



**Leveraging ICT for Climate
Action in North and Central Asia
14:00 – 16:15, 26 March 2024,
Almaty, Kazakhstan**



**Information and Communications Technology and
Disaster Risk Reduction Division**



ESCAP
Economic and Social Commission
for Asia and the Pacific



ESCAP

Economic and Social Commission
for Asia and the Pacific

IDS, IDD, ESCAP

26 March 2024

- **Strengthening cooperation on digital inclusion and transformation (2024-2026).**
- **United Nations Special Programme on Economies of Central Asia (SPECA) Working Group on Innovation and Technology on 26-27 June, Kyrgyzstan**
- **Strengthening policies and regulatory frameworks of digital public services for SMEs in North and Central Asia under APIS (2024-2026)**
- **Clean Air for Sustainable ASEAN (CASA) (2023-2027)**
- **Digital ID systems in ASEAN (2025-2028) under review**
- **Digital and transport connectivity for rural communities (2022-2025).. Bangladesh, Lao PDR and Samoa**
- **Internet Exchange Points (IXP) in the Pacific**
- **Training on digital for climate impact in the Pacific (2024-2026)**
- **Advancing the cross-border data sharing platform with a focus on digital public service (2024-2026)**

1. Projects under implementation for strengthening digital cooperation



MINISTRY OF DIGITAL
DEVELOPMENT, INNOVATION
AND AEROSPACE INDUSTRY



MINISTRY OF FOREIGN
AFFAIRS OF THE REPUBLIC
OF KAZAKHSTAN

Asia-Pacific Ministerial Conference on Digital Inclusion and Transformation

3-5 September 2024

Astana, Kazakhstan



Time	3 September 2024	4 September 2024	5 September 2024
09:00-12:00	<p>Agenda Item 1: Opening (a) Opening Session (by PM, tbc); (b) Election of Officers – Chair of MC; (c) Adoption of the Agenda</p> <p>Launch of APDT Report 2024 Ministerial Group photo Media coverage and door-step interviews</p> <p>Agenda Item 2: Policy perspectives on building an inclusive and sustainable digital future (a) High-Level panel discussions (b) Country statements on policy perspectives</p>	<p>Agenda Item 3: Digital solutions for sustainable development (Continued)</p> <p>Agenda Item 4: Review of the work of the Committee on ICTSTI</p> <p>Agenda Item 5: Other Matters</p>	<p>Site visit for Ministers and delegates to the digital solutions exhibition</p>
12:00-14:00 Lunch	<ul style="list-style-type: none"> • <i>Side Events</i> • <i>Bilateral meetings between Ministers</i> 	<ul style="list-style-type: none"> • <i>Side Events</i> • <i>Bilateral meetings between Ministers</i> 	<p><i>Lunch for Ministers</i></p>
14:00-17:00	<p>Agenda Item 2 (Continued) (b) Country statements</p> <p>Agenda Item 3: Digital solutions for sustainable development (a) High-Level panel discussions (b) Country statements</p>	<p>Agenda Item 6: Adoption of the Ministerial Declaration</p> <p>Agenda Item 7: Adoption of the report</p>	<p>Closing of Ministerial Conference (14:00 to 14:30)</p>
18:30-20:30	<p>Welcome Dinner</p>		

