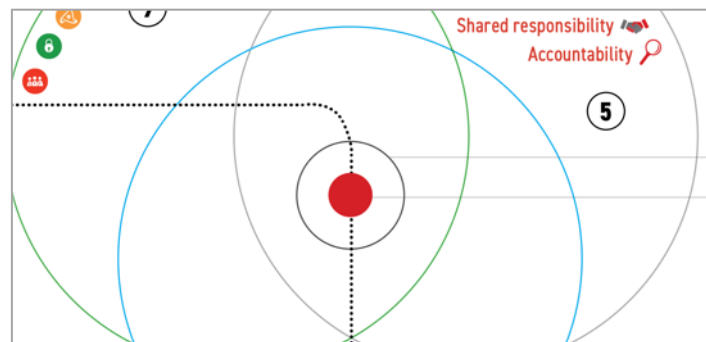


# Agenda 2030 meets digital principles - With examples from Bangladesh and Indonesia

08 December 2020, 9:00 – 10:15 CET



**Transformation - Urban Opportunities - Climate Change (TUrbOCLiC)**

Cross-sectoral group of the TUEWAS and SNGA network of GIZ



## **Before we start....**

- The session will be recorded, please grant your permission for the recording
- Please keep your microphone muted unless you are speaking
- If you wish, and connection allows, feel free to keep your camera on
- If you have a question or comment, please post it in the chat or
- In the Q & A session you can also virtually “raise your hand” via MS Teams

# Programme

- **Welcome and Moderation: Vaishali Nandan**, Senior Advisor and Head of Project Climate Smart Cities and Joint Speaker of TUrbOCliC
- **Agenda 2030 meets digital principles – The assessment framework and some results - Dr. François van Schalkwyk** – Expert, Lecturer, Consulting researcher
- **Planning Information system (PLIS) for climate-resilient planning of investment projects in Bangladesh – Ms. Kaniz Fatema**, Technical Advisor Organizational Development - Adaptation to Climate Change into the National and Local Development Planning (ACCNLDP II)
- **AKSARA – Indonesia Low Carbon Development Planning and Monitoring Application – Ms. Annisa Diva Putri Murbaran and Ms. Maria Febe Evnike**, Junior Advisors – Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV MMI)
- **Interactive discussion with audience**

# Programme

- **Agenda 2030 meets digital principles – The assessment framework and some results -**  
**Dr. François van Schalkwyk** – Expert, Lecturer, Consulting researcher



# Principles *for* Digital Development



Design with the User



Understand the Existing Ecosystem



Design for Scale



Build for Sustainability



Be Data Driven



Use Open Standards, Open Data,  
Open Source, and Open Innovation



Reuse and Improve



Address Privacy & Security



Be Collaborative

## 2030 Agenda Implementation Principles



**Universality** GIZ programmes need to support the nationally defined goals for implementing the 2030 Agenda in its partner countries.



**Shared responsibility** More emphasis must be placed on the inclusion of relevant stakeholders and on the structuring of multi-stakeholder partnerships.



**Integrated approach** In the implementation of programmes, all dimensions of sustainability and the increased use of synergies between measures, policy fields and sectors need to be considered.



**Leave no one behind** Stronger focus must be placed on marginalised population groups, and there should be a push for more disaggregated data and target-group analyses to understand and address the concerns of those who are typically left behind.



**Accountability** A stronger focus needs to be put on reporting the GIZ contribution to the implementation of the 2030 Agenda as well as supporting partner countries in their efforts of strengthening statistical capacities and the reporting mechanisms to inform proper review and tracking of progress.

# Agenda 2030 Principles Meet Principles for Digital Development

## 2030 Agenda Implementation Principles

### Digital Development Principles

Universality	Design for scale Be collaborative
Integrated approach	Understand the ecosystem Openness
Leave no one behind	Design with the user Address privacy & security
Shared responsibility	Reuse and improve Be collaborative
Accountability	Build for sustainability Be data driven



# Assessment framework

**FIGURE 001**

Links between principles, the SDGs and digital solutions for climate-resilient and low-carbon urban development



**giz**  
Digital solutions

2030 Agenda Implementation Principles

Universality  
Integrated approach  
Leave no one behind  
Shared responsibility  
Accountability

GIZ programme  
Digital solution

SUSTAINABLE DEVELOPMENT GOALS

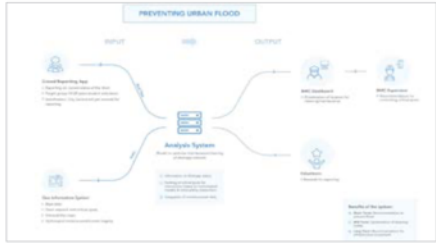
Development  
that is  
collaborative, open &  
inclusive

The objective of the study is to understand better where improvements can be made in the planning, design and implementation of digital solutions so that they are likely to deliver sustainable and equitable outcomes.



# Four Solutions analysed

## Flood prevention



**Digital solution** FLOOD PREVENTION MOBILE APP  
**City** Bhubaneswar, India  
**Description** A reporting application for mobile phones that enables citizens to report blocked drains in real-time to the city. Reports received by the city are combined with existing data to optimise the management and clearing of the city's drainage network. The aim of the tool is to minimise disruption in urban areas caused by flooding which, in turn, is attributable to blocked drains in the city.

## Planning Information System



**Digital solution** PLANNING INFORMATION SYSTEM (PLIS)  
**City** Dhaka, Bangladesh  
**Description** The Bangladesh Planning Commission's (PC) mandate includes the appraisal of public investment projects proposals. Previously the PC did not have a systematic way to access relevant information when evaluating project proposals. The PLIS tool supports the project proposal appraisal process by providing relevant information. The key features of PLIS are the Geographical Information System (GIS) platform and the database of the public investment project proposals.

