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LEDS in Indonesia: Addressing Vulnerability Needs

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USAID Indonesia Clean Energy Development

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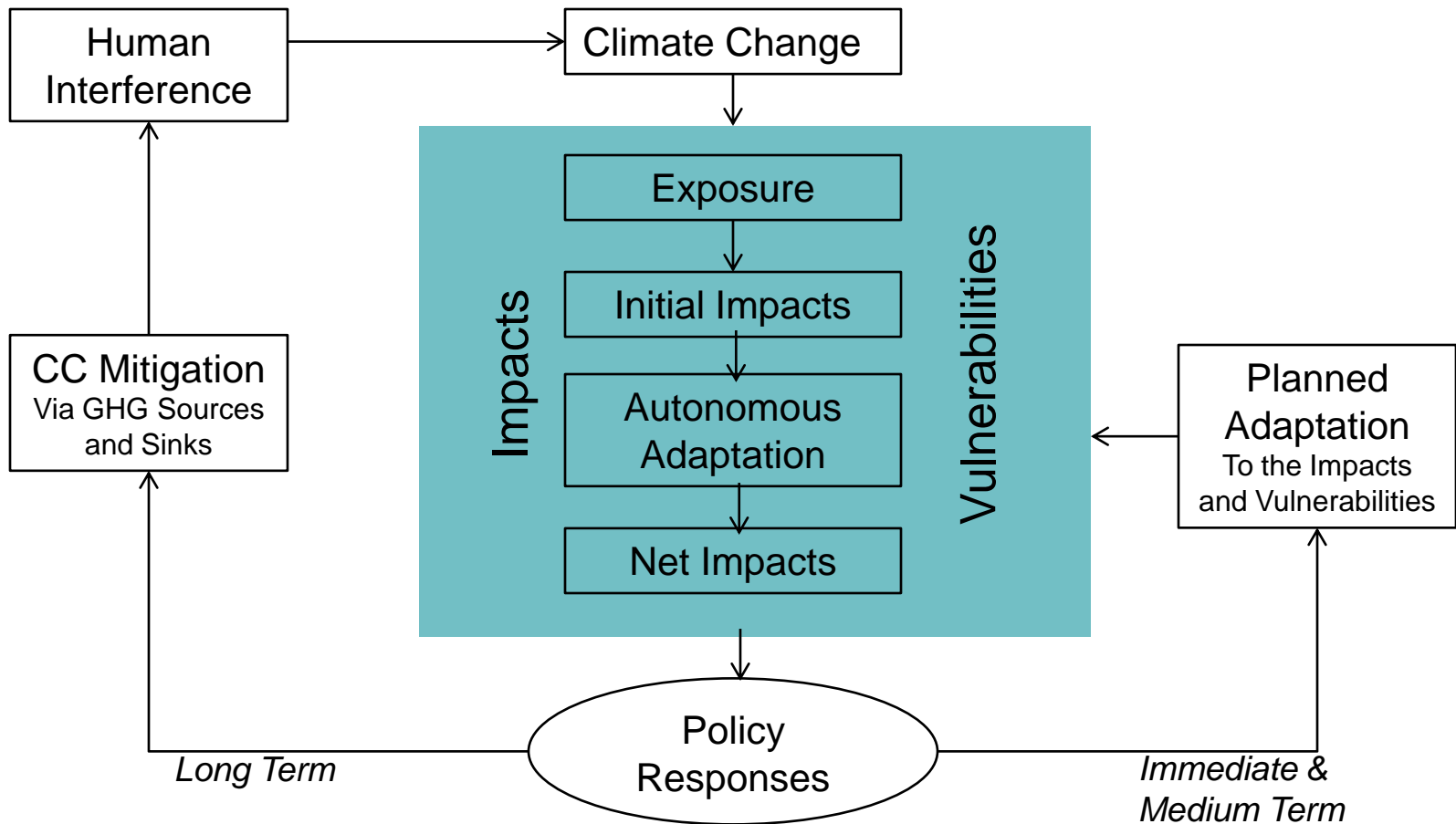
Outline

- Framework
- Mitigation, Adaptation and Energy Policies
- Vulnerability in Energy
- Energy Planning to Address Vulnerability
 - National Level
 - Sub-national Level



