

PANEL 4

Capability Building in PNGRB

Gaps and How to Bridge

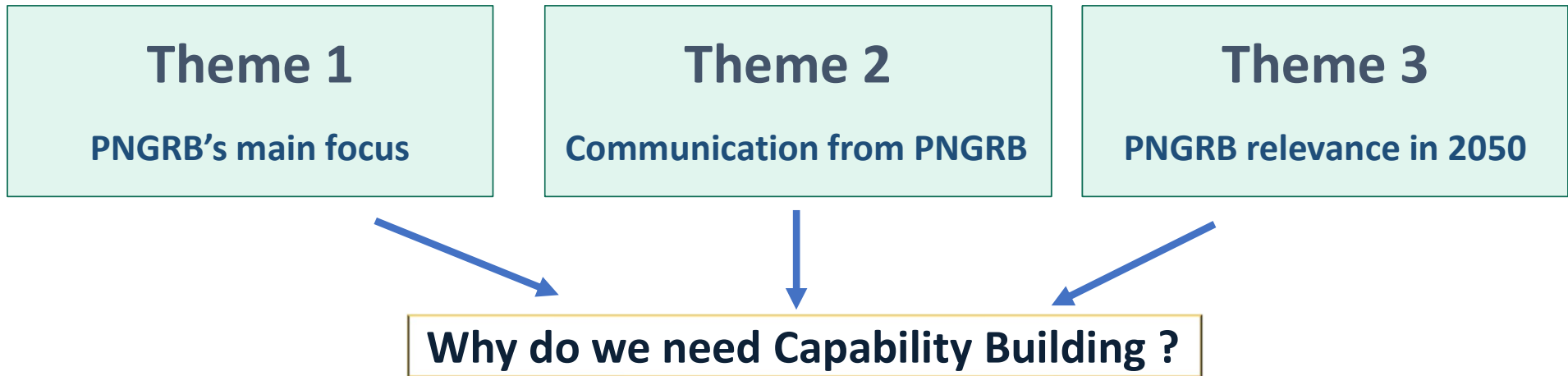


Internal
Capability Building

Digital Literacy

Industry &
Global Engagement

Cybersecurity &
Data Governance



- Knowledge must grow with domain (PNGRB now engages CBG, Hydrogen)
- Professional excellence is our primary defense against regulatory vulnerability
- In-house Capability needed to meet PNGRB Objectives

INTERNAL CAPABILITY BUILDING



Learning & Development

- Dedicated **L&D Cell** for Gap assessment and resource allocation with the annual training calendar
- **Cross-functional** training (eg. Legal for non-legal)
- **University partnerships** for custom short programs for officers.
- **Soft Skills**

Digital Literacy

- Maintaining **digital hygiene** practices and safe browsing habits
- Practical **use-cases of AI** to automate routine work
- Train staff on **phishing awareness**, secure document handling, access control, and safe handling of sensitive entity data

