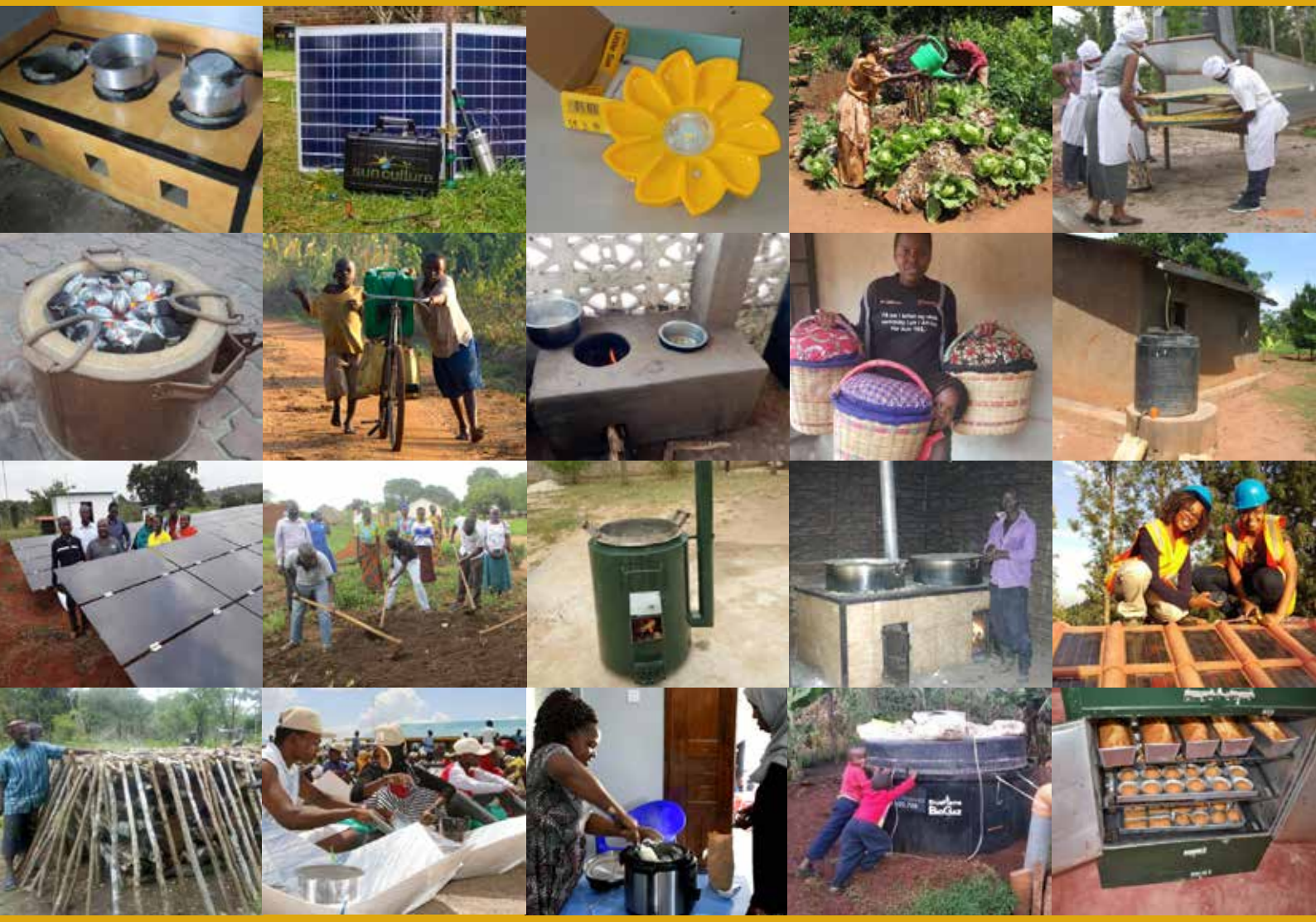
NEWSLETTER OF INFORSE - INTERNATIONAL NETWORK FOR SUSTAINABLE ENERGY NO. 84, DECEMBER 2020

SUSTAINABLE ENERGY NEWS



THEME: CATALOGUE, EAST AFRICA, ECO-VILLAGE DEVELOPMENT IN SOUTH ASIA, 100 RE EUROPE NEWS

CONTENTS

Printer:
Fjerritslev Tryk, Denmark
1,700 copies

Printed matter 5041 0357

The articles reflect the views of the authors and of INFORSE, not of the financial supporters.

Feel free to use the information, but state the source.

◀ UNFCCC Climate Dialogues' Virtual Hall in December 2020.

▶ Screenshot of speakers at UN CD2020: INFORSE's side event on 26 November, 2020, where INFORSE members presented local sustainable solutions from East Africa, eco-village development solutions in South Asia and 100 % renewable scenarios from Kenya, European Countries, including UK, Ukraine and Belarus.
Presentations available at:
https://www.inforse.org/cd2020.php3

Climate Action Needs Local Solutions, Global Finance, also in a Covid-19 Year

It is promising to see that large countries are stepping up climate ambitions around the world in China, India, and the USA (the upcoming administration) as well as EU countries. *One concern, however*, is that some of the plans to realise the climate targets are based on large-scale centralised solutions including carbon capture and storage (CCS). To reduce emissions as much as needed, *we need large popular involvement* as well as regulation and programs *to support local solutions.* We also need to help each other to step-up community resilience and adaptation to climate change.

The Covid-19 pandemic has opened our eyes - wide - to the stark gap in sustainable energy supply at the time of crisis. People around the world are quarantined at home, and poor people in many developing countries had to go back to their villages, to rely on inefficient ways of cooking and lighting. *More people were forced to live with cooking smoke* that contributes to a range of chronic and acute health impacts, as well as to further depletion of wood resources. Women and young children are the most affected.

While one local solution alone cannot solve all the challenges, clever use of such measures by people around the world can mitigate some of their problems. To make some of the *best solutions widely known*, INFORSE members in East Africa are now launching a *catalogue, documenting the best practical, local solutions.* And in INFORSE South Asia, members are cooperating on *implementing local solutions in an eco-village development concept*. Further, we hope to start a global INFORSE project on local solutions in 2021.

For over 20 years, INFORSE has worked on plans for transition to *100% renewable energy. This is not only for industrialised countries*, even though they still need to act the fastest to reduce emissions. Thus, we are also proud to present the launch of a plan that shows how Kenya can move to 100% renewable energy with a healthy economy nonetheless devoid of coal and nuclear power.