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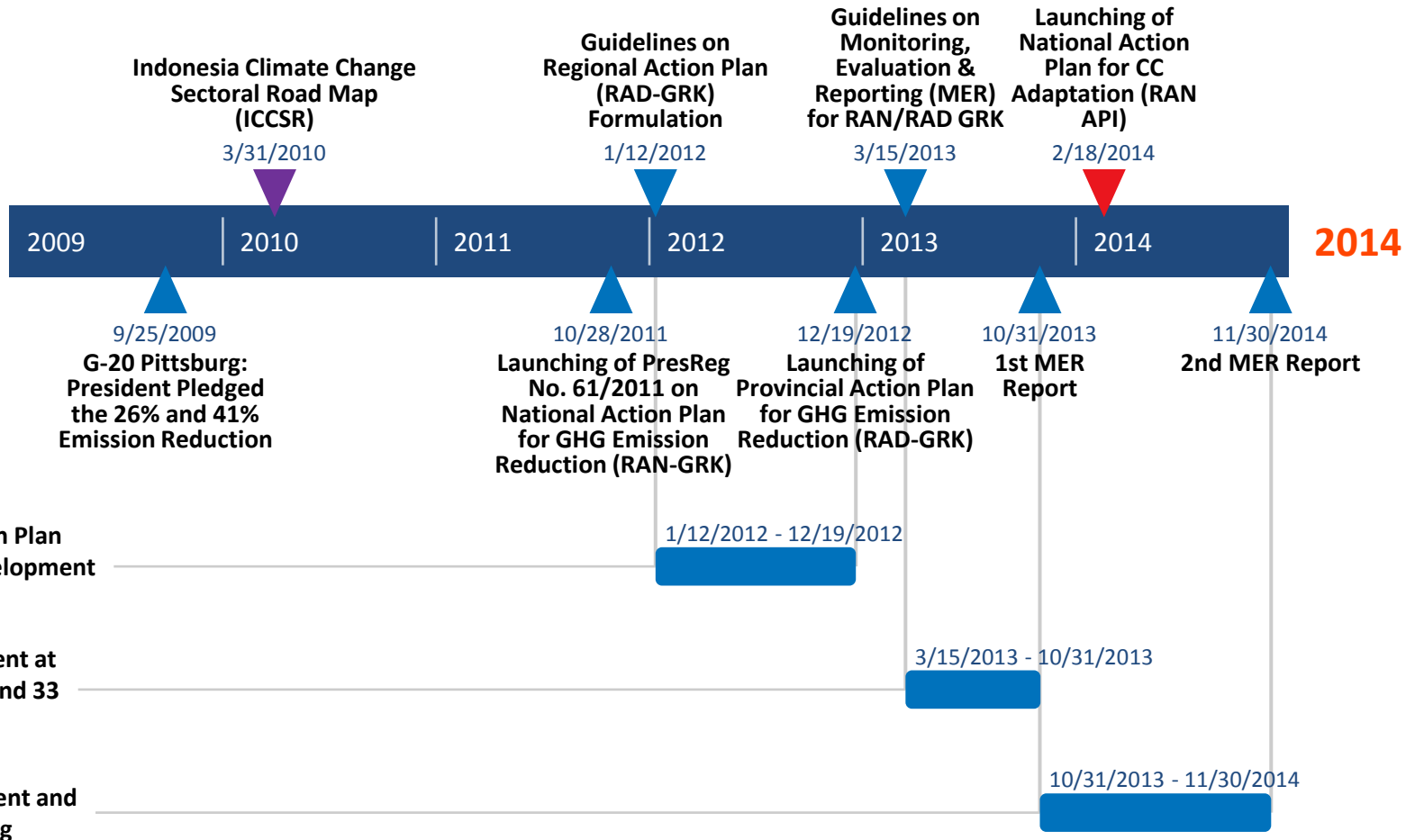
Framework