## Monitoring, Evaluation & Reporting



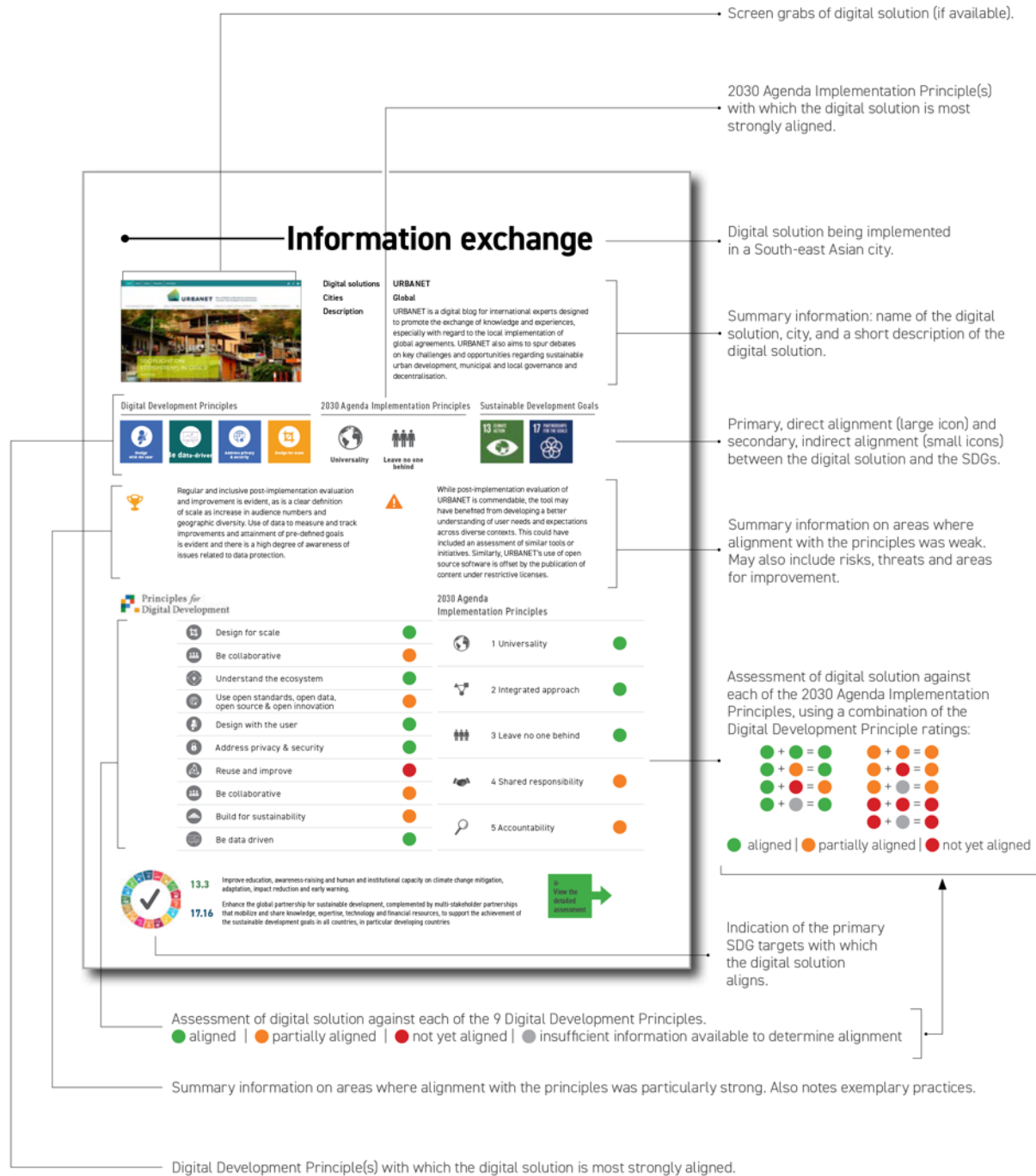
**Digital solutions** AKSARA (ONLINE MONITORING, EVALUATION AND REPORTING TOOL)  
**City** Jakarta, Indonesia  
**Description** AKSARA (formerly PEP-Online) solves the challenge of Indonesia's expansive island geography. Using this online system, contributors from all 34 provinces, including Jakarta City, can report and monitor their emissions. The website also allows the Government of Indonesia to increase the transparency and accountability of the reporting system for mitigation action activities.

## Information exchange



**Digital solutions** URBANET  
**Cities** Global  
**Description** URBANET is a digital blog for international experts designed to promote the exchange of knowledge and experiences, especially with regard to the local implementation of global agreements. URBANET also aims to spur debates on key challenges and opportunities regarding sustainable urban development, municipal and local governance and decentralisation.





# Results

## Monitoring, Evaluation & Reporting

**Digital solutions** **AKSARA (ONLINE MONITORING, EVALUATION AND REPORTING TOOL)**  
**City** **Jakarta, Indonesia**  
**Description** AKSARA (formerly PEP-Online) solves the challenge of Indonesia's expansive island geography. Using this online system, contributors from all 34 provinces, including Jakarta City, can report and monitor their emissions. The website also allows the Government of Indonesia to increase the transparency and accountability of the reporting system for mitigation action activities.

**Digital Development Principles** **2030 Agenda Implementation Principles** **Sustainable Development Goals**

**Accountability**

On-going consultation in the design and implementation phases. Use of data-centric approaches to ensure use of tool by government stakeholders. High degree of commitment and co-operation of government as both owner and user of the online tool.

No evidence of research done prior to design and implementation, nor of consideration given to scaling or to the re-use of pre-existing emissions measuring and monitoring tools. Some evidence of openness and despite a high degree of user consultation, there is no evidence of attention to data privacy and protection.

**Principles for Digital Development**

- Design for scale
- Be collaborative
- Understand the ecosystem
- Use open standards, open data, open source & open innovation
- Design with the user
- Address privacy & security
- Reuse and improve
- Be collaborative
- Build for sustainability
- Be data driven

**2030 Agenda Implementation Principles**

- 1 Universality
- 2 Integrated approach
- 3 Leave no one behind
- 4 Shared responsibility
- 5 Accountability

**11.6** Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

**11.A** Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.

**13.2** Integrate climate change measures into national policies, strategies and planning



15

## Planning Information System



**Digital solution** **PLANNING INFORMATION SYSTEM (PLIS)**  
**City** **Dhaka, Bangladesh**  
**Description** The Bangladesh Planning Commission's (PC) mandate includes the appraisal of public investment projects proposals. Previously the PC did not have a systematic way to access relevant information when evaluating project proposals. The PLIS tool supports the project proposal appraisal process by providing relevant information. The key features of PLIS are the Geographical Information System (GIS) platform and the database of the public investment project proposals.