While there are promising climate actions and good potentials to mitigate the worst of the climate crisis, as we now celebrate the five-year anniversary of the Paris Agreement on December 12, one important target is to be missed. This is the target and *the promise by developed countries to provide 100 billion $ annually by 2020* for the climate actions of developing countries. *This must not be overlooked.*

Richard Kimbowa, INFORSE East Africa Chair
Gunnar Boye Olesen, INFORSE Coordinator

Sustainable Energy News
ISSN 0908 - 4134

Editorial Address:
INFORSE-Europe,
Klosterport 4F, 1. fl,
8000, Aarhus C, Denmark.
T: +45-86-227000
E: ove@inforse.org
W: www.inforse.org

Published by INFORSE
International Network for Sustainable Energy
INFORSE is a worldwide NGO network formed at the Global Forum of the "Earth Summit" in Rio de Janeiro, Brazil, 1992.
INFORSE has Consultative CSO Status at UNFCCC & UN ECOSOC.

Editors:
Gunnar Boye Olesen
Judit Szoleczky
Niki Fowler (text advice)

Layout: Charlotte Søby

Photo on the front page:
Local sustainable solutions in East Africa.
See article on pages 3-6.

This issue of Sustainable Energy News is financially supported by the EASE-CA projects supported by CISU - Civil Society in Development, Denmark.

▲ Local Sustainable Solutions in East Africa. The photos and the category icons are from the Catalogue launched by the EASE-CA Project partners.

Catalogue: Local Sustainable Solutions in East Africa - Online - www.localsolutions.inforse.org

On December 11, 2020, the 5th anniversary of the Paris Agreement - the "*Local Sustainable Solutions Catalogue in East Africa*" was launched. Almost 60 successful cases were recorded by INFORSE members in Kenya, Uganda, and Tanzania.

Thanks to the hard work and contributions from all through the INFORSE's NGO Cooperation Project EASE-CA:
Mary Swai, Estomih Sawe from TaTEDO, Tanzania; Prossie Nabiyonga, Ruth Kiwanuka from JEEP, Uganda; Wendy Mitoko, Justus M. Munyoki from SusWatch Kenya; Richard Kimbowa from UCSD, Uganda; Gunnar Boye Olesen, Judit Szoleczky from INFORSE-Europe; Daniele Pagani, Lene Høgh, Tonny Brink, Nicolaj Stenkjær, Anna Krenz, and Jane Kruse from the Nordic Folkecenter for Renewable Energy.

The Catalogue Online:
www.localsolutions.inforse.org

Catalogue Launch Event on 11.12 2020:
The official launch was on 11 December 2020, celebrating the 5th anniversary of the Paris Agreement. Link to the presentations available at *www.inforse.org/africa/EASE.htm*

Solutions Presented at United Nations' Events:
The local solutions of the catalogue, and the 100% renewables scenario work were presented at UN HLPF2020 and at the UNFCCC Climate Dialogues 2020. *See proceedings at:*
www.inforse.org/INFORSE_at_HLPF2020.php
www.inforse.org/cd2020.php3 .

About EASE-CA project:
INFORSE members are cooperating in a 3-year project in 2019-2022 in East Africa. The Project's title is: *"East African Civil Society for Sustainable Energy Climate Action*" (EASE-CA). The Partners are: SusWatch Kenya, UCSD and JEEP in Uganda, TaTEDO in Tanzania, INFORSE-East Africa c/o TaTEDO, INFORSE, and NFRE in Denmark.

The NGO Partners focus on strengthening CSOs; networking and advocacy for better climate targets, financing of local, sustainable, pro-poor, gender-responsive climate- and energy solutions in development strategies and in implementation.

You can read more exciting details on the regional, national and local activities on the next pages.

INFORSE-East-Africa Coordination Meeting

On October 16, 2020, INFORSE East Africa national coordinators and members discussed implementation of the INFORSE Work Programme, and how to overcome the challenges of COVID19 limitations.

Topics included: strengthen networking and participation of East African CSOs for exchange of experiences and to give voice to EA CSOs to influence development of the international framework for the national strategies and for climate financing, including in the UNFCCC; and

Brainstorming to identify projects and the potential donors with interest to support regional partnership projects and strategize to apply for in near future.
More: inforse.org/africa

EASE-CA Partners - East African Civil Society for Sustainable Energy Climate Action - www.inforse.org/africa/ EASE.htm

UCSD - Uganda Coalition for Sustainable Development, Uganda
www.ugandacoalition.or.ug

SusWatch - Sustainable Environmental Development Watch, Kenya
www.suswatchkenya.org

INFORSE - International Network for Sustainable Energy
www.inforse.org
www.inforse.org/africa

JEEP - Joint Energy and Environment Projects, Uganda
www.jeepfolkecenter.org

TaTEDO - Tanzania Traditional Energy for Development Organization, Tanzania
www.tatedo.org

NFRE - Nordic Folkecenter for Renewable Energy, Denmark
www.folkecenter.dk

The Project is supported by CISU, Denmark.


By Mary Swai from INFORSE-East Africa Coordinator, TaTEDO, Tanzania; and Richard Kimbowa INFORSE East Africa Chair Person, UCSD Uganda.

Tanzania: INFORSE Members Agreed on Joint Recommendations

On 10th June 2020, TaTEDO, the East Africa regional coordinator and the national focal point of the INFORSE, organized a meeting with the national members of INFORSE in Tanzania.

The objectives of the meeting were to identify policy issues around biomass energy and around use of electricity for cooking, as well as to agree on joint recommendations to be submitted to the respective governmental authorities.

The following are some of the recommendations for policy actors and other key decision-makers to boost development of a market for modern-energy cooking in Tanzania as proposed by Tanzanian INFORSE members and partners.

- Introduce policy instruments and incentives that can encourage local manufacturing of sustainable energy systems, e.g., large-scale production of high-efficiency biomass stoves, efficient pressure cookers, solar panels, etc.
- Encourage multi-stakeholder (public-CSOs-private) partnerships to leverage skills and to close knowledge gaps on sustainable energy technologies and services.
- Promote bottom-up energy-planning processes and productive use of sustainable local energy solutions to improve energy access, affordability, and income generation.
- Establish and enforce through the Tanzania Bureau of Standards (TBS) of Minimum Energy Performance Standards (MEPS) and appliance labeling for clean cooking devices and fuels.
- Establish a mechanism for tracking, to document the number of efficient biomass cookstoves produced per year for household, institutional, and commercial levels of use.