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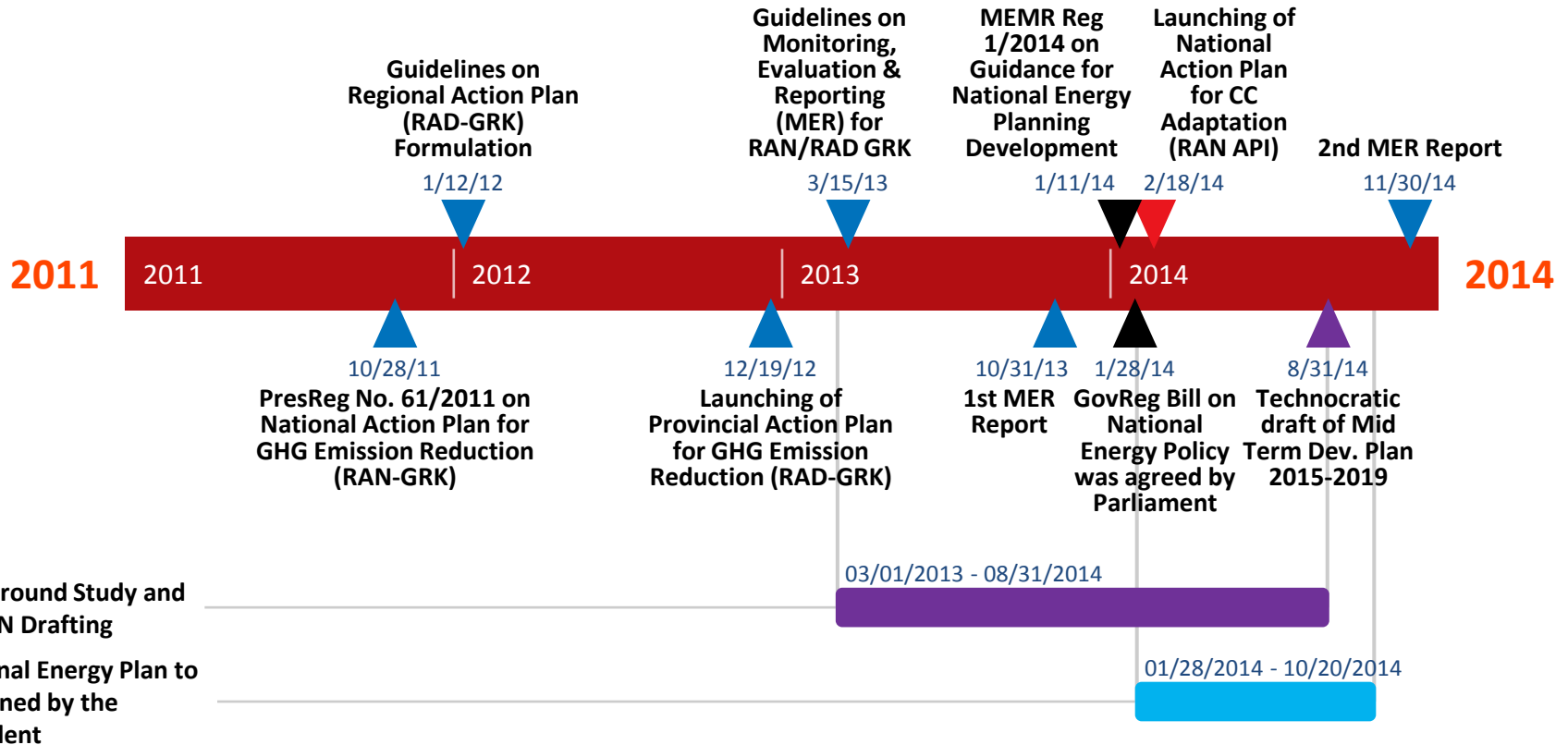
Mitigation and Adaptation Planning in Indonesia





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Timeline of Mitigation, Adaptation and Energy Planning in Indonesia





Interplay between Mitigation, Adaptation and Energy

| | Mitigation (RAN-GRK) | Adaptation (RAN-API) | Energy (RUEN-RUED) |
|-------------|---|---|--|
| Coverage | National and Province | National, Selected Province and Selected District/ Municipality | National, Province, District/Municipality |
| Legal Basis | <ul style="list-style-type: none"> • Law No.7/2007 on Long Term Development Plan (RPJP) 2005 – 2025 • Law No. 26/2007 on Spatial Planning • Law No. 32/2009 on Environmental Protection and Management • Indonesia Climate Change Sectoral Road Map*) • National Development Planning: Indonesia Response to Climate Change (NDPIRCC): Yellow Book Bappenas *) • Min. of Public Works Regulation No. 11/2012 on Ministry of Public Works' National Action Plan for CC Mitigation and Adaptation • MOE Regulation No. 9/2011 on Guidelines for Environment Strategic Review | | |
| | <ul style="list-style-type: none"> • PresReg 61/2011 on National Action Plan for GHG Emission Reduction (RAN-GRK) • PresReg 71/2011 on GHG Inventory | <ul style="list-style-type: none"> • Climate Change Adaptation Strategy • National Action Plan for CC Adaptation**) • Vulnerability Index & Data Information System: Social Economic Impacts & CC Adaptation (SIDIK DESA) ***) | <ul style="list-style-type: none"> • GovReg 79/2014 on National Energy Policy • MEMR Reg 1/2014 on Guidelines for National Energy Planning • PresReg on National Energy Planning ***) |