**Digital Development Principles** **2030 Agenda Implementation Principles** **Sustainable Development Goals**

**Accountability**

Narrowly defined user group consulted during all the phases of the development of the tool.

Clear definition of what scaling means in the implementation context and scaling clearly taken into consideration in the design of the tool.

No evidence that the project paid attention to understanding the ecosystem prior to planning and design; to the possibility of other, similar tools or initiatives worthy of consideration, or of sharing and consulting beyond the confines of the implementation context (i.e. government).

**Principles for Digital Development**

- Design for scale
- Be collaborative
- Understand the ecosystem
- Use open standards, open data, open source & open innovation
- Design with the user
- Address privacy & security
- Reuse and improve
- Be collaborative
- Build for sustainability
- Be data driven

**2030 Agenda Implementation Principles**

- 1 Universality
- 2 Integrated approach
- 3 Leave no one behind
- 4 Shared responsibility
- 5 Accountability

**13.2** Integrate climate change measures into national policies, strategies and planning

**9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.



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## DIGITAL DEVELOPMENT PRINCIPLES

	Bhubaneswar	Dhaka	Jakarta	Global
1 Design with the user	Orange	Green	Green	Green
2 Understand the ecosystem	Green	Green	Orange	Green
3 Design for scale	Green	Green	Red	Green
4 Build for sustainability	Green	Green	Green	Orange
5 Be data driven	Green	Green	Green	Green
6 Use open standards, open data, open source & open innovation	Orange	Orange	Orange	Orange
7 Reuse and improve	Red	Orange	Red	Red
8 Address privacy & security	Red	Red	Red	Green
9 Be collaborative	Green	Red	Orange	Orange

## 2030 AGENDA IMPLEMENTATION PRINCIPLES

1 Universality	Green	Orange	Orange	Green
2 Integrated approach	Green	Green	Orange	Green
3 Leave no one behind	Orange	Orange	Orange	Green
4 Shared responsibility	Orange	Orange	Orange	Orange
5 Accountability	Green	Green	Green	Orange

# Programme

- **Planning Information system (PLIS) for climate-resilient planning of investment projects in Bangladesh – Ms. Kaniz Fatema**, Technical Advisor Organizational Development - Adaptation to Climate Change into the National and Local Development Planning (ACCNLDP II)