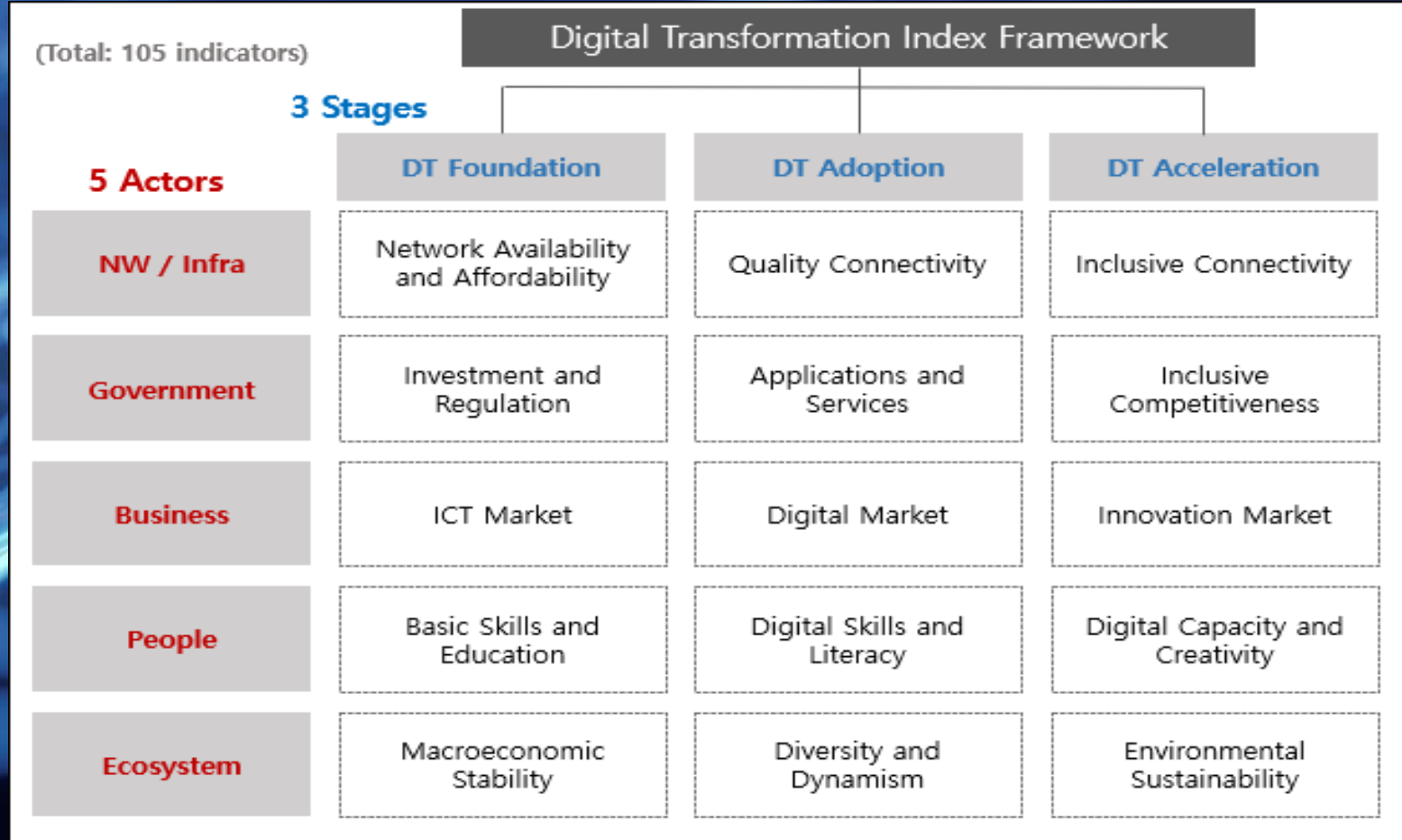
Expected outcome:

- **Declaration** of the Asia-Pacific Ministerial Conference on Digital Inclusion and Transformation (APMCDIT).
- **Common vision on ESCAP Asia-Pacific Digital Solutions Center**
 - Proposal by the Government of Kazakhstan to set up a regional ESCAP centre. Informal consultations among member States aimed at information sharing and deepening understanding of the vision, purpose and scope of work are making progress.

ESCAP will send out: (i) official invitation letters to the member States by the end of April 2024 to seek nominations by mid-July 2024, (ii) call for side event proposals led by the member States and organizations.

We would highly appreciate your facilitation
in securing Ministerial level representation at the Conference

