eco-Village Development (EVD), promoting a basket of solutions that are adapted to each village, guided by participatory development of village plans.



The EVD basket of solutions is expanding with new, local technologies. As an example: in Nepal, electric induction cook stoves is a new way to shift towards clean cooking. With its abundant water resources in Nepal, 25% of households can use electric cooking by 2030, replacing LPG and wood.

*Photo: Villagers engaged in development of a village plan, IDEA, Sri Lanka.*



Photo by EVD partners