# **Planning Information System (PLIS)**

**for climate-resilient planning of investment projects in Bangladesh**

**Adaptation to Climate Change into the National and Local Development Planning II (ACCNLDP II)**

08 December 2020

# Agenda



Why Planning Information System (PLIS) is needed



What is PLIS



How PLIS was implemented



Lessons learned



Way-forward

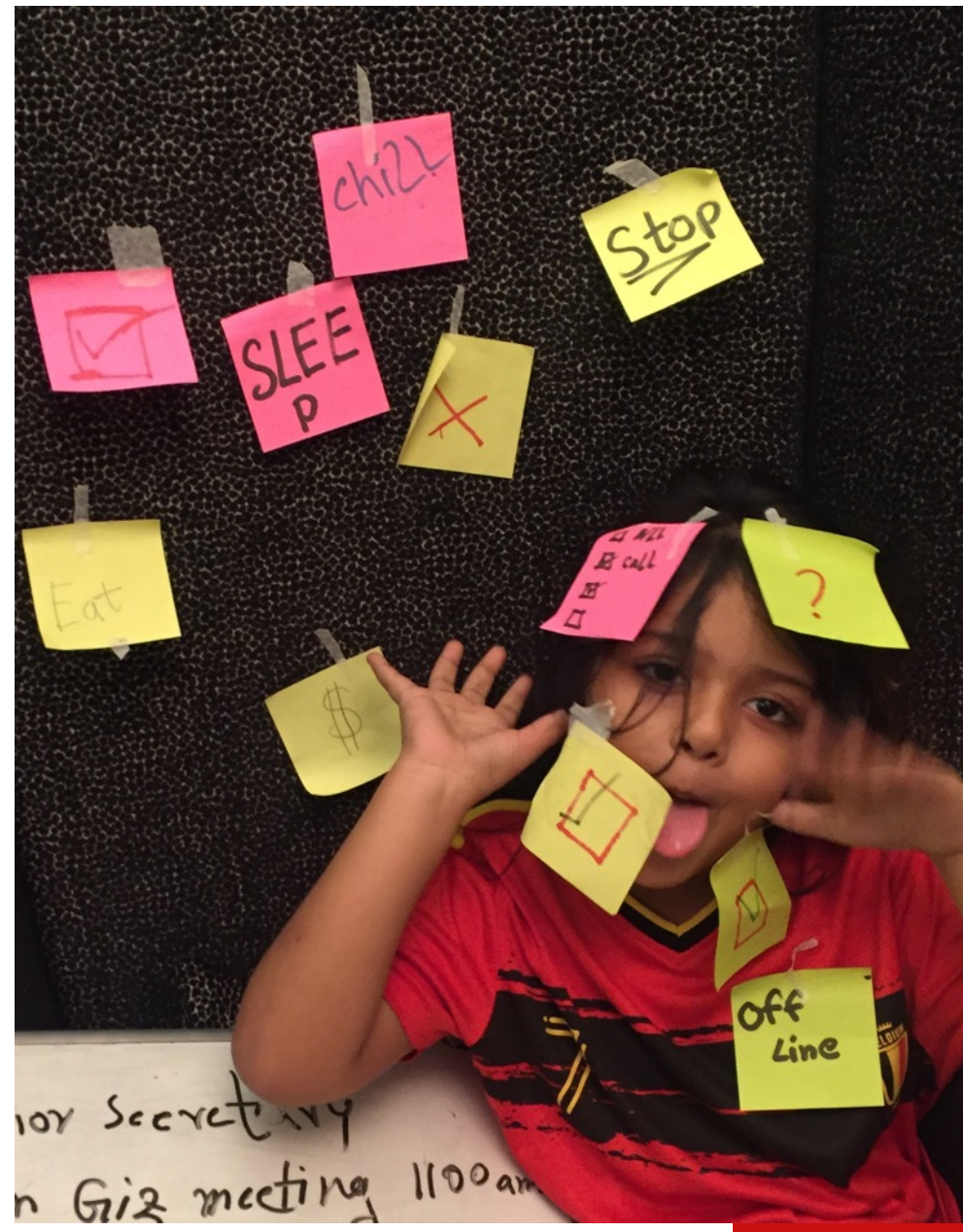


# ? Why PLIS is needed

Mr. Fatema  
Desk officer PID

-Responsible for project appraisal process

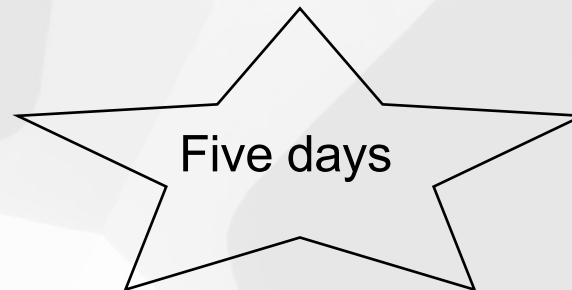
Establishing Dhaka- Sylhet national highway to 4 lanes and construction of separate service lanes on both sides



# ? Why PLIS is needed



- Feasibility
- Coherence with National plans
- Relevance with national priority
- Budget linkage with sectoral allocation
- Existing projects of the agency
- Overlapping or duplication
- Consideration of the fund mobilization
- Cost estimation
- Impact on economic social and environmental aspect



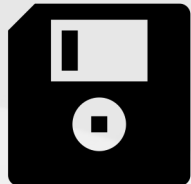
Information needed to effectively apprise the project proposal are often collected following informal channels



# ? Why PLIS is needed

The project is often appraised without

- Suitability of location
- Information related to the existing roads and major installations of that locality
- Spatial plan of the concerned authority
- Demographic and environmental information
- Geomorphic information and information on climate change projections
- WITHOUT other option beside the proposal





# What is PLIS

Server based computer system consisting of:

- Database of the project proposals
  - Proposal documents
  - Identifying data (name, project type, ministry, agencies, wing etc.)
  - Expenditure, duration and location data
  - Donor agencies
  - Summary background, objectives , activities
  - Data is required for PEC/MoP/NEC/ECNEC report
- Geographical Information System (GIS)
  - Positional data of the proposals
  - Type of project (road, water, building etc.)
  - Maps of partner organisations (e.g. LGED, Roads & Highways, Railways etc.)
  - Development plans from partner organisations
  - General maps ( Districts, Upazilas etc., )
- Reporting tool



# Present scopes of PLIS

## Bangladesh Planning Commission

Programming Division

General Economics Division

Socio-Economic Infrastructure Division

Agriculture, Water Resources and Rural Institution Division

Industries and Energy Division

Physical Infrastructure Division



## How PLIS implemented

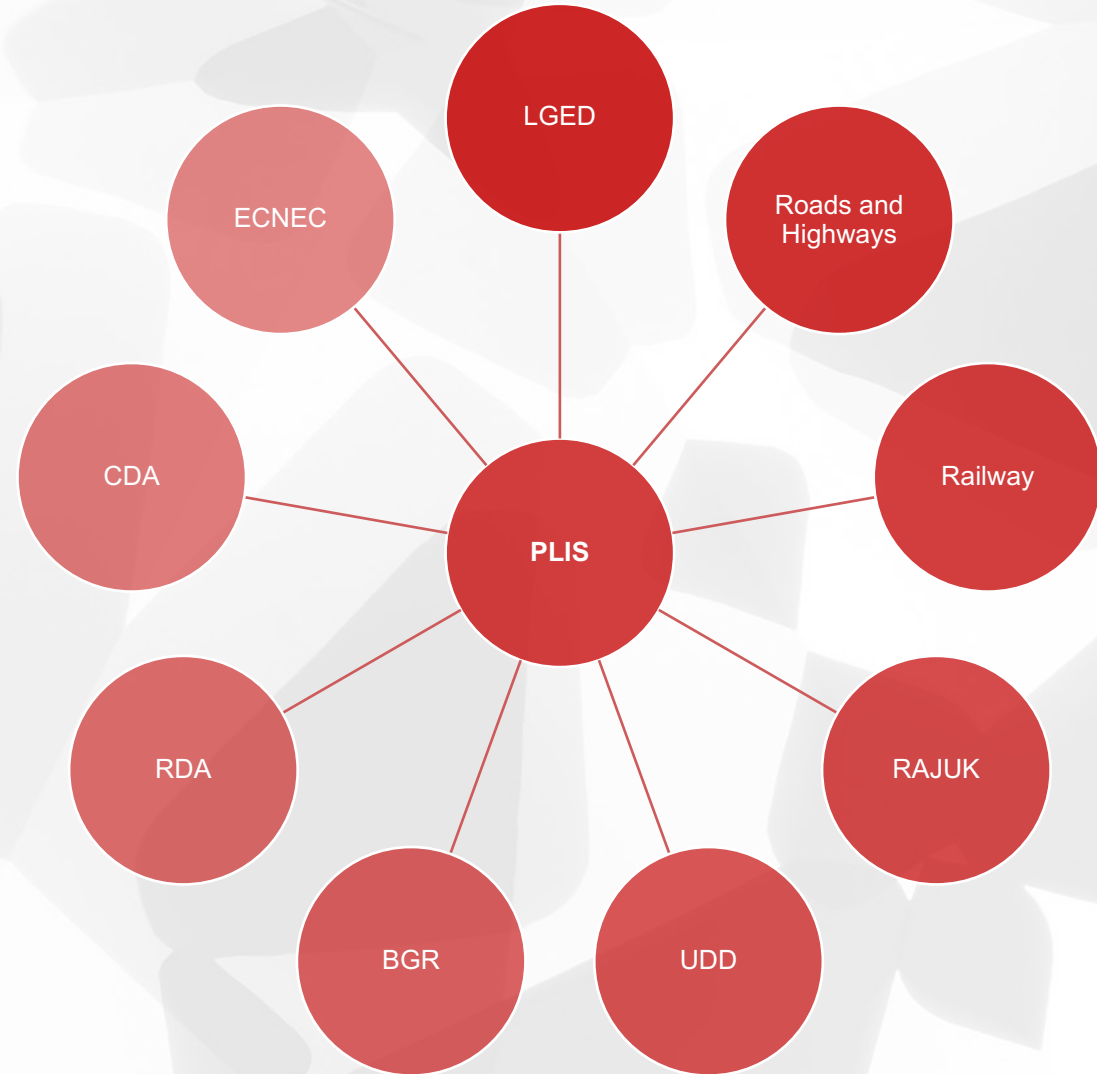
- The initial idea for PLIS came through partner request
- Needs assessment
  - ✓ Series of workshops with the officials of PC
  - ✓ Engaging international consultancy firm
  - ✓ Individual interviews with PC officials by the firm
- Development of the system
  - ✓ Preparing the functional specification, getting feedback and adjustment
  - ✓ **Development of the system, testing, feedback from the key users**