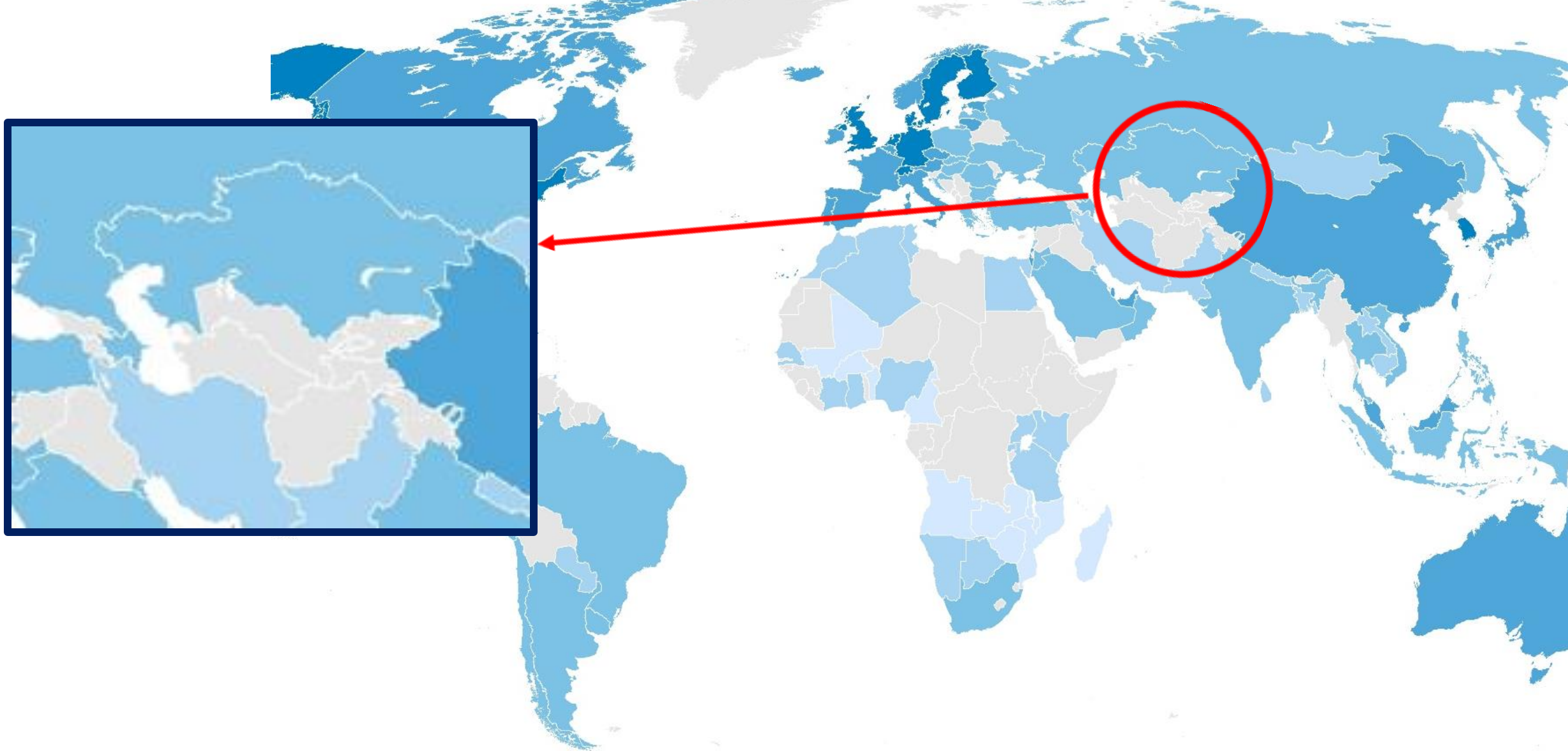
Framework of
Digital
Transformation
and Index 1.0



105 existing
indicators

107 countries

2. Tracking DTI in NCA

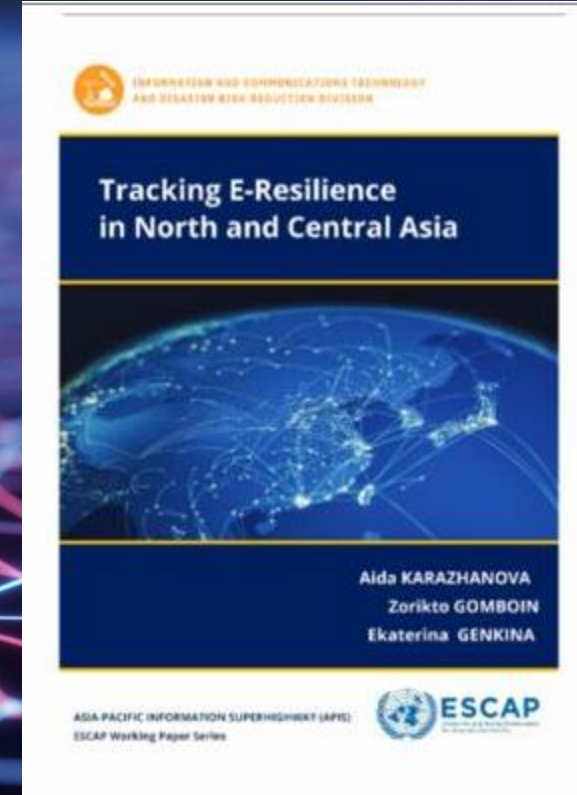
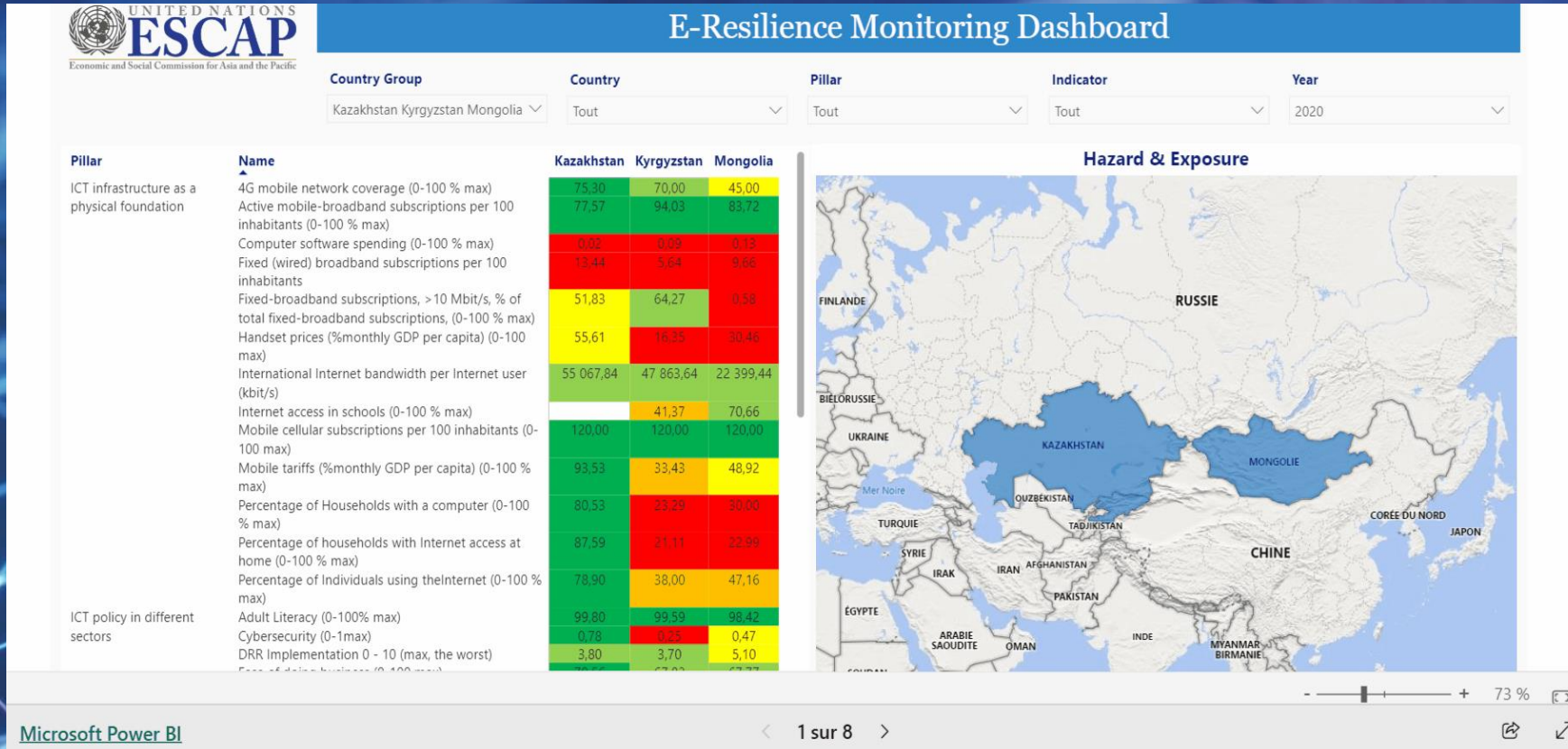