*) Government official document, without legal basis

***)No legal basis, and will refer to PresReg on Mid Term Dev Plan 2015 – 2019

***)Will have legal basis



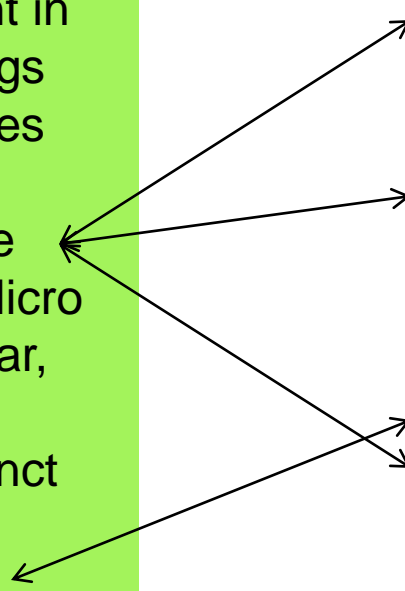
Energy Sector in RAN GRK (mitigation) and RAN API (adaptation)

Mitigation (RAN-GRK)

- Energy management in Industry and Buildings
- Household appliances efficiency
- New and Renewable Energy Provision (Micro and Mini-Hydro, Solar, Wind, Biomass and Energy Self-Sufficient Village)
- Biogas utilization
- Post mining reclamation

Adaptation (RAN-API)

- Catchment area restoration and conservation
- Expansion of utilization of renewable energy sources (waste and hydro)
- Bioenergy utilization
- Research and Development on hydro vulnerability and crops to energy





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A view on Vulnerability in Energy Sector

Un-Availability of energy:

- Limited supply of modern energy
- Low quality of energy supply, such as unstable power services

Lack of Access to energy:

- Electrification ratio

Un-Affordable:

- Highly subsidized energy prices - heavy burden to government budget, unsustainable

Non-Acceptable:

- Power plant inefficiency
- High reliance on depleted resources for power plant → increasing production cost and GHG Emission
- Massive use of energy intensive appliances, low awareness on energy efficiency
- Change in precipitation and forest logging would affect hydro power plant performance