▶ The participants of the INFORSE Tanzania meeting. Read More on the recommendations at https//www.inforse.org/africa and https://tatedo.or.tz

E-Pressure Cooker in East Africa?

On 27 November, 2020 INFORSE-East Africa held a webinar on E-Cooking:

Electric Pressure Cooker as a Clean Cooking Option for East Africa? Is it a 'Silver Bullet' to Reduce Dependence on Solid Fuels and Associated Indoor Air Pollution or is it Just 'Chasing the Wind'?

The background is that in East Africa there is little use of clean and sustainable cooking options. In Tanzania, more than 85 % of the population still depends on solid biomass fuels for cooking, contributing to deforestation at the rate of 3,728 km^2 per year. Transforming cooking energy services for East Africa, including Tanzania, is therefore critical to the development of the countries and is a strategic measure for achieving several SDGs and SE4ALL targets.

Until now, electrification and clean cooking are seen as two separate domains. To date, progress in electrification has been relatively rapid in East Africa, while clean cooking is lagging behind. About 78 % of the population of the Tanzanian mainland have access to electricity, but only 3% use it for cooking.

This could be changed with the use of efficient electric cooking appliances such as e-cookers: *insulated and electronically controlled pressure cookers.* E-cookers are already gaining ground in Tanzania and Kenya. *Because of their high efficiency,* they are an affordable clean cooking solution. *Because of their low energy demand* compared with other electric cooking technology, they can also be used in mini-grids. They present a transformative opportunity to leverage the progress towards universal access to clean cooking by 2030, in line with the SDGs.

To take advantage of this opportunity, policies and incentives supporting clean cooking are needed, as well as expansion of renewable electricity production. Tanzania has a regional leading mini-grid sector, and the market for solar home systems is developing rapidly. E-cookers can be the next step to provide clean energy for all.

▼ Electrical pressure cooker in use and screenshot from the online event. Read the proceedings from the E-Cooking Event: TaTEDO: https://tatedo.or.tz/news/51-inforse-east-africa-zoom-webinar-e-cooking-in-east-africa and www.inforse.org/africa/EASE.htm

Uganda: JEEP Raising Awareness and Training in 3 Districts
Thousands Learn about Local Climate Solutions

Several thousands have been trained in sustainable solutions in three districts of Uganda under the NGO cooperation project "East African Civil Society for Sustainable Energy & Climate Action" (EASE&CA) since its start in 2019.

The trainings were organised by the INFORSE member, Joint Energy and Environment Projects (JEEP) in the districts of Nakaseke, Nakasongola, and Nebbi.

Project activities included awareness-raising seminars, hands-on training with stoves, tree-planting, and backyard gardening.

These efforts are reaching more residents than initially hoped, despite slowdowns caused by the COVID-19 pandemic and by floods.

Community-Awareness Seminars

More than 4000 people participated in community-awareness seminars in the districts of Nakaseke, Nakasongola, and Nebbi, 45% of them women. Attendees heard about sustainable energy and local solutions to climate change.

Presentations aimed to ensure high levels of understanding, of acceptance, and of practice among the community members. The seminars also raised awareness of the benefits of solar lamps, 276 of which were sold as a result.

Energy-Saving Stove Construction

About 400 trainers of trainers (ToT) learned how to train others to build energy-saving stoves for home kitchens. The trained participants were members of small organized groups, each of which was represented by two individuals. These trained representatives are expected first to train their own group's members before going out to the communities.

More energy-efficient stoves lead to decreased deforestation, less use of firewood, and reduced incidence of fire-related diseases in poor rural communities that currently typically cook with three-stone fires.

Institutional Cook Stoves Were Constructed in Schools. The new stove means that the schools save on firewood and money. School leaders and visitors are educated as well as inspired. The news spreads, and new schools start saving up money to have stoves built as well. The new stoves, used for more efficient food preparation each day, help to ensure that more of the children get school lunches, bolstering health and supporting better performance in class.

The school administrators were so grateful that they committed themselves to promote the stove to other school leaders.

Training in running tree nurseries, in gardening, and in improving access to water for plants

There were several training sessions to build capacity by **training ToTs** on the **benefits and management of tree nurseries and on backyard gardening.** Almost 500 people were trained, of whom about two thirds were women. *The* topics included establishment and management of *tree seedbeds and nurseries* and skills for *vegetable-growing*, as well as *fruit- and woody tree planting* and *sustainable fuel-wood production.*

The topics on **water access included rainwater- and runoff-water harvesting, storage in ponds and tanks**, distribution of water from tanks to plants, and the water's usefulness in vegetable-growing as well as for domestic purposes. To boost access to tree seedlings, tree seeds were sold at subsidized rates.

Other training sessions were presented for *local leaders such as sub-county agricultural officers* and parish chiefs, as well as for tree-nursery operators.

Among the benefits are increased tree coverage in the area for fuel wood, future production by fruit trees, increased food security and healthier diets through greater availability of locally grown vegetables. Incomes and employment opportunities also rise.

Challenges

Outbreak of the Covid-19 pandemic caused some of the activities to be delayed during the lock down. When that was lifted, however, JEEP was permitted to work in all three districts. Activities continue, though more slowly, as pandemic restrictions allow the training group no more than ten people at a time, and as some participants facing basic survival issues.

Heavy rainfall and flooding of roads severely impeded the training effort. Follow-up became expensive and time-consuming. Some of the ToTs were forced to migrate from their homes to other places for safety.

Local Follow-ups

JEEP's three district field workers and headquarter staff made follow-up visits to the communities that have trained beneficiaries and local leaders, with the aim of keeping up commitments and high standards. In two of the districts, they also met with the sub-county technical planning committees. During the follow-up, pictures and video were taken, and the most significant change stories were collected. JEEP also was interviewed on Nakaseke FM radio for a talk show on environment issues.