and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

* the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

c of Sudan and the Republic of South Sudan has not yet been determined.

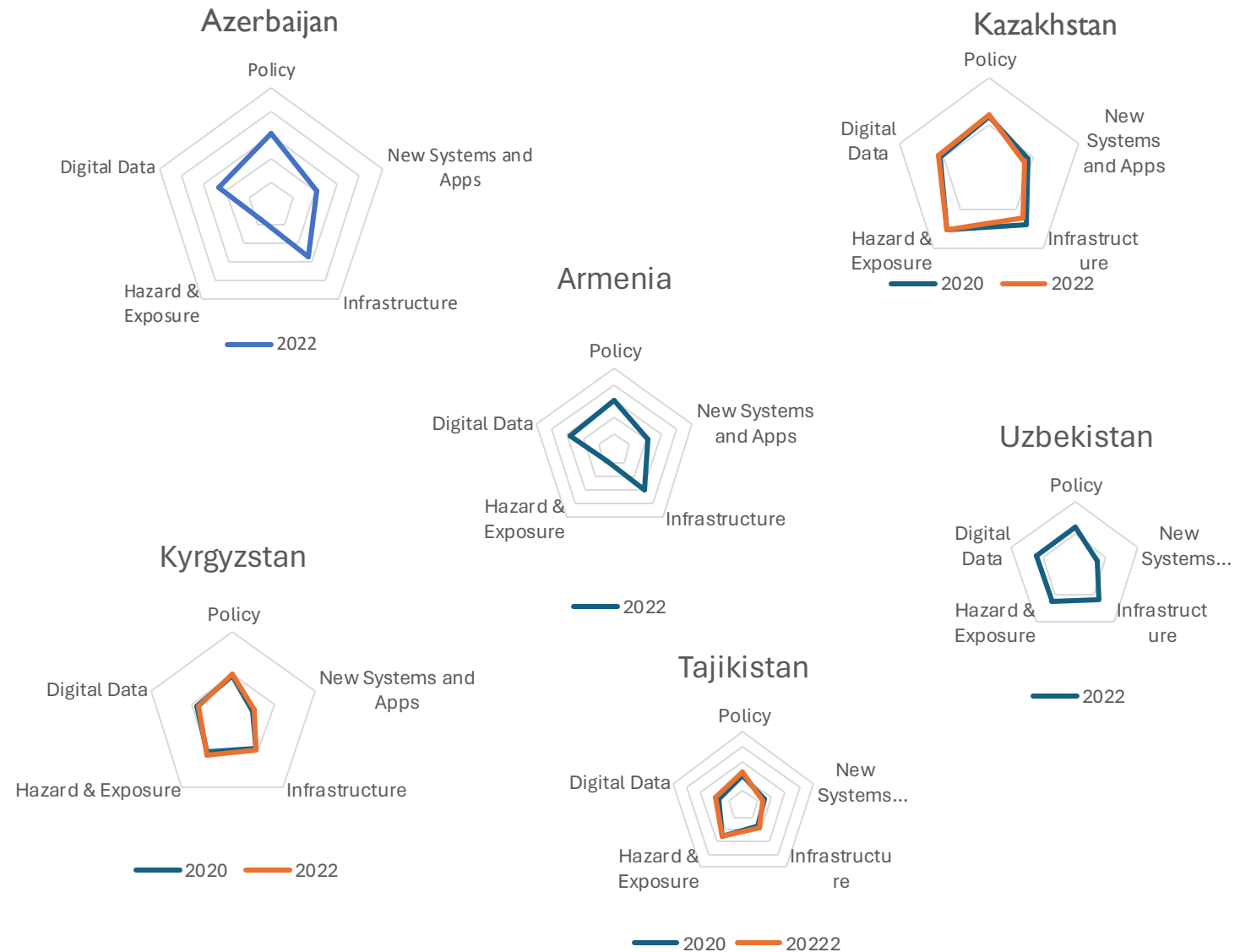
ments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas)



