

# EKOPESANTREN PROGRAMME FOR SOLAR ENERGY IN ISLAMIC BOARDING SCHOOLS



The EKOPESANTREN programme is managed by the Centre for Islamic Studies at Universitas Nasional (PPI UNAS) in Jakarta with the support of various professional and industry partners. It was designed to become a movement for change for a network of Islamic boarding schools (Pesantren) in Indonesia not just to raise awareness about the need for climate and ecological action but also to implement practical and self-help programmes for the students and their communities.

One of the ten EKOPESANTREN initiatives focuses on advancing sustainable, renewable energy as a source of electricity. PPI UNAS is collaborating with 50 schools from planning to constructing solar panels to support their educational activities, starting with those receiving insufficient or unreliable electricity.

According to the Pew Research Center, in 2022, Indonesia had the largest population (12.7%) of Muslims worldwide with around 241.5 million. Pesantrens make up a large segment of educational institutions in Indonesia which has a Muslim majority. According to the Ministry of Religious Affairs, in April 2022 there were more than 39,000 pesantren schools in the country with a total number of students approaching 4 million. Pesantren alumni occupy many positions in society including those in key decision-making roles in the state and society at various levels and fields. Hence, they can play an important and strategic role in building a movement towards improving the environment and in addressing the climate crisis.



## WHAT WE DO



The Renewable Energy Movement Program (TREM) is an EKOPESANTREN's Programme to install and maintain solar PV energy and energy storage systems in Islamic Boarding Schools. It is aiming for an initial coverage of at least 20-30% of their total energy use and eventually 100% reliance on renewable energy (RE) within 3 years. In addition, we train students to form a task force to maintain RE facilities, enhance the energy efficiency of electrical equipment used in schools and communities as well as measure the energy savings at both campus and community levels.

In the pilot programs that PPI UNAS is managing within the TREM programme, the introduction of solar energy has resulted in 30-50% energy savings replacing conventional power sources such as electricity provided by diesel generators or from local electricity networks.

## Future Energy Needs

Some of the participating Pesantren schools are located on the city outskirts or near forest conservation areas which often face electricity outages due to limited and often unreliable supply. As diesel power generation has recently become more costly, investing in renewable energy has become much more economically viable.

The TREM Programme also provides practical solutions for those Pesantrens creating greater opportunities for the school students particularly as many belong to local indigenous communities.

The TREM solutions are currently implemented in one area with two schools participating and the programme will be rolled out in the remaining 50 boarding schools. The progress will be closely monitored by a team of academics and external professionals.

**The installation of solar energy will approximately cost around \$15k-25k per school depending on their size.**

# 50

ISLAMIC  
BOARDING  
SCHOOLS

# \$600-10k

APPROXIMATE  
CURRENT MONTHLY  
ELECTRICITY BILLS  
(FOR EACH SCHOOL)

# 30-50%

TARGET  
SAVINGS IN  
ELECTRICITY COSTS



Scan  
for more  
information



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