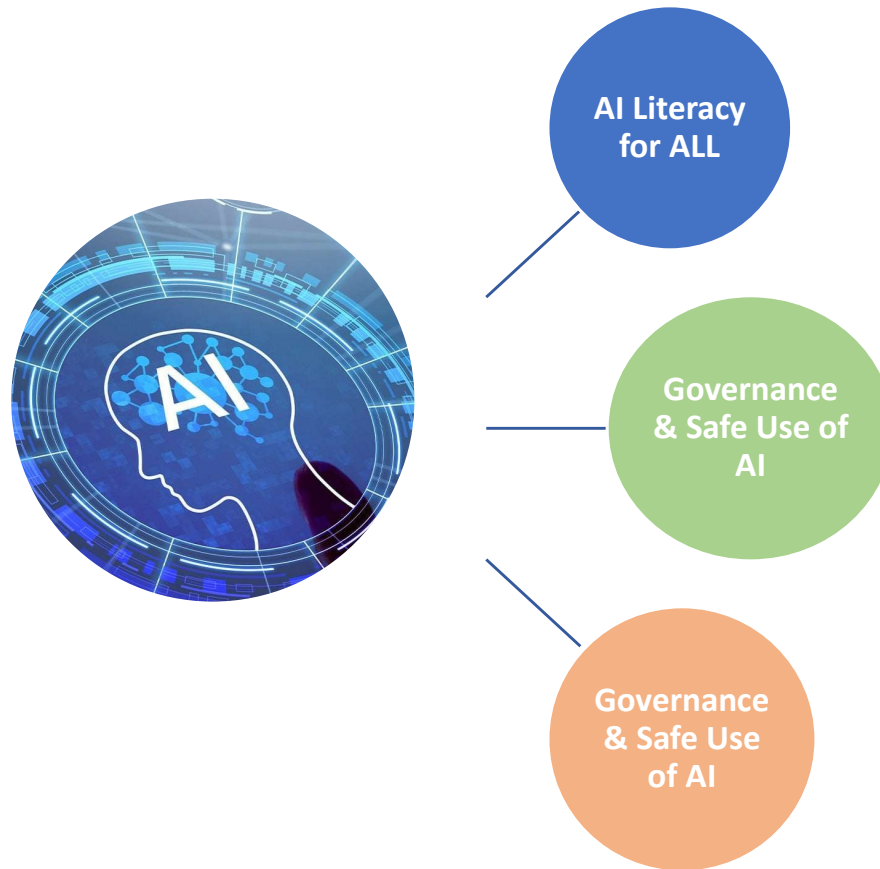
Knowledge Sharing and Management

- **Knowledge Management System (KMS)**
- Mandate structured **exit knowledge transfer** before every posting change
- **Newsletters** - Monthly compilation of industry news and developments

Industry learning

- **Knowledge sharing session** with entities, peer regulators
- **MoUs** with national & international bodies (14)
- Officer **Exchange** program

Capability Building in AI



- AI is not a technology. It's a thinking Tool
 - AI handles the repetitive. You handle the consequential.
 - Create a small AI Champions cohort
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- Meeting summarization tools for action points without manual note-taking
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- Establish a clear internal AI usage policy

INDUSTRY & GLOBAL ENGAGEMENT (MOUS)



FERC	Federal Energy Regulatory Commission Exchange of information, consultation, training & assistance in oil and gas sector
GIDM	Gujarat Institute of Disaster Management To strengthen Capacity in disaster risk management , safety and emergency preparedness
ASME	American Society of Mechanical Engineers To develop and estb policies and programs and procedures that will promote and sustain a market for oil and gas in India
IIT	IIT BOMBAY Provide infra support for R& D project in Hydrogen & Organize training programe
IGEM	Institute of Gas Engineers and Manager Develop knowledge of the standards / regulation pertaining to Natural Gas/CGD & Hydrogen

API	American Petroleum Institute Exchange of information about standardization, technical regulation, and related activities between the Parties
DVGW	German Association of Gas and Water Industries Cooperation in hydrogen infrastructure sector, creating a foundation for regulatory info exchange, technical collaboration
NSC	National Safety Council Organize training programe, workshops, conferences, seminars, to provide support for safety training
QCI	Quality Council of India Providing accreditation services to PNRB to support its regulations on Procedure for Development of Technical Standards
HSSC	Hydrocarbon Sector Skill Council Providing accreditation services to PNRB to support its regulations on Procedure for Development of Technical Standards

CYBERSECURITY FRAMEWORK & DATA GOVERNANCE



KEY PROPOSALS

Governance

Cyber Security Guidelines | Escalation matrix

Framework

NIST CSF (IT) + IEC 62443 (OT/ICS) + ISO 27001 ISMS

Compliance

3-tier classification: Basic / Advanced / Critical; Annual Audits

Data Governance

Classify data; retention rules; 72-hr breach notification (DPDPA 2023)

Incident Response

IR playbook; 6-hr OT incident report to CERT-In + PNARB; tabletops

INDIAN SCHEMES

CERT-In CCMP

Incident reporting, response timelines & coordination for government bodies

MeitY DG Framework

Data quality, interoperability, security, ethical usage across GoI entities

Natl. Cyber Security Policy

NCIIPC Framework - Protection of critical info infrastructure;

STQC Empanelment

GIGW Guidelines - Audit and certification of cybersecurity controls for government IT systems

GLOBAL STANDARDS

NIST CSF: Identify–Protect–Detect–Respond–Recover

IEC 62443: OT/ICS security (Pipeline & CGD)

ISO/IEC 27001: ISMS international standard

OECD DG Principles; OWASP

BRIDGING THE GAPS



Capability Building

Structured approach to staff knowledge training with defined curriculum and need based assesment

Digital Literacy

PNGRB should issue an internal Safe Use Policy dealing with sensitive data and access control discipline

Building an AI Champion cohort for active peer-learning

Regular training on cyber hygiene practices and awareness on cyber-attacks through Phishing simulations

Cybersecurity & Data Governance

PNGRB may prescribe to oversee baseline Cyber Security Guideleines in accordance with the Meity framework

Entities must designate a CISO and adhere to CERT-In guidelines for reporting any cybersecurity incidents to established bodies, keeping PNRB in the loop

Industry Engagement

Facilitate partnerships with Oil & Gas institutes to stay in line with emerging technologies and R&D related matters

Bringing together representatives from CGD, NGPL, PPPL, LNG, and CBG sectors into a formal periodic council

PANEL 4



We are now open to Questions...