3. Tracking e-resilience in NCA

2. E-resilience in North and Central Asia (2023)

- **ICT Infrastructure:** solid scores with growing preference for mobile devices
- **ICT Policy:** scores are moderately high. Regulatory policy/quality needs improvement.
- **New Systems and Applications:** pillar is the weakest compared to the region.
- **Data Management:** low levels of e-participation are paired with widening gender and socio-economic gaps.
- **Hazard and Exposure:** ICT infrastructure in Azerbaijan and Armenia is more exposed to hazards compared to other Central Asian countries.





4. Leveraging ICT for Climate Action

4. Eight Leverage Points of Digital Technologies for Climate Action (ESCAP, 2024)



Create

innovation

through dynamic mobile-enabled digital connectivity, empowering seamless **access** to information and resources.



Increase

productivity

through the implementation of agile methods for increasing the scale of the economy, examples : **energy sector and manufacturing.**



Promote

sustainable consumption, by decreasing waste of materials, and **reducing carbon emissions.**



Support

environmental protection and conservation through **remote sensing , GIS and digital twin technologies.**



Enhance

effectiveness through **fostering transparency** and accountability **and e-governance platforms**



Strengthen

resilience (monitoring and predicting weather patterns and disasters and health systems).



Transition

To **low carbon economy** (such as **electric vehicles and renewable energy systems**).

