

Sulis Setiawati / Island of Sumba, Indonesia

Islander who has helped bring a diverse range of local, national and international stakeholders to agreement over the 100% renewable vision for Sumba





# INTRODUCTION

In the past Sumba Island was renowned for being one of the poorest areas of Indonesia where very few people had access to electricity, now thanks to the efforts of Sulis Setiawati the future is looking bright. Setiawati has been at the heart of a groundbreaking, island-wide initiative to address the energy shortage and boost living conditions by going 100% renewable.

Setiawati has played a pivotal role, bringing views of local farmers to decision-makers and the national government to agreement over the sustainable future of the island, ensuring that the needs of the local communities are being met. On a day-to-day basis she ensures that the just transition to 100% renewables is effectively helping to boost energy access, improve local business and safeguard public health.

Setiawati is a local partner in the Hivos Sumba Iconic Island Initiative that aims to deliver 100% renewable energy to islanders by the year 2020, It has been underway for 5 years and has already met with considerable success. "At first I thought it was just a crazy dream," says Setiawati, "but it is not crazy at all, by Working together to harness 100% renewable energy we are delivering prosperity, equal opportunity and fundamental human rights for our communities – no more living in darkness".

Indonesia struggles to provide its citizens with reliable, cheap and safe access to energy with the existing grid infrastructure and reliance on large, centralized coal plants – which represent 30% of the countries current energy mix. However, the national government has noticed the development benefits of going 100% renewable on the Island of Sumba, in April this year Sudirman Said the Energy Minister was sent to scout out the initiative.

## **PROJECT**

Five years ago Hivos, an international development organisation, spearheaded the introduction of the 'Sumba Iconic Island' initiative with support from the Indonesian Ministry of Energy and Mineral Resources. The aim is to support the just transition to a 100% renewable energy supply for the island by 2020 in order to reduce poverty, improve people's health, increase economic development and help tackle climate change while making communities more resilient to climate impacts.

Setiawati first encountered the initiative when the civil society organiation she works for became a partner in the programme. She saw firsthand how solar and biogas were delivering real solutions to the problems she was seeing native communities face everyday in the field. The majority of people had no electricity and islanders, particularly women, were being exposed to smoke and fumes from open fires in the home. Setiawati quickly offered her support to the initiative because for her, "providing clean and renewable energy on Sumba is the best way to ensure fundamental human rights like the right to energy access and the right to health."

Setiawati is now engaged in the project as a civil society representative, she brings diverse stakeholders to the table and channels ideas for solutions between local groups and the government. Her role is to translate the goal of going 100% renewable

into a delivery system that addresses the real needs of the poor people on Sumba – energy access, secure food production, better education and improved health. She is working closely with key constituents, like farmers, to ensure they understand the potential of the initiative and she is helping to harness their expertise to develop solar irrigation systems.



Setiawati works hard to ensure that the development benefits are systemic, not fleeting. To ensure this happens she says, "it is of the utmost importance to be able to connect with regional and national government representatives to voice directly all the hopes and concerns I gather from the field." Thanks to the spirit and commitment from local people in Sumba like Setiawati the initiative has obtained the full support from local leaders, the Indonesian government and major donors like the Asian Development Bank as well as the governments of Norway and Netherlands who all work together in the Sumba taskforce to realise the ambitious goal. "Now our farmers wanting to harness the power of renewable energy can directly apply for financial support and technical assistance" says Setiawati.



## **RESULTS**

The impact of the iconic island initiative has already been far-reaching and transformative, doubling the electrification ratio on Sumba to nearly 40%. "Many people now have electricity for the first time in their lives," explains Setiawati. "Having access to electricity means much more than just light in the darkness. It means independence and economic development. It means a way to improve our livelihoods."

In the past the majority of the population used kerosene and wood for lighting and

cooking, which are polluting, extremely unhealthy and relatively expensive. Electricity was only available either in the city, where the grid is close by, or with diesel generators. Only a few businesses and residents could afford the expensive and highly polluting energy supplies. By using renewable energy and reducing the use of the old diesel generators, the island will decrease its CO<sub>2</sub> emissions as access to energy grows.

Agriculture is a vital sector for Sumba and farmers are benefitting directly from renewable energy. "For me the most important part of the programme is the solar irrigation project in Dikira" says Setiawati. "Farmers can

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now grow a range of fresh vegetables when in the past they had to survive from growing corn and maize. It also means that farmers can now farm during the dry season – which lasts 8 months. Our farmers are able to generate food and income from their lands all through the year which is a boost for our economy and is paving the way out of poverty." The solar irrigation project is currently being replicated around the island.

The economic benefits for the Sumbawese people have been profound. Setiawati knows like no other that the Sumba programme has had a major impact on small enterprises and traditional businesses around the island, "the hundreds of household biogas digesters have given local agriculture a giant boost. The digesters are all built and maintained by local entrepreneurs here on Sumba," she says. These biogas systems harness natural waste products from local farming to supply energy for cooking and lighting. The bioslurry they produce is an excellent fertilizer that is sold by locals to farmers and is helping to increase agricultural output, alongside the solar irrigation projects.

The benefits of shifting towards a 100% renewable energy model are reaching women and children who in the past had suffered the worst impacts of poor energy access. Women were exposed to harmful fumes and children were unable to further their education. Now however, "solar panels and micro-hydro plants power schools and enable women to generate additional income by producing handicraft after sunset.

Many women are establishing small enterprises while more and more children are able study in the evening at home," says Setiawati. "It is solar and biogas systems that are bringing the light, making households healthier and more prosperous across the island."

As Setiawati and her colleagues continue to deploy renewable energy on Sumba the obvious development benefits and reporting of the Sumba Iconic Island taskforce are catching the eye of officials in the Indonesian government and having an impact on national level policy. "There is a noticeable progress at a higher level - such as more budget allocation from central government for renewable energy projects and more collaboration between the government, the private sector and local civil society organisations," she explains.

"Sudirman Said, the Indonesian Minister of Energy, has taken responsibility for the realization of the Sumba objectives, and stated the government's intention to replicate the model in other parts of the country," says Setiawati, who expects the initiative to be replicated. "It is officially part of the Indonesian government policy through a recent Ministerial Decree announced in June. 100% renewable Sumba is an ideal model for other areas in Indonesia and beyond." But Setiawati is very clear about the importance of engaging local communities in the process, "even if it takes some time we need to be part of the planning of our energy system."



# CONCLUSION

The Sumba Iconic Island initiative has set a benchmark for deploying low cost renewable energy in a way that empowers people, spurs local economic development and supports public services. Almost five years after its start, the project based on the aim to provide an entire island with 100% renewable energy by 2020, is well on its way to become a replicable example for climate-smart development solutions all over the world. Setiawati has already been engaged with the UN Food and Agriculture Organisation and the Cooperative Agency to discuss the benefits 100% renewables can deliver for both food security and gender equality. In sharing her experience she emphasises that the greatest challenge in deploying renewable energy for development is to ensure the local community is at the decision-making table to ensure long-lasting improvements and real life benefits.

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<u>Video</u>