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Implementation of NDCs: Opportunities and Challenges

Resources to Advance LEADS Implementation (RALI)

ICF International

Asia Clean Energy Forum | 9 June 2016

About ICF International



- Professional services for:
 - All levels of government
 - Corporations
 - Multilateral institutions
- LEDS and clean energy support for:
 - Resources to Advance LEDs Implementation (RALI)
 - Low Emissions Asian Development (LEAD)
 - Catalyzing Clean Energy in Bangladesh (CCEB)



Photo credit: Panos

About USAID RALI



Reporting With CLEER

If I know the amount of energy generated or saved...
If you know the amount of energy generated or saved for a given project (e.g., kWh or J), use the CLEER Tool to estimate and report GHG emission reductions.

Get Started with the CLEER Tool

If I need help estimating the amount of energy generated or saved...
If you do not know the amount of energy generated or saved for a given project (e.g., kWh or J), download and use the CLEER Excel Calculators.
Take me to the CLEER Calculators
(The CLEER Tool will be expanded soon to help estimate energy savings data)

CLEER Clean Energy Activities

- Anaerobic Digesters for Manure Management
- Appliance and Equipment Efficiency
- Biomass Energy - Select Fuels
- Building Energy Efficiency
- Geothermal Systems - Direct Heat
- Geothermal Systems - Heat Pump
- Geothermal Systems - Power
- Hydroelectric Power Systems
- Solar Photovoltaic Systems
- Solar Thermal Systems
- Stranded Natural Gas Capture Systems
- Transmission & Distribution System
- Upgrades - Technical Loss Reductions
- Wind Turbine Systems

Coming Soon

Analysis of Intended Nationally Determined Contributions (INDCs)
May 2016

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HYDROELECTRIC AND WIND PROJECTED RESULTS AT A GLANCE

20,734,820 tCO₂e mitigated from 2016 to 2030 estimated using CLEER GHG predictor calculator	INCREASING ENERGY ACCESS WHILE REDUCING GHG EMISSIONS With a population of almost 255 million and a member of the G20, Indonesia is among the world's top emitters of greenhouse gases (GHGs). Approximately one-fifth of the population lacks access to electricity, despite Indonesia having high renewable energy and energy efficiency potential with traditionally low electricity rates. ¹
1,431,349 tCO₂e mitigated in 2016 estimated using CLEER GHG calculator	USAID Indonesia launched the five-year, \$15 million Indonesia Clean Energy Development (ICED) Project in March 2011 to increase access to energy services, stimulate economic growth, slow the growth of energy sector GHG emissions, and develop clean energy and transportation initiatives. ICED set a goal of avoiding 4 million metric tons of CO ₂ -equivalent (tCO ₂ e) annually from energy and transportation, installing 120 megawatts (MW) of clean energy generating capacity, and completing at least 20 small to medium-sized renewable energy and energy efficiency projects. ICED was also an important contributor to the U.S.-Indonesia Comprehensive Partnership signed by President Barack Obama and President Susilo Bambang Yudhoyono in 2010.
670 MW hydro and wind capacity installed by 2016	ICED worked in partnership with the Government of Indonesia (GoI) to reduce the carbon intensity of its energy sector, aligning with the country's goals to ensure adequate and reliable energy supplies at affordable prices. ICED facilitated cooperation between Indonesia and Thailand to exchange experience on biogas development. This resulted in the mapping of potential biogas resources in Kangar, facilitating the development of the domestic biogas industry. ICED provided critical assistance to help develop Indonesia's first four wind farms, through feasibility studies and power grid enhancements to improve integration. ICED also helped implement a small-scale hydro project along the Sei Bangel River, significantly increasing the local population's access to energy.
5.8 million people with improved energy access	ICED partners include 12 Indonesian banking and financial institutions, the Indonesia National Power Company, Ministry of Energy and Mineral Resources, the Central Bank, and Ministry of National Development Planning. The project concluded in February 2015.
\$1.4 billion financing leveraged for hydro and wind	ICED LEVERAGED \$1.7 BILLION TO EXPAND RENEWABLE ENERGY CAPACITY ICED assistance to renewable energy projects resulted in a major expansion of Indonesia's clean energy sector. Many renewable energy project developers took advantage of the GoI's feed-in tariff policy and power purchase agreements, and collectively leveraged over \$1.7 billion, of which \$1.4 billion supported hydroelectric and wind energy. Small hydroelectric generation capacity comprised nearly half of all renewable generation projects supported by ICED, with ICED helping to develop over 422 MW of small hydro projects across Indonesia. ICED supported the development of 247 MW of wind energy generation expected to be commissioned within the next