## How PLIS implemented

Appx. 1500  
Project  
Documents

Appx. 3000  
data set of  
GIS info





# Lesson learned

## Data gathering

- No/poor quality of GIS data
- Acquire from different agency were poor quality
- Needed to be checked to be useful for PLIS
- Huge time needed to process for end user



## Leadership

- Complexity of more than one agency in steering
- Rigid leadership vs cultural differences



## Training

- General election (2018)
- Training participants and retainment in PID





# Way Forward



- **Scaling up to all the divisions of Bangladesh Planning Commission**
  - Needs assessment of sector divisions in PC
  - Independent firm to evaluate the needs
- **Tackling Corona**
  - Combination international and national firm of consultant
  - Exploring local IT firms
- **Safeguard project boundary**
  - Awareness building
  - Donor alignment
- **Mainstreaming & sustainability**
  - National priority, resources together with SDG and digital principles



# PLIS digital solution

What to address?

It solves the inadequacy in accessing, storing relevant information and analyzing them to take evidence-based decisions

SDG



Digital Principles

Design with the user

Be data driven

Build for sustainability



# Thank you

## Adaptation to Climate Change into the National and Local Development Planning II (ACCNLDP II)

**Kaniz Fatema**

Technical Advisor -  
Organizational Development

[kaniz.fatema@giz.de](mailto:kaniz.fatema@giz.de)

# Programme

- **AKSARA – Indonesia Low Carbon Development Planning and Monitoring Application – Ms. Annisa Diva Putri Murbaran and Ms. Maria Febe Evnike**, Junior Advisors – Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV MMI)



# AKSARA

APLIKASI PERENCANAAN DAN PEMANTAUAN AKSI  
PEMBANGUNAN RENDAH KARBON INDONESIA

## AKSARA - Indonesia Low Carbon Development Planning and Monitoring Application

Presented at the TURBOCLIC webinar

Monitoring, Reporting and Verification for Mitigation Measures in Indonesia | 8 Dec 2020

<https://pprk.bappenas.go.id/aksara/>

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

# Project Information

## Name of country

Indonesia

## Donor

The Federal Ministry for the Environment,  
Nature Conservation, and Nuclear Safety

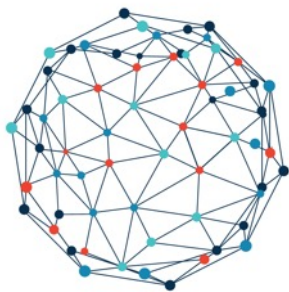
## Implementing organisation

GIZ GmbH

World Agroforestry Centre (ICRAF)