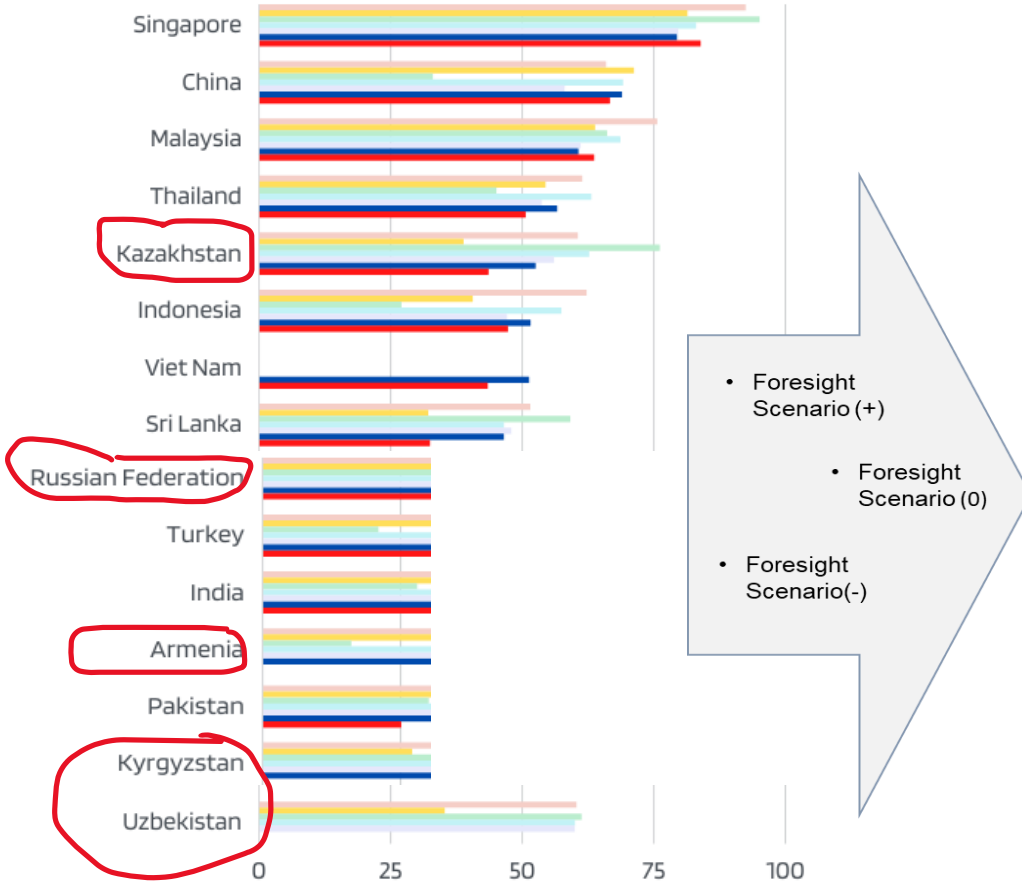


Integration

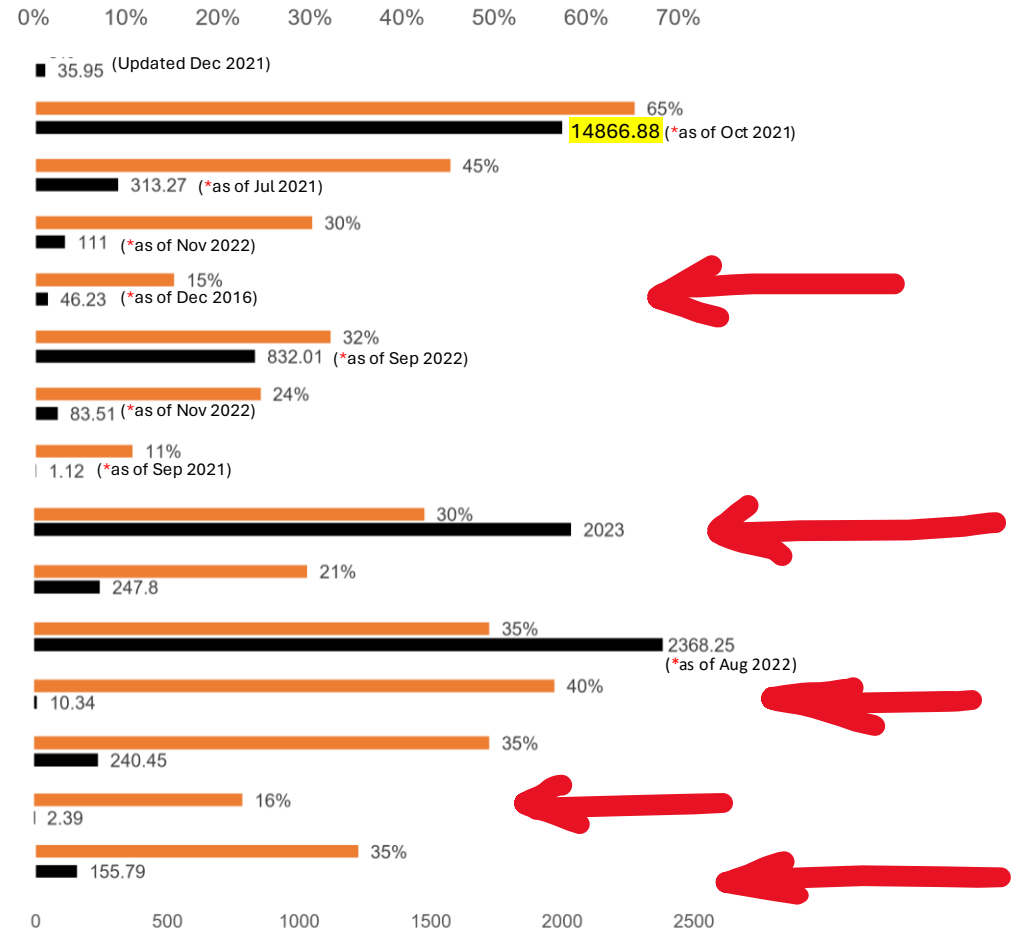
Provide high **tech integration by leveraging AI and mobile-enabled solutions**, harnessing the power of ICT platforms with cloud-based technologies to drive innovation and efficiency.