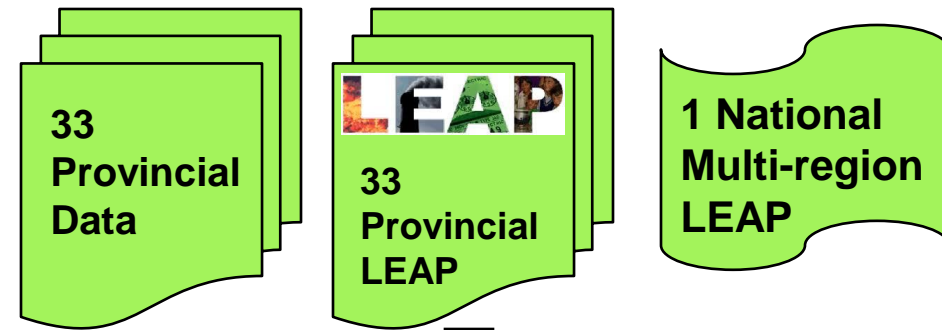


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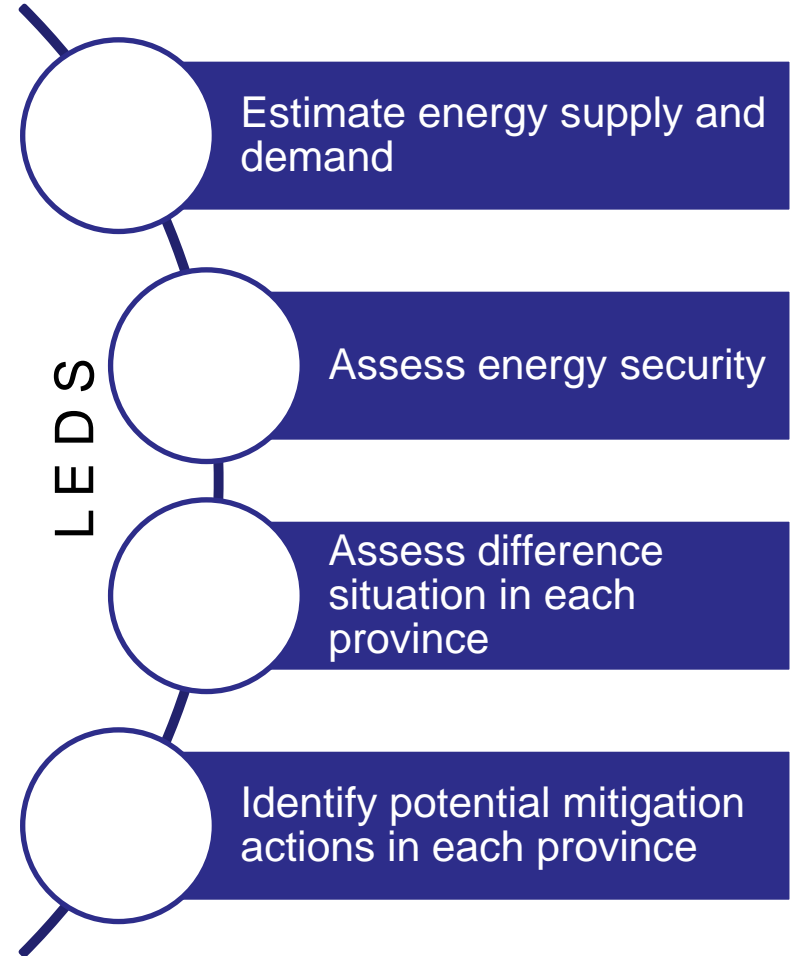
ICED Activities

Background Study of
RPJMN 2015-2019 *

Product



Purpose

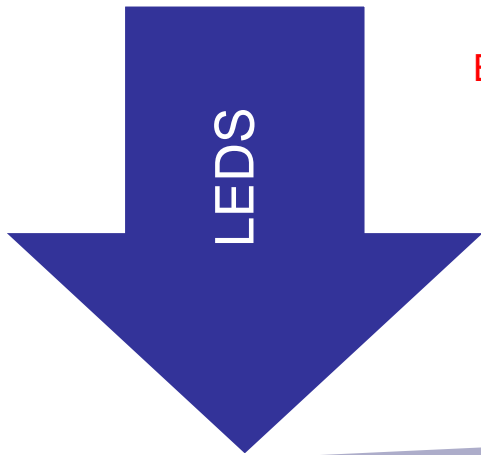


* Medium Term Development Plan



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Energy Planning to Address Vulnerability

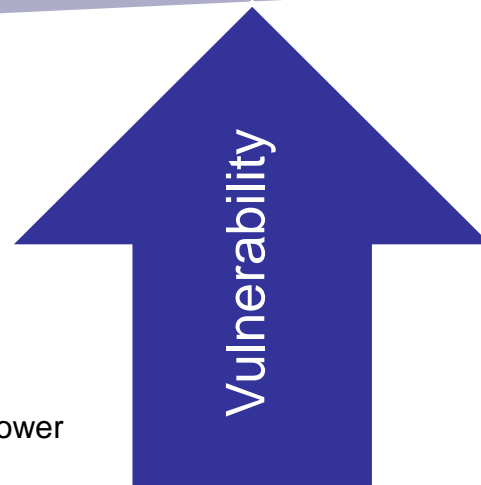


Energy Planning Process with LEAP:

- Energy supply and demand estimation
- Energy security status for each area
- GHG status and trajectory for each area
- Evidence-based mitigation action

Energy Insecurity (lack of 4A)*

- Unstable power supplies
- Lack of access to energy
- Power plant inefficiency
- High reliance on depleted resources for power plant → increasing production cost and GHG Emission
- Massive use of energy intensive appliances
- Change in precipitation and forest logging affect hydro power plant



* Availability, Accessibility, Affordability, Acceptability



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Thank You

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