## Name of partner: Ministry of National Development Planning/BAPPENAS

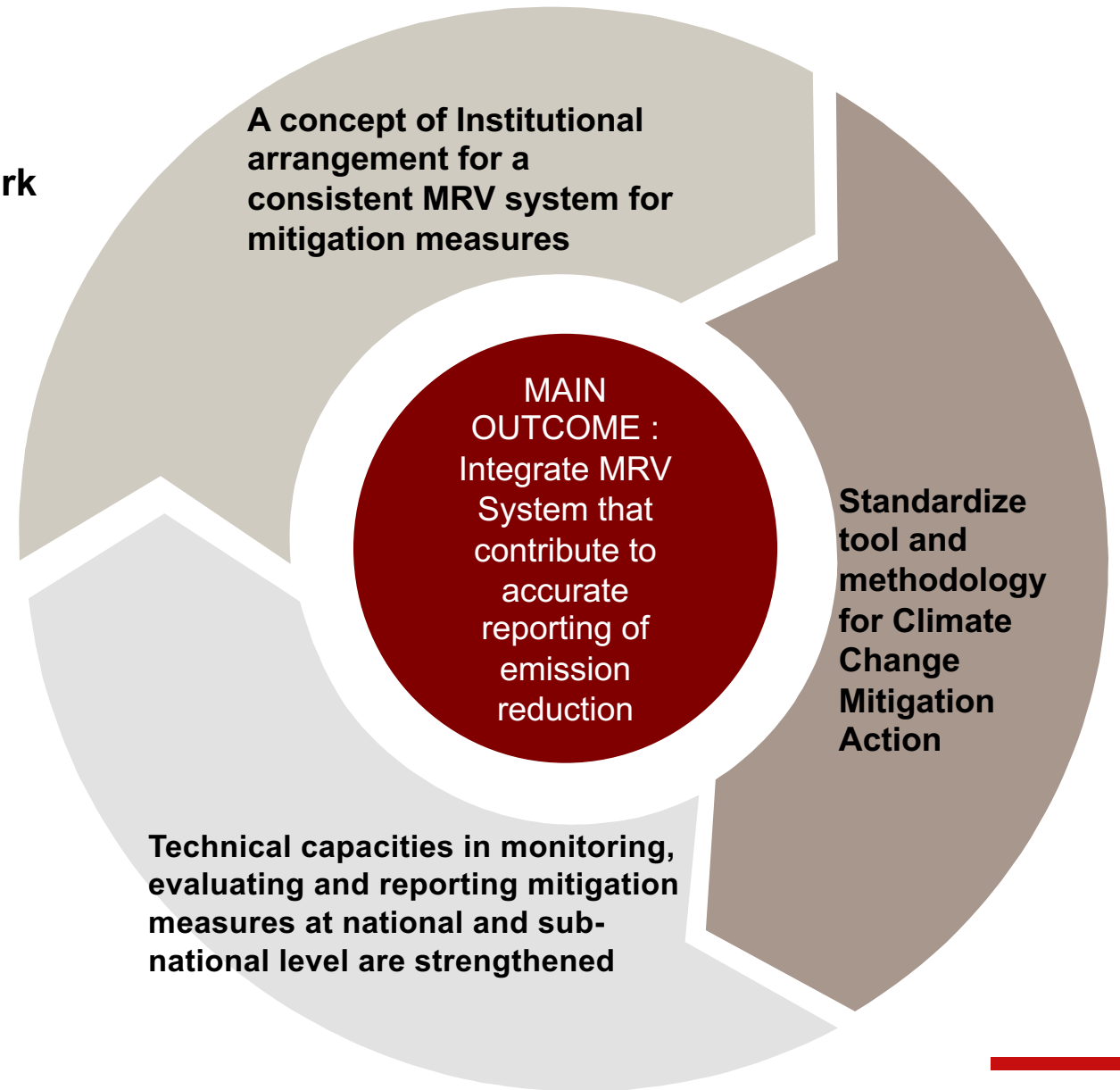
11/2018 – 10/2020



# MRV MMI

Monitoring, Reporting and Verification  
for Mitigation Measures in Indonesia

## Scope of work



# Climate Mitigation Target and Monitoring Tools

**2009**

Gol has committed to reduce emission by 26% (fair scenario) and 41% (ambitious scenario) by 2020

**2011**

Gol has launched Perpes 61/2011 RAN GRK (National Action Plan for GHG Emission Reduction)

**2015**

Gol reviewed RAN GRK, submitted its INDC post-2020 to reduce emission 29% (fair scenario) and 41% (ambitious scenario)



**2015-2016**

Sub-national govt. (34 provinces) reported implementation on mitigation actions to LCDI Secretariat

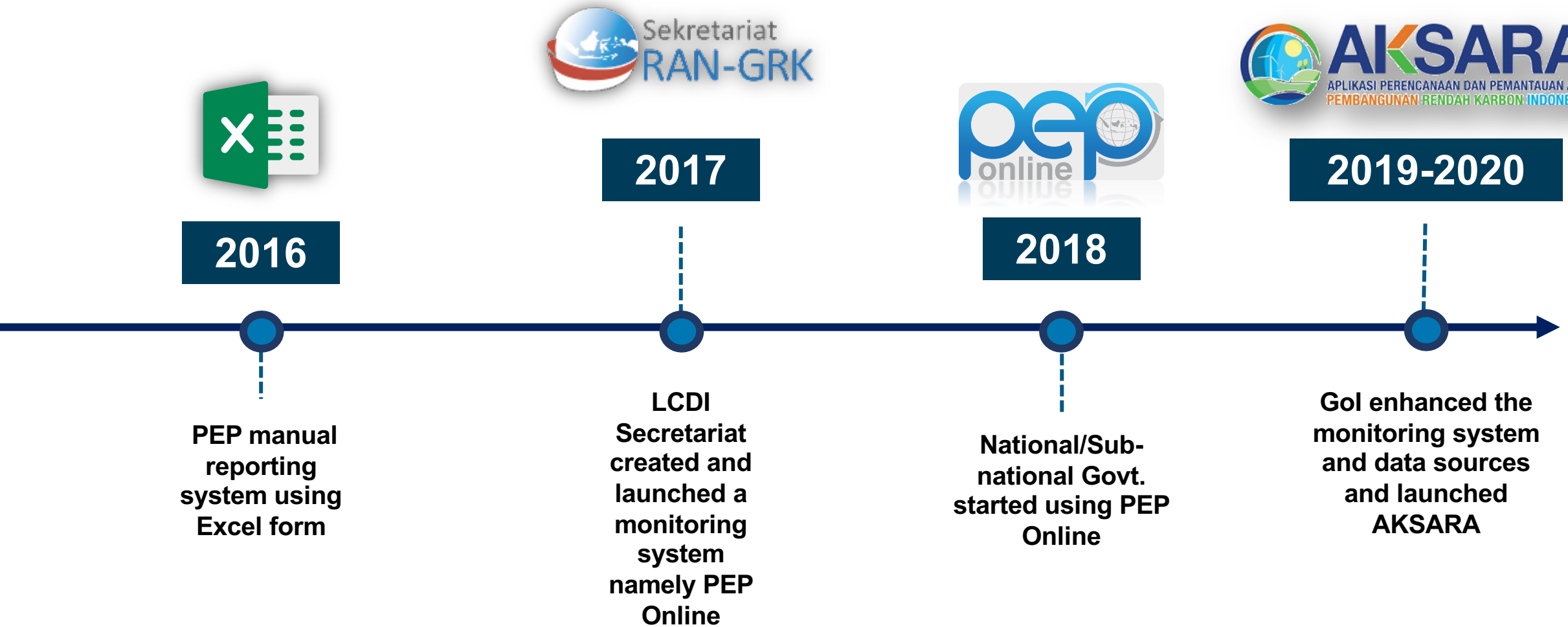
**2017**

Ministry of National Development Planning/Bappenas launched LCDI and PEP Online

**2019**

Transformation of PEP Online Application to AKSARA Application

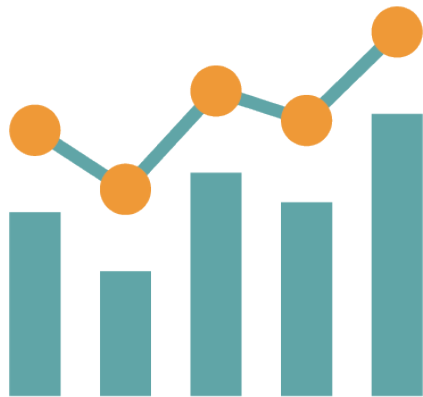
# AKSARA Transformation Timeline





# AKSARA Objective

- Accurate and participatory climate change mitigation **data and information** in Indonesia.
- **A repository for reports** on collaborative, intersectoral, central-regional mitigation action accomplishments in supporting credible and transparent low carbon development in Indonesia.
- **Balanced and reliable evaluations** of low carbon development implementation.



