INDUSTRIAL ENERGY ACCELERATOR INDONESIA



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Reducing industrial energy emissions in Southeast Asia's largest economy

Indonesia is already the largest energy user in Southeast Asia, consuming nearly as much energy as Thailand, Malaysia and Singapore combined. With a mandate to maintain economic growth over the coming years, the country's energy demand is also set to rise.

By 2025, the Indonesian government predicts that its thriving industrial sector will account for almost half of the country's final energy demand, and a significant amount of greenhouse gas emissions as a result. But there is an opportunity to reverse this trend.

Through the implementation of energy efficient policies and management systems, Indonesia's industrial sector could conserve as much as 30 per cent of its current energy use. Such a saving in energy would cut emissions and help to minimize production costs as fuel subsidies are gradually reduced.



Indonesia's energy consumption (Excluding biomass)

Data Source: Indonesian Ministry of Energy and Mineral Resources, 2018 Handbook of Energy & Economic Statistics (data from 2017)

FAST FACTS

Population: 264 million people.

National energy demand

The Indonesia National Energy Master Plan predicts that the final energy demand in 2025 will increase by 67.5% from 2016 levels.

The industrial sector and the economy

Industry drives economic growth in Indonesia, contributing 41% to total GDP in 2016 . Over the last 12 years, mining has contributed the largest share to GDP in Indonesia, followed by food and tobacco. Other large sub-sectors include textiles, chemicals, rubber and plastics as well as metal and metal products.

Industrial energy growth

By 2025, industry will be the Indonesia's major energy user, consuming approximately 47.7% of the national energy supply².

Industrial energy policy

There are a number of laws and regulations relating to energy efficiency and conservation in Indonesia. Of the relevance to the industrial sector or the ones that relate to the industrial sector include the Government Regulation No. 70/2009, which sets out the efficiency responsibilities for large energy consumers. The Energy and Mineral Resources Minister Regulation No.14/2012 on Energy Management provides further details on implementing energy efficiency measures including requirements around energy management systems, standardization and labelling, energy saving campaigns, and incentives. Meanwhile, the Labor Ministry Decree No.80/2015 on Energy Manager Certification in Industry and Building requires a competency standard to be attained by energy managers in industrial sectors and buildings.

Accelerating industrial energy efficiency in Indonesia

Indonesia already boasts the second largest market for energy efficiency implementation in the ASEAN region. However, electricity subsidies and limited financing schemes mean there has been very little incentive for industry to reduce its energy bills or invest in efficient technology and management systems. This is particularly the case for smallto-medium sized enterprises with fewer resources to invest in energy efficiency improvements.

¹ Data Source: Trading Economics (2018)

² Data Source: Ministry of Energy and Mineral Resources (2017)

Energy consumption by fuel-type in industrial sub-sectors



Data source: Manufacturing Industrial Statistics Indonesia 2015 in Statistics Indonesia (2018)

FINANCE Designing financing solutions

After examining the ecosystem of existing industrial energy efficiency initiatives in Indonesia — many of which focus on policy reform and general awareness raising — the Accelerator identified a gap within the financial services sector. The analysis found that banks were not providing low-interest loans for energy efficiency projects. Barriers include limited scale, the expense of conducting investment grade audits and an overall high perception of risk. The Accelerator's design of a national seed-fund to provide concessional debt for industrial energy efficiency projects will allow for large-scale proof of concept demonstrations in key industries such as mining, textiles and cement production. Simultaneously, the design and introduction of de-risking instruments, such as energy savings insurance, aims to attract more private sector capital to the national energy efficiency market.

Project Timeline			
2018	2019	2020	2021
Diagnostic analysis of the Indonesian market.	Ideation, concept development and engagement with financial service providers and potential partners to assess and test assumptions for effective industrial energy efficiency financial models and products.	Presentation of proposed Industrial Energy Efficiency Seed Fund.	National and international Industrial Energy Efficiency Seed Fund partners engaged for roll-out and implementation.

CONTACT

Since its launch, the Accelerator has engaged dozens of critical actors on the road to energy efficiency. For more information on how your organization can support and join the movement contact the Accelerator's Indonesia project coordinator, Nurzat Myrsalieva: n.myrsalieva@unido.org

To find out more about the Industrial Energy Accelerator contact our global project manager, Rana Ghoneim: **R.Ghoneim@unido.org**

About the Industrial Energy Accelerator

In partnership with key government agencies and industry stakeholders, the Industrial Energy Accelerator works on the ground to rally government, industry and finance around solutions that ignite change in energy-intensive industries. We then take our knowledge and experience to the world, sharing what we have learned to inspire a global movement for industrial energy efficiency.