Clean Energy Emission Reduction (CLEER) Tool

INDC White Paper


Clean Energy Case Studies





INDC White Paper – just released!

- Evaluated the commitments of 37 countries (EC LEDS and other)
- Presents regional and country specific summaries of:
 - Commitments for Mitigation
 - Commitments for Adaptation
 - Analytical Basis of Commitments
 - Technical and other Needs
 - Context Information

Available at:

<https://www.climatelinks.org/resources/analysis-intended-nationally-determined-contributions-indcs>

Indonesia 

Indonesia Summary

Information Contained in Country INDC	Target	Unconditional	
		Reduce GHG emissions by 29% from BAU levels (2,881 MtCO ₂ e) by 2030.	
	Conditional	Reduce GHG emissions by 41% from BAU levels by 2030.	
Mitigation	Basis of Target	Analytical Basis	<ul style="list-style-type: none"> • Sector-based, but methodology and sector targets are not described. • Post-2010 BAU modeling based on 2000-2010 national GHG trajectory (no national GHG emissions included in INDC). • National emissions for some sectors are published elsewhere.^{xxx}
		Existing Policies	<ul style="list-style-type: none"> • Indonesia's Mitigation Policy (RAN-GRK) • Indonesia's Framework for Nationally Appropriate Mitigation Actions • National Action Plan on Climate Change Adaptation
		Mitigation Actions	Mitigation actions include: <ul style="list-style-type: none"> • Reducing deforestation and forest degradation; • Restoring ecosystems; • Energy conservation; • Increasing energy from "new and renewable sources" to 23% by 2025; and • Improving agriculture and fisheries productivity; and improved waste management.
Adaptation	Basis of Target	Included in INDC	Yes
		Implementation Strategies	<ul style="list-style-type: none"> • Made significant progress towards implementing a National Action Plan on Climate Change Adaptation (RAN-API). • Mapping regional vulnerabilities to strengthen institutional capacity and promulgate improved knowledge management, disaster risk reduction, and application of adaptive technologies.
		Priority Sectors	Agriculture (including Forestry and Fisheries); Water; Energy Security; Health; Infrastructure; Public Services; Urban Systems.
		Data Quality & Transparency	<ul style="list-style-type: none"> • Yes; mainstreaming climate change mitigation and adaptation into development planning. • Working with public and private sector, academia, civil society and indigenous communities to develop comprehensive plans.
Participation	INDC prepared through consultations with academia, the private sector, and civil society at national and local levels.		
Financial Assistance	<ul style="list-style-type: none"> • No specific financing request included. • INDC indicates need for international financial assistance. 		
Technical Needs Identified in INDC	<ul style="list-style-type: none"> • No specific technical needs identified in INDC. 		
Information from Other Sources	GHG Inventories and Reports	<ul style="list-style-type: none"> • Submitted Second National communication in 2010. • Latest inventory submitted to UNFCCC was for 2005, prepared using Tier 1 and 2 methodologies following IPCC 2006 Guidelines. • No BURs submitted to date. 	

Areas for RALI support include:

- **Transparency:** Support for MRV, GHG inventories
- **NDCs:** Refinement of country NDCs
- **Implementation:** Support the mainstreaming of climate considerations, NAMAs
- **Institutional Arrangements:** Support ministry coordination

Tools can help countries move forward in more transparent, defensible manner by evaluating the pipeline of activities in relation to the national goal

Thank You!



Marian Van Pelt

Marian.VanPelt@icfi.com

Vice President, ICF International

USAID RALI

www.climatelinks.org/projects/rali

www.cleertool.org/

icfi.com/climate