# AKSARA User



## Technical Contributor

**Who?**  
Provincial/district/municipal technical units of ministries and technical agencies.

**Functions**  
Periodically input data on low carbon development actions.



## Supervisor

**Who?**  
Units in technical ministries and provincial development planning agencies.

**Functions**

- User management (adding, removing).
- Controlling data quality by evaluating and approving reported low carbon development actions.
- Coordinating regional reporting.
- Evaluating performance of low carbon development actions.



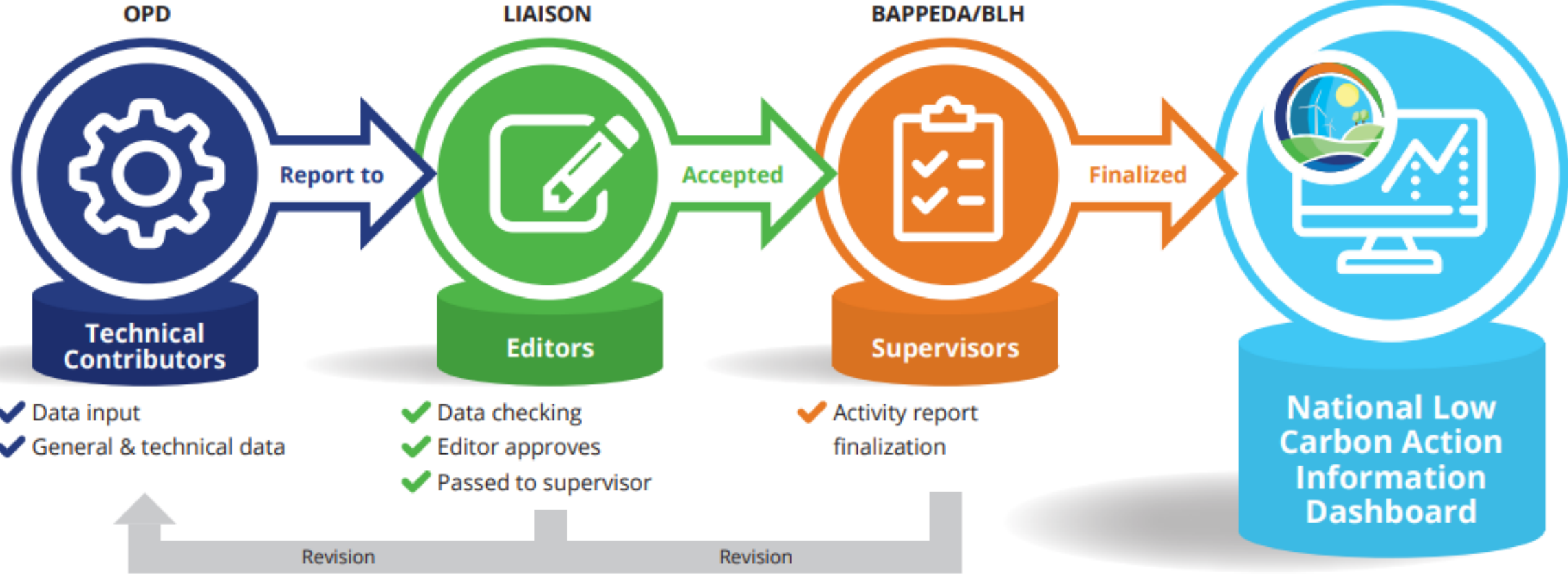
## Editor

**Who?**  
Sectoral technical experts and low carbon development planning (PPRK) secretariats.

**Functions**

- Controlling data quality in accordance with each sector's rules.
- Providing information and assistance (a helpdesk) for sectoral technical issues relating to the use of AKSARA

# AKSARA System Data Management Flow



# AKSARA Modules

## Planning Module

To design and plan low carbon development interventions

## Monitoring Module

To monitor the implementation of low carbon development activities

## Evaluation Module

To provide evaluations of low carbon development target achievement at the national and regional level

## Reporting Module

To provide regular, comprehensive, and reliable information on low carbon development implementation processes to relevant stakeholders

## Planning Module

- **What** : RAN GRK and RPJMN
- **Who**: Line ministries and Sub national governments
- **When**: 2020 - 2024
- **How** : baseline data, RPJMN targets, emission reduction target.

- **What** : emission reduction
- **Who**: Bappenas
- **When**: annually
- **How** : achievement transparency

## Reporting Module

## Monitoring Module

- **What** : LCDI implementation
- **Who**: line ministries and sub-national governments
- **When**: annually
- **How** : general data, technical data, and methodologies

- **What** : progress and target achievement
- **Who**: Bappenas
- **When**: annually
- **How** : planning vs achievement

## Evaluation Module



# Reporting Mechanism in AKSARA







General action data such as activity name, budget (data from budget tagging results)

Varies depend on the chosen methodology

<https://pprk.bappenas.go.id/aksara/>

# Technical Data/Methodologies

Technical data is the data required for calculating potential emission reduction mitigation actions, this data differs by category/methodology.