4. Side-by-side visualization of the ICT profiles and GHG reduction pledges for selected countries (ESCAP, 2024)

Countries with Policy Documents on Nationally Determined Contributions**



Greenhouse gas emission reduction pledges by 2030*



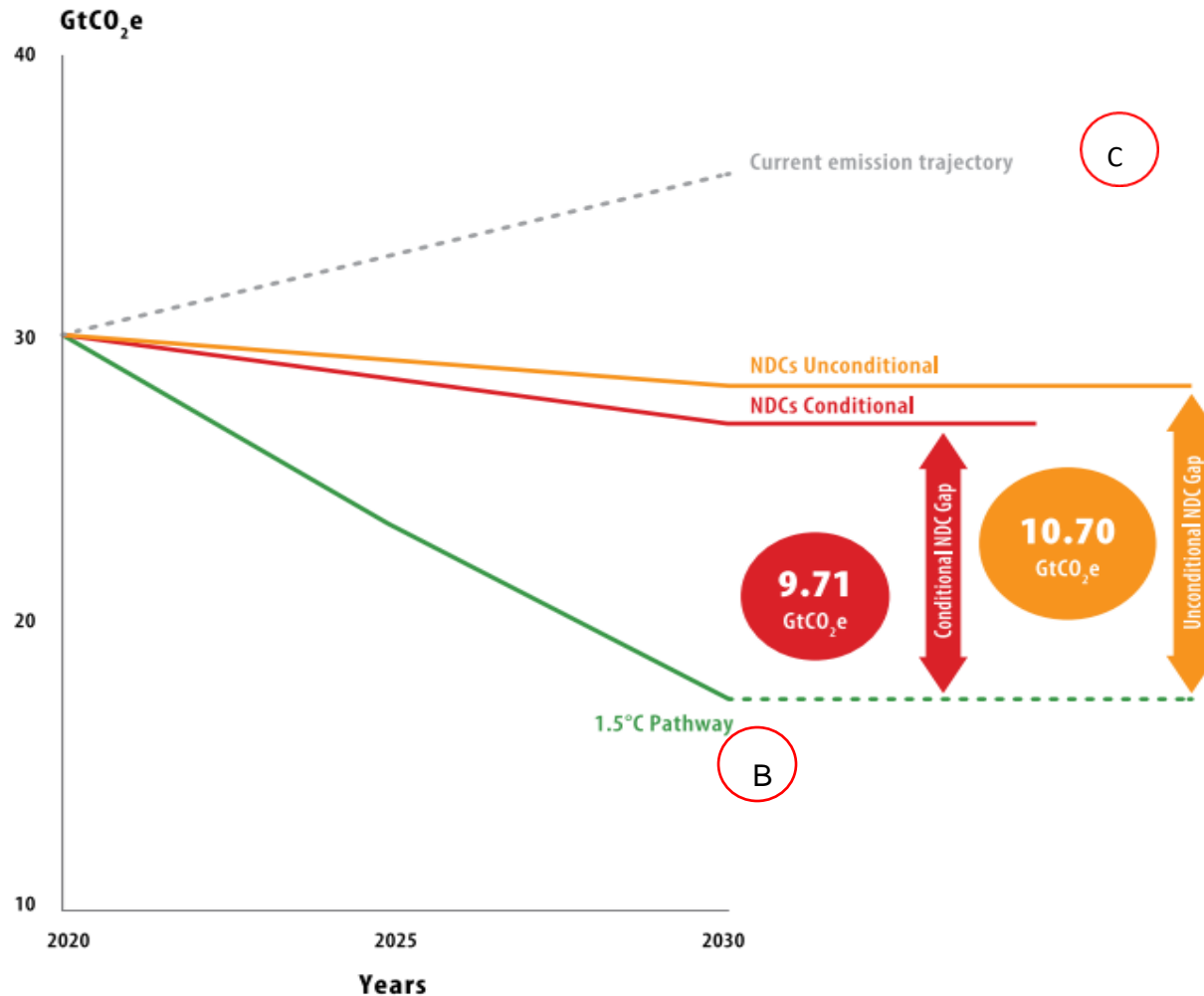
E-resilience Readiness:

- Policy
- New Systems and Applications
- Hazard and Exposure
- Infrastructure
- Data Management
- Digital Transformation Index
- Network Readiness Index

Unconditional NDCs (% of GHG reduction by 2030) Unconditional reduction of GHG by 2030 (MtCO₂e)

*Source: [Nationally Determined Contributions Registry | UNECCC](#) and Adopted from unpublished material of EDD, ESCAP (2023)