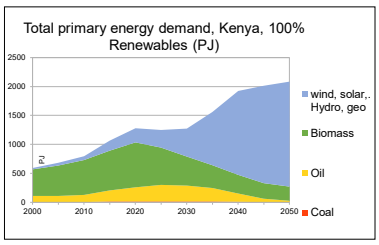
Read more: JEEP: www.jeepfolkecenter.org
EASE-CA: www.inforse.org/africa/EASE.htm
Catalogue: www.localsolutions.inforse.org

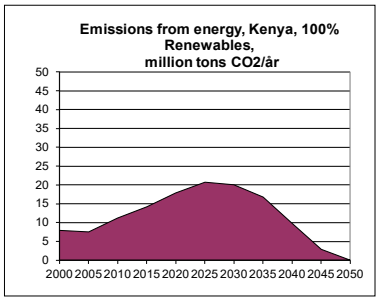
▲ JEEP project team: Prossie Nabiyonga - Project Manager; Ruth Kiwanuka, CEO; Racheal Turyamuhebwa in Nakasongola; Carol Nalugega in Nakaseke; Mungujakisa Brian in Nebbi; Paul Muganga, finance.

▲ Pictures from trainings by JEEP in Uganda. Photos by JEEP.



▲ SusWatch Kenya, INFORSE national coordinator, EASE-CA project team: Nobert Nyandire, Justus M. Munyoki, Wendy Mitoko.





Graphs from the 100 % RE Scenario Kenya Report.
▲ Emissions from Energy, Kenya, 100% Renewables, mil.tons CO_2/yr
▲▲ Total primary energy demand, 100% Renewables Scenario (PJ).

Kenya: SusWatch Kenya Officially Launched A 100% Renewable Energy Scenario

On Thursday, September 3, 2020, SusWatch Kenya launched a report with proposals and a scenario to achieve 100% Renewable Energy (RE) in Kenya by 2050 *by Justus M. Munyoki from SusWatch Kenya*

The proposals and scenario were developed within the framework of the INFORSE East Africa NGO Cooperation project EASE-CA.

The scenario is a result of SusWatch Kenya's collaboration with both non-state and state actors in order to participate fully in the processes and to create common understanding. It was developed in cooperation with the INFORSE network and with Aalborg University, Denmark.

The virtual event was presided over by the Ministry of Energy of Kenya and SusWatch Kenya. From Suswatch Kenya, Nobert Nyandire, and Justus M. Munyoki presented the new report. It was attended by representatives of national civil society organisations (CSOs), GIZ, WWF, academia, private sectors, and EASECA project partners such as INFORSE Secretariat and INFORSE East Africa (TaTEDO, UCSD, JEEP).

Aims and Role of NGOS

During the process of the work, it became clear that the Kenya 100 % RE Scenario has important essential elements to help Kenya realize its development goals (Big Four Agenda) and the Kenya Vision 2030, as well as in support of the UNFCCC's Paris Agreement, UN Sustainable Development Goals, and the Sustainable Energy for All.

At the event, Edwin Nyakundi Omwenga, Renewable Energy Officer, Renewable Energy Directorate, Ministry of Energy stressed the expertise and important role of the civil society organizations (CSOs) as trusted intermediaries between government, the private sector, and energy users, including poor and vulnerable groups.

Methodology

The main scenario tools were INFORSE's spreadsheet-based model, developed and used earlier by INFORSE-Europe, which calculates the energy balance every 5 years; and the Energy Plan program, developed by the Aalborg University in Denmark, which calculates the hourly balance of demand and supply during target years (2030 and 2050).

The input data sets were from national and international statistics.

The working team was led by Justus M. Munyoki from Sustainable Environmental Development Watch - SusWatch Kenya and by Gunnar Boye Olesen from INFORSE.

100 RE Kenya Scenario

The report presents a scenario how Kenya can move into a 100% renewable energy economy by 2050.

It provides for energy enough for all Kenyans and for the country's development from a lower-middle-income country into an upper-middle-income country. This can be combined with a reduction of biomass use to sustainable levels, and at lower energy prices for consumers.

The report gives an overview of the present supply and demand of the renewable-energy and energy-efficiency potentials, and of the future demands of continued economic growth in Kenya.

In an additional analysis, we compare renewable-energy power solutions with the non-renewable power solutions, coal power and nuclear power, and show that the renewable energy solutions are considerably cheaper for Kenya.

The scenario gives specific proposals, and policy recommendations, which can lead to increased electricity production from renewables, reduction of biomass use to be within sustainable levels of biomass production in Kenya, and reduced emissions of CO_2. The report estimates the capacities and the costs of energy supply in the scenarios for 2030 and 2050. The comparison to "business as usual" shows economic benefits favoring the renewable energy scenario.

The most important proposals are:

- Change to more efficient cooking, including efficient electric cooking as well as new highly efficient wood and charcoal stoves.
- Change of transport gradually to electricity, hydrogen, and new fuels (electrofuels).
- Make charcoal production much more efficient; increase conversion efficiency from wood to charcoal from around 10% today to 25%.
- Expand wind, solar, geothermal power, and the capacities of electric international interconnectors.
- Use biomass power plants and existing hydro power to balance remaining demand and supply.

Download the report from:
SusWatch Kenya: www.suswatchkenya.org/100-renewable-energy-plan-for-kenya-by-2050/
INFORSE East Africa EASE-CA Project: www.inforse.org/africa/EASE.htm .

INFORSE-Europe News


by Gunnar Boye Olesen and Judit Szoleczky, INFORSE-Europe

Energy Sufficiency on the Road to 100% Renewables and Zero Emissions

INFORSE-Europe is currently involved in development of scenarios to show how Europe and European countries can reduce emissions fast enough to be compatible with the Paris Agreement target of keeping global warming to 1.5-2'C. We contributed to *Climate Action Network Europe and European Environmental Bureau's Paris Agreement Compatible (PAC) Scenario* with targets of 65% reduction of greenhouse gases by 2030 and of net zero emissions by 2040; *see https://www.pac-scenarios.eu/* .

INFORSE-Europe is working with *negaWatt* in France and with partners in most EU countries to develop a bottom-up European scenario for fast transition to 100% renewable energy, covering the EU and the UK. In the development, we focus particularly on quantifying European needs for energy services, considering, e.g., sizes of houses and distances travelled. Many Europeans could live better lives in smaller houses, with less travelling by cars and planes. The challenge is to find the balance and to devise policies that support people in reducing their consumption of energy services. We will integrate energy sufficiency into the scenarios as extra actions on top of renewable-energy use and increased energy efficiency to foster a faster, easier transition to 100% renewable energy and to greenhouse-gas neutrality.

INFORSE-Europe also working with *Aalborg University* and with partners in the Nordic-Baltic countries to integrate energy sufficiency into energy scenarios and energy planning for Denmark, Latvia, and Lithuania, in a project supported by *Nordforsk.*

The results from the two studies will be presented in mid-2021 and in the second half of 2021.

Read more at https://www.inforse.org/europe/Vision2050.htm https://www.inforse.org/europe/Energy-Sufficiency-Project.htm and https://negawatt.org/en .

Seminars and General Meetings Online

INFORSE-Europe held its General Meeting and European NGO Seminar online in September and October. The topics were 100 % Renewables and European Energy Communities. There was big interest, and we hope that a real seminar will be possible at the Nordic Folkecenter for Renewable Energy in August 2021.

Presentations available at: *www.inforse.org/europe/seminar_20_INFORSE-Europe_100RE_21092020.htm*

www.inforse.org/europe/seminar_20_INFORSE-Europe_energycommunity_09092020.htm

Decorbanising European Heating

While it is simple, in principle, to convert heating to renewable energy, a major challenge of reaching climate targets is the fact that the vast majority of European houses are heated with fossil fuels. At INFORSE-Europe, we work within the Coolproducts Coalition to promote energy labelling and ecodesign requirements that encourage use of renewable heating with solar and heat pumps. We also support the use of renewable district heating, including informing the public about related opportunities through webinars. Read more on https://www.inforse.org/europe. *https://www.coolproducts.eu/* .

Power of Community Energy

In April, 2020, INFORSE-Europe participated on an event of the NGO Cooperation Project *"The Power of Community Energy"* organised by WECF. The event should have been in Germany, but it became online. The Partners are Social Ecological Institute in Poland (coordinator), INFORSE-Europe, WECF and Troya Environment Association in Turkey. The results of the project will be: a short guide on how to organise renewable-energy cooperatives; a comparative analysis; and databases with focus on Eastern Europe, Poland and Turkey. The next meetings are postponed to be in 2021. The Project is supported by the EU Erasmus+ Program. *Read More: www.inforse.org/europe/POWER_CE.htm*

INFORSE-Europe info in Denmark - EU Green Deal

In 2020, INFORSE-Europe, together with the Danish members, has organised several events for citizens on EU Green New Deal. The activity was supported by Europa-Nævnet. *More: www.inforse.org/europe/europa-naevnet.htm* .

Zero-Carbon Britain (ZCB) Hub and Innovation Lab - *by Paul Allen, CAT, UK*

The INFORSE member, Centre for Alternative Technology (CAT) in Wales, UK, has started a Zero-Carbon Britain Hub and Innovation Lab to help turn the many British climate-emergency declarations from local authorities into action. Via the Hub, CAT provides local authorities, businesses, institutions, and community groups with the confidence, skills, and understanding to help achieve net-zero greenhouse-gas emissions by 2040. The technical solutions are already readily available. The Lab tackles the specific barriers to transforming the complex economic, social, and political dynamics in the UK and beyond.

Read more at https://www.cat.org.uk/info-resources/zero-carbon-britain/ .

Community Energy in Ukraine - *by Andriy Martynyuk, Ecoclub*

The INFORSE member, Ecoclub is training 12 communities to foster local sustainable energy projects that are implemented in a cooperation by citizens, business and local authorities in Ukraine. *Read more: ecoclubrivne.org* .

CSOs Call for Sustainable-Energy Future in Ukraine and Belarus

A new project *"Civil Society for Sustainable Energy - Local to National in Eastern Europe"* in short, *SELNEE Project*, started in May of 2020.
The Project is an NGO Cooperation across the INFORSE-Europe network in Belarus by the Center for Environmental Solutions (CES), in Ukraine by Renewable Energy Agency (REA), and in Denmark by Nordic Folkecenter for Renewable Energy (NFRE), and the INFORSE-Europe Secretariat.

The activities aim to increase national and municipal sustainable energy transitions by preparing an overview, proposals, and advocacy for them, as well as through information and exchanges with civil society organisations (CSOs).

The proposals for the national renewable scenarios are based on the earlier work of the partners and of other CSOs.

On municipal level, the partners are facilitating development of more ambitious transitions to renewable energy with tools to improve municipal Sustainable Energy and Climate Action Plans (SECAPs), with proposals for energy-management systems, as well as by promoting citizens' involvement.

In addition, the partners promote simple, affordable energy solutions that citizens can implement.

Conference & Joint Statement by Ukrainian NGOs/CSOs

More than 1700 people were watching online during or after the event about sustainable-energy transition of Ukraine on November 18, 2020. It was organised by REA, 100RE Ukraine platform, UABIO, and INFORSE-Europe, in cooperation with many other NGOs in Ukraine. Speakers included NGOs, including INFORSE members like REA and EcoAction, 100 RE Ukraine, ESCO-Association, EBRD, Ukrainian Hydrogen Council, and Heinrich Böll Foundation, as well as high-level representatives from the Ukrainian Ministry of Foreign Affairs, the Ministry of Environment and Natural Resources, and the State Agency for Energy Efficiency and Energy Saving of Ukraine.

At the end of the conference, a Joint Statement was announced, which was signed by more than 20 civil society organizations, associations, and experts in the renewable energy sector. It was sent to the Ukrainian Government to underline the immediate need to start developing the *National Green Deal* and the *new Green Energy Strategy of Ukraine for 2050-2070* to synchronize Ukraine with the EU Green Energy Transition.
Download the presentations, read the joint statements from: https://rea.org.ua/en/news/504/
More: www.inforse.org/europe/SELNEEhtm, https://100re.org.ua/ .

Project Results Presented at the UNFCCC Climate Dialogues

The UNFCCC Climate Dialogue gave the possibility for INFORSE to organise a side event on 26 November 2020. At this side event, INFORSE members presented the project results until now, the national and municipal energy situation, barriers, available scenarios for 100% renewable energy supply, as well as the status of the countries towards the implementation of the Paris Agreement of the UNFCCC From REA, Oleksandra Tryboi, from CES, Dmitry Burenkin made the presentations. These complemented well the overview of Gunnar Boye Olesen from INFORSE-Europe on the 100% renewables scenarios in Europe, and the ZeroCarbonBritain by Paul Allen from Centre for Alternative Technology, UK.
All presentations are available at INFORSE's website: https://www.inforse.org/cd2020.php3 .

Read more: Civil Society for Sustainable Energy - Local to National in Eastern Europe -SELNEE Project in 2020-21
SELNEE is an INFORSE-Europe cooperation project with NGO Renewable Energy Agency (REA) in Ukraine, Center for Environmantal Solutions (CES) in Belarus, Nordic Folkecenter for Renewable Energy (NFRE) in Denmark. W: www.inforse.org/europe/SELNEE.htm

REA: www.rea.org.ua
CES: www.ecoidea.by
NFRE: www.folkecenter.eu
INFORSE: www.inforse.org/europe

The Project is supported by CISU - Civil Society in Development, Denmark.

Ukraine's Sustainable Energy Future is Threatened but the Country is on Track to Reach 2020 Targets

By Oleksii Epik, Anna Pastukh, Oleksandra Tryboi,
NGO Renewable Energy Agency (REA), Ukraine



Ukraine is on track to fulfill its commitments in its National Renewable Energy Action Plan for 2020 (NREAP-2020), reaching 11% Renewable Energy Sources (RES) in its overall Gross Final Energy Consumption with 12% RES in electricity, 11% RES in heating and cooling, and 10% RES in transport. The Energy Strategy for 2035 is likely to be fulfilled with respect to RES share in electricity and heating/cooling, but not in the transport sector.

However, there are several drawbacks among some of the key stimulation mechanisms for RES in Ukraine during 2020:

- Restructuring of the "green" tariff decrease by 15% for all solar PV (including that already constructed) and by 7.5% for all wind power plants.
- Effective blocking of payments for generated energy from the State Enterprise (SE) Guaranteed Buyer to RES-to-grid objects since March, 2020. Official explanation claims difficulties related to the new transition market model from "green" tariff to auctioning principle. At the time of going to press, the problem remained unsolved, forcing some plants into bankruptcy while others sought court pressure on SE Guaranteed Buyer.
- Indefinite postponement of auctioning of green electricity (the first auction had been planned for April, 2020).
- Failure to incorporate competition into the heating market and to upgrade the stimulus heat tariff "0.9 principle" for biomass. All necessary documents and respective Draft Law are ready for registration and approval, having been prepared in 2019 following wide public discussions.
- Cancellation in Jan., 2020 of VAT/customs duties exceptions for all RES installations.
- Attempts by the National Energy and Utilities Regulatory Commission of Ukraine (NERC, one function of which is regulation of the electricity market) to nationalize RES installations (Dec., 2019).
- Failure of the government to honor its own newly developed Ukrainian Green Deal. Public governmental announcements have stated instead that coal and nuclear power will remain the core generation technologies for the post-2020 period, without plans for restructuring.
- Unnecessary delay in updating the Ukrainian UNFCCC Nationally Determined Contribution (NDC) plan development.

Unless these key drawbacks are solved, urgently, during 2020, the track for fulfillment of the Energy Strategy for 2035, of the Heat Supply Concept and of other official documents and draft documents, all of which require increasing RES share, will be broken.

As for the post-2020 period, currently the main documents that contain approved targets for the energy sector and for RES development are the Energy Strategy for 2035, the Heat Supply Concept of Ukraine for 2035, and supporting documents. For the post-2035 period, there are no official approved documents or respective targets for energy transition.

Alternative 100% RE Scenarios for 2030-50-70

A number of alternative, well developed scenario proposals could serve as a basis for the official Energy Strategy for 2050. The most advanced, which contain concrete targets, are:

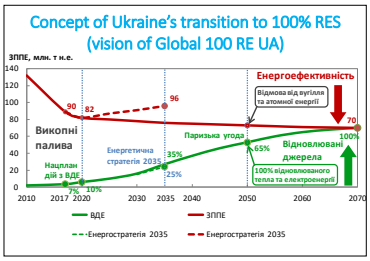
- Road Map of Climate Targets by 2030 - Public Vision by Ecoaction, 350org, Ukrainian Climate Network.
- Ukrainian government's "Green Deal" - Green Energy Transition by 2050;
- Transition to RE Scenario by 2050 by Ukrainian IEF supported by Heinrich Böll Foundation;
- 100% RES transition scenario by 2050 by NGO REA, ASET INFORSE Cooperation Scenario;
- 100RE Ukraine Platform Scenario for 2050-70.

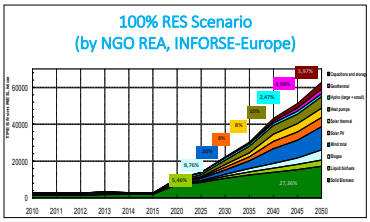
Barriers to the 100 Renewable Scenarios

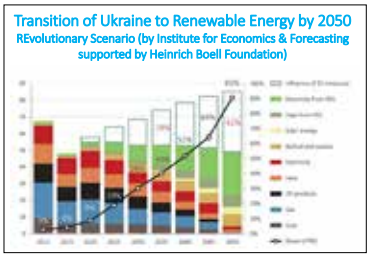
The achievement of targets formulated by national and alternative documents for the energy transition in Ukraine are hampered by a number of barriers, the most critical of which are:

- Uncertainty of the Ukrainian state's policy on RES market rules;
- Subsidizing of fossil-fuel-based energy generation in all sectors of economy;
- Absence of state-level adopted programme for a planned fuel switch from coal power plants and unreadiness for closure of coal infrastructure;
- Very low ambition in the Nationally Determined Contribution of the Paris Agreement;
- Low power-grid flexibility, allowing plugging in only up to 6-7 MWel installations of solar+wind generation, a limit already exceeded;
- Lack of power-grid integration with European Network of Transmission System Operators for Electricity (ENTSO-E);
- Non-liberalized electricity and heat markets with obstructive state regulation and communal monopolies;
- Monopoly of communal enterprises on heat market with absolutely no competition;
- Underdeveloped biomass market;
- Lack of any stimulus mechanism for electric cars.

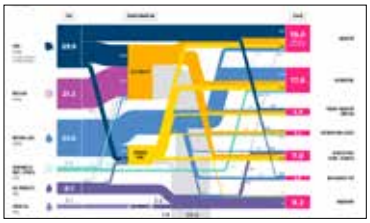
More information: www.rea.org.ua/en/projects/472/
https://rea.org.ua/en/news/150/
https//www.inforse.org/europe/SELNEEhtm
https://www.inforse.org/europe/VisionUA.htm

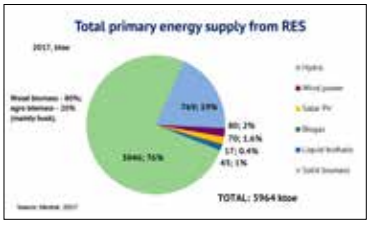






▲ Graphs from the Transition Scenarios to 100 % RES in Ukraine by 2050.





▲ Flow diagram of different energy sources in Ukraine, 2016, Mtoe

▲ Energy sources of all RES in Ukraine, 2017

Local Solutions in Eco-Village Development Are Feasible and Will Be Implemented

In Bangladesh, India, Nepal, and Sri Lanka, INFORSE members and other CSOs have started a new phase of promoting the eco-village development (EVD) concept and its local solutions. In spite of the limitations imposed by the Covid19 pandemic, we have finalised feasibility studies for the implementation of EVD in coastal areas of Bangladesh and of Sri Lanka, as well as in new rural areas in India and in Nepal.

Guided by our feasibility studies, we have now started implementation in one local area in each of the four countries. With due precautions due to Covid-19, we have started the elaboration of village development plans with the villagers. These first activities on the ground also have started with the help of local partners. While it has been possible to launch these efforts, Covid-19 lockdowns unavoidably slow the work on the ground.

In the present phase of the project, we are developing EVD model villages in the selected areas. We will introduce new local solutions for sustainable energy, for climate adaptation, and for improving livelihoods. Training will take place for local communities and artisans, including women in villages and stakeholders from the project area. We will provide technical assistance, support for demonstration units, and financing models for the local solutions. We also will help the villagers to organise income-generation activities, including marketing their products, thereby helping them to improve their standards of living.

We will develop informative materials on the concept of EVD. These will include a database of local solutions, impact assessments of the local solutions in the new areas, and the organisation of capacity-building through training of not only local stakeholders, but also of local and national development planners and decision-makers. We will organise exchanges of information on existing local solutions with webinars, nationally and internationally. We also will advocate for more international support for local climate solutions and for the EVD concept.

.

The project partners are the INFORSE South Asia national coordinators Grameen Shakti in Bangladesh; INSEDA in India; Center for Rural Technology in Nepal (CRT/N); IDEA in Sri Lanka; Climate Action Network - South Asia (CANSA); INFORSE Secretariat; and DIB, Denmark (coordinator). The project is supported by CISU, Denmark.

▼ Partners met in New Delhi in January 2020 to coordinate feasibility studies. From left to right: Jagdeep Sharma (INSEDA), Dumindi Herath (IDEA), Niraj Shrestha (CRT-N), Animesh Khimla (New Life Center), Lykke Valentin Kristiansen (DIB), Santosh Patnaik (CANSA), Raymond Myles (INSEDA), Gunnar Boye Olesen (INFORSE), Abdul Arif (Grameen Shakti), Isaac Khimla (NLF) Not on picture: Sohel Ahmed (Grameen Shakti), Ashok Zutshi & Sanjiv K. Nathan (INSEDA), Judit Szoleczky (INFORSE)

Read more: Publications, Policy Briefs, Event Proceedings at the Project's and at the Partners' web site. www.ecovillagedevelopment.net & www.inforse.org/asia/EVD.htm

EVD was developed by INFORSE-South Asia members in cooperation with CANSA within the framework of Projects since 2015. The Projects are supported by the Climate and Enviornment Fund of CISU - Civil Society in Development, Denmark.

www.crtnepal.org
www.gshakti.org
www.ideasrilanka.org
www.inseda.org
www.inforse.org/asia
www.cansouthasia.net
www.dib.dk
www.inforse.org





Eco-Village Development Solutions:

Bangladesh - Local Area: Coastal villages in Mathbaria in the Pirojpur district in Barisal division.
EVD Solutions: solar water pump, solar street light, biogas plant and vermi compost, improved cookstoves, rainwater-harvesting system, oganic/ climate-smart farming.

India - Local Area: Villages of Margul Panchayat with Bhil tribal people in Ratlam district in the state of Madhya Pradesh.
EVD Solutions: Heera a hybrid improved cookstove with chimney, hot water tank, solar cell; regular improved cookstove with chimney; household biogas; solar streetlight; solar lantern; natural daytime lighting; solar drier; vermi compost; bamboo basket compost; greenhouse; rooftop rainwater harvesting; kitchen gardening; day and night Indoor solar powered cooker and solar home light; energy plantation; horticulture; income generation organised through self-help groups with keeping poultry; making baskets; growing mushrooms

- **Nepal - Local Area:** lowland Marin Rural Municipality of Sindhuli district, Bagmati Province.
EVD Solutions: water-lifting technology, clean cooking solutions (ICS, electric cookstove), plastic-tunnel farming, micro-irrigation system (drip irrigation and sprinklers), application of organic fertilizer and organic pesticides.

- **Sri Lanka - Local Area: C**oastal villages in Matara District, Southern Province.
EVD Solutions: domestic clean cooking stoves (ICS), institutional ICS, kitchen improvements, solar/ biomass dehydration and other value additions, organic farming: home gardening, mushroom farming, other cash crops, rainwater-harvesting, pottery- and brick-making improvements, composting and other waste-management solutions.

Read more in feasibility studies and publications: https://www.inforse.org/asia/Publications_EcoVillageDevelopment_SouthAsia.htm

▲ Eco-Village Development (EVD) solutions with participatory planning achieving climate change mitigation and adaptation as well as several SDGs in South Asia.

▲ Front pages of publications on Eco-Village Development (EVD) in South Asia published by the project partners:

Socio-Technical Manual for Training of Trainers (ToT), Manual on Participatory Planning, Technology and Knowledge Transfer of Eco-Village Development (EVD) in India, Nepal, Sri Lanka and Bangladesh. 132 pp. 2018. Published in English, Hindi, Nepali, Bangla, and Sinhala.

White Paper: Climate Mitigation and Adaptation with Eco-Village Development (EVD) Solutions. 45 pp. 2018. Published in English:

Eco-Village Development Feasibility Studies in new climate zones in India, Nepal, Sri Lanka, and Bangladesh, July 2020. Executive Summaries.

Download EVD Publications from: https://www.inforse.org/asia/Publications_EcoVillageDevelopment_SouthAsia.htm .

Firewood, Forgotten Fuel of the Masses - A Case for Firewood in Sri Lanka

by R.M. Amerasekera, Executive Director, Integrated Development Association, Sri Lanka

The biomass-heavy rural energy sector in Sri Lanka calls for immediate remedial action. Current utilization of biomass is inefficient and unsustainable, with adverse impacts on health, food security, productivity of livelihoods, natural resources, subsistence, local environment, and climate. Nearly 50% of Sri Lanka's total energy supply is from biomass. Over 70% of the total population relies on biomass energy for cooking and for industrial needs, positioning biomass as a crucial factor in the economy of Sri Lanka.

Governmental efforts have been made to improve use of biomass energy, particularly in rural, plantation, and poor urban communities in the past through improved cookstove programs. Recent efforts and involvement by relevant stakeholders, however, have fallen short, leading to a national practice that primarily promotes alternative, imported fossil-fuel-based energy sources such as LPG. However, there has been limited growth with LPG, due mainly to its cost.

Unsurprisingly, then, more than 70% of Sri Lankan population prefers firewood, a cheaper (or free), readily available, self-replenishing resource. Moreover, the financial suffering inflicted by the Covid-19 pandemic has placed locally available firewood at the center of energy-security safeguards for the poor.

However, improvements in this field have had limited success in relieving the adverse effects on health, food security, productivity, living standards, and the environment inherent in the inefficient burning of biomass. It will require a national-level intervention to upgrade these aspects of biomass energy. Active cooperation of all stakeholders from the lowest levels upwards in a multi-sectoral, multi-disciplinary, integrated development process will be necessary. Improvement of the biomass-energy sector with more efficient and cleaner technologies will boost the rural economy while adding value to the energy mix of Sri Lanka.

We urge all responsible decision-makers to implement immediate technological and efficiency improvements in the biomass-energy sector through policy and through grassroots engagement.

Shortened by Dumindu Herath, IDEA, SriLanka.
Read the full article at www.inforse.org/asia/INFORSE-Asia_Press.htm

INFORSE's Recent Positions:

- **Call to Action: Governments must act now to correct course for a green recovery and accelerate progress towards Paris Agreement.** *By 100+ organisations of IRENA Coalition for Action. www.coalition.irena.org/releases*

INFORSE-Europe

- **Public Development Banks MUST Deliver on the World We Want, to stop financing harmful projects.** - *By 300+ organizations. www.forus-international.org/en/resources/193*

- **Open letter to the EU Commission to implement a Covid19 economic recovery that ensures more resilient and fairer development and an energy transition that achieves real net zero much earlier that 2050.** - *By 15 organisations of Community Power Coalition. www.inforse.org/europe/eu_policy_press.htm*

- **Communiqué to EU: Nuclear is no solution ! calling on the EU to not include nuclear as a green investment option in the EU Taxonomy (rules) for sustainable finance that can receive support from green investors and from various EU funding schemes.** - *By 52 organisations. www.inforse.org/europe/nuclear.htm*

INFORSE-East Africa:

- **Recommendations for key decision-makers to boost a market for modern-energy cooking in Tanzania** - By national INFORSE members in Tanzania. tatedo.or.tz www.inforse.org/africa
- **CSOs Call for Accelerating Implementation of Sustainable Energy for All (SE4ALL) and Sustainable Development Goals** - *By INFORSE East Africa Coordinators for Kenya, Tanzania. www.suswatchkenya.org, www.tatedo.or.tz www.inforse.org/africa/*

INFORSE at United Nations

Calling for More Climate Actions with Local Climate & Sustainable Energy Solutions, 100% Renewable Energy
By INFORSE Side-event at UNFCCC Climate Dialogue 2020
More: www.inforse.org/cd2020.php3

Calling for Local Sustainable Energy Solutions in East Africa, South Asia and 100% Renewables to meet the Sustainable Development Goals
By INFORSE Side-event at UN HLPF 2020. www.inforse.org/INFORSE_at_HLPF2020.php

INFORSE is a world-wide network of 145 non-governmental organizations in 60 countries

INFORSE was established in 1992 at the UN "Earth Summit" (UNCED) in Rio de Janeiro to promote a transition to efficient and sustainable use of renewable energy.

The organisations work with renewable energy and sustainable development to improve environment and to reduce poverty through advocacy as well as by raising awareness.

Lobby United Nations:
INFORSE has NGO consultative status with the UN ECOSOC since 1998, and with the UNFCCC since 2002.
INFORSE has sent delegations to many of the UN Climate COP-meetings as observers, and organized official side events and exhibitions.

Lobby European Union:
INFORSE-Europe is registered in the EU transparency lobby register and has a permanent seat at the EU Ecodesign Directives' consultations.

Communication:
The communication is facilitated by this newsletter, Sustainable Energy News, web site, facebook, twitter, and an online database of more than 1000 relevant contacts.

Financial supporters of the network and projects have included CISU, DANIDA, EU, SIDA, Norden, AirClim, ECOS, and Europa-Nævnet.

Activities: INFORSE's member organizations often work together to achieve progress through policy advocacy, to build capacity through exchanges of information and of services, and through cooperation projects. Examples are:

- Promoting local climate and sustainable energy solutions in East Africa.
- Eco-Village Developments as Climate Solutions in South Asia.
- Low-Carbon, Pro-Poor Development Strategies in Africa and South Asia.
- "Southern Voices on Climate Change", an NGO capacity-building program.
- Power of Community Energy, Europe.
- Social participation in local energy planning in Poland.
- Local sustainable energy planning and advice center in Belarus.
- 100% renewable-energy scenarios for Kenya, Uganda, Denmark, Baltic Countries, Armenia, Romania, Bulgaria, Hungary, EU.
- Cool Products Campaign for the EU EcoDesign Directive.
- NGO cooperation projects in Eastern and Central European Countries.
- EU and sustainable energy information and debates in Denmark.
- Creation of a network of NGOs and researchers on low-carbon scenarios.
- Educational programs e.g., SPARE, DIERET, and a database of school materials.
- Renewable energy and eco-village development manuals in South Asia.

WWW.INFORSE.ORG

www.facebook.com/INFORSE
www.facebook.com/INFORSEEurope
www.facebook.com/eastinforse
www.facebook.com/INFORSE.SouthAsia

www.twitter.com/INFORSE_ORG
www.twitter.com/INFORSE_EU
www.twitter.com/EastINFORSE

Welcome to the New INFORSE Members:

Tanzania: AGENDA for Environment and Responsible Development, Catalyst for Social Action and Development (CSADO), Tanzania National Gender and Sustainable Energy Network (TANGSEN).

Uganda: Uganda Nature Palace Foundation

Nepal: Manushi for Sustainable Development