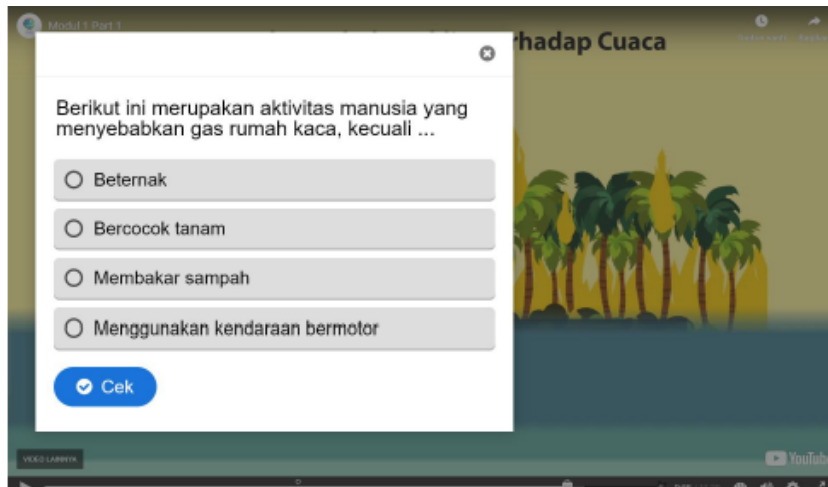
	Sector	Sub Sector
	Energy	Energy
		Transportation
		Industry
	Land-based	Forestry and Peatlands
		Agriculture
	Blue Carbon	Blue Carbon
	Waste Management	Water Waste
		Solid Waste

# AKSARA Online Learning Platform

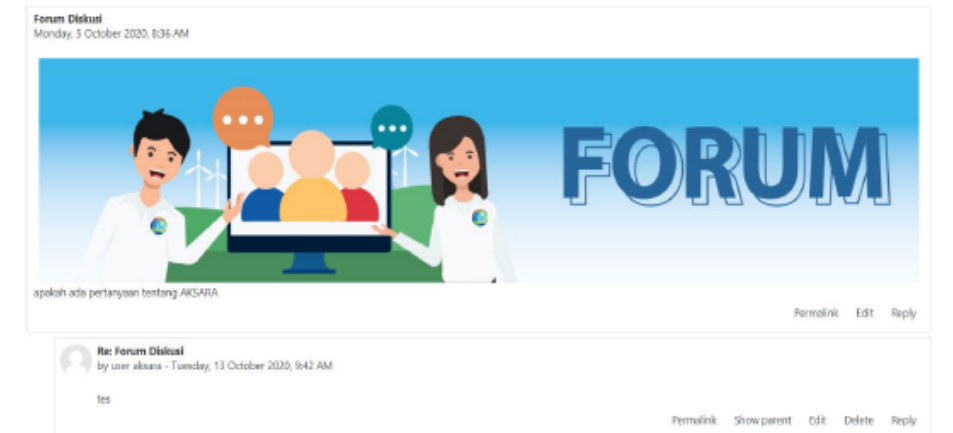
## Contains of

- 5 courses
  - Introduction to Low Carbon Development Indonesia
  - National Low Carbon Development Planning
  - Regional Low Carbon Development Planning
  - Monitoring, Reporting and Evaluation of Regional Low Carbon Development Planning
  - AKSARA - Indonesia Low Carbon Development Planning and Monitoring Application

## • Quiz



## • Forum





# AKSARA Digital solutions

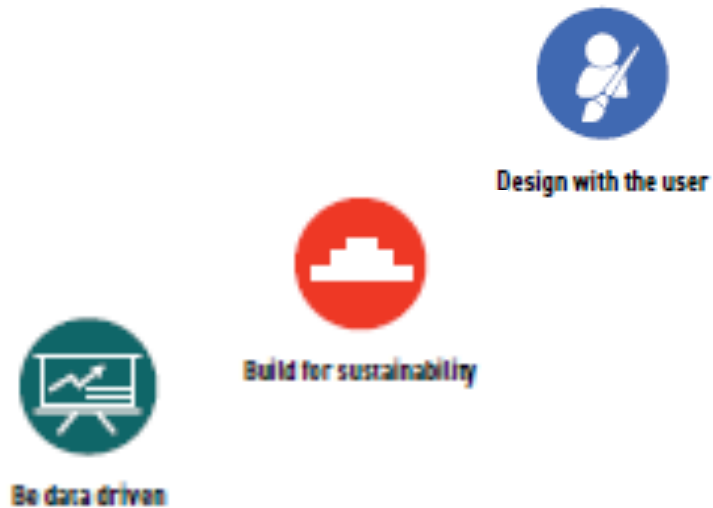
AKSARA (formerly PEP-Online) try to solve the challenge of Indonesia's expansive island geography.

AKSARA included 2 sustainable development goals (11, sustainable cities and communities and 13, climate action)



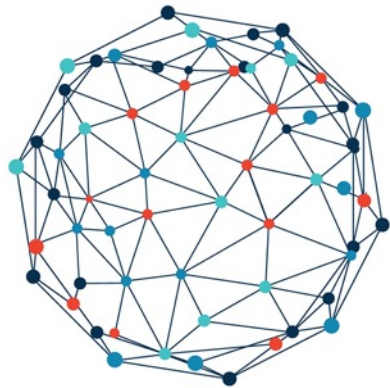
AKSARA aligned with 3 digital development principles:

1. Design with the user
2. Build for sustainability
3. Be data driven





# Thank you



**MRV**  
**MMI**

Monitoring, Reporting and Verification  
for Mitigation Measures in Indonesia

Further contact:

**GIZ MRV-MMI co/ Bappenas**

Graha MR 21 (Gedung JASINDO) 11<sup>th</sup> Floor  
Jl. Menteng Raya No.21  
Jakarta 10340 – Indonesia

Yuliana Cahya Wulan

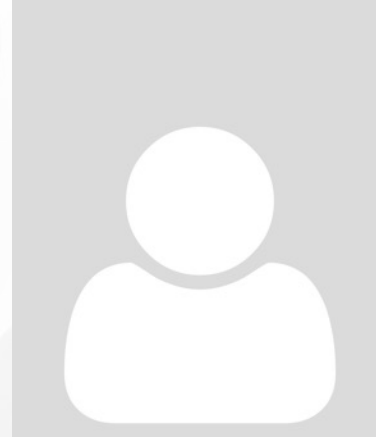
Email: [yuliana.wulan@giz.de](mailto:yuliana.wulan@giz.de)

# Contact



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Junior Advisor, Jakarta, Indonesia

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[www.giz.de](http://www.giz.de)



[https://twitter.com/giz\\_gmbh](https://twitter.com/giz_gmbh)



<https://www.linkedin.com/company/gizgmbh>

# Programme

- **Interactive discussion with audience**

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