4. NDC commitments scenario and gaps with 1.5°C pathway for the Asia-Pacific region, 2023



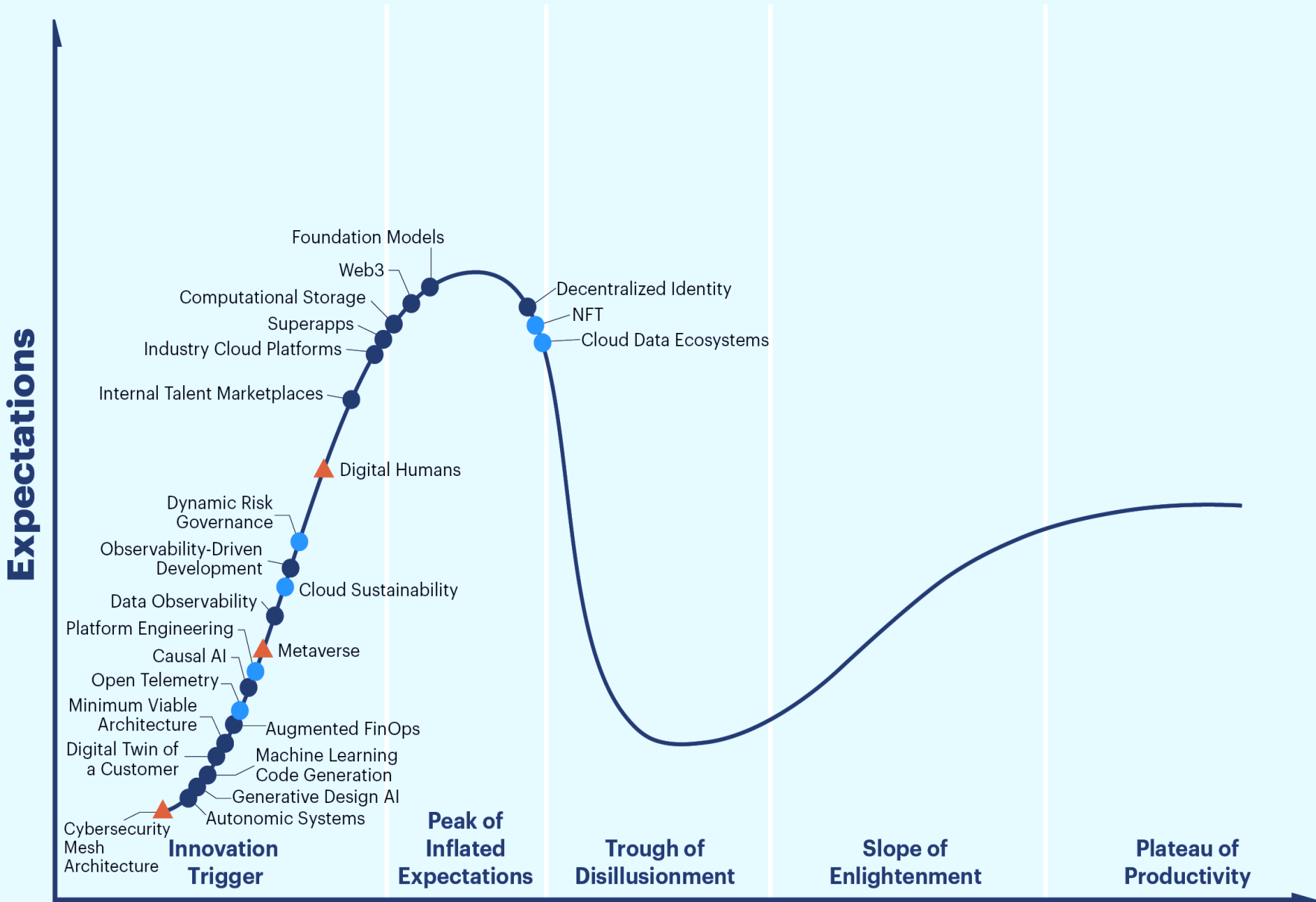
To move out from point A to point B and avoid point C (BAU) we need to:

Set/achieve mid-term targets to drive low-carbon transformation processes per sector to achieve net-zero commitments.

Leverage ICT tools to accelerate digital transformation processes at country level and through regional cooperation.

Source: Developed by ESCAP based on data and methodology in the United Nations Environment Programme (UNEP), "Adaptation Gap Report 2022: Too Little, Too Slow – Climate adaptation failure puts world at risk", Nairobi (United Nations publication, 2022); and the IPCC 6th Report Guidance for 1.5°C pathway (IPCC, 2023a).

The 2022 Gartner Hype Cycle Informs on Limitations and Opportunities for Climate Action



Plateau will be reached:

- less than 2 years
- 2 to 5 years
- 5 to 10 years
- ▲ More than 10 years
- ⊗ Obsolete before plateau

As of August 2022



1. **Second edition of APDT Report 2024**
2. **Commons of DT and CC: Two key driving forces leading to fundamental structural changes**
3. **Focus on system/paradigm changes beyond single application** of digital technology.
4. Key point is to explore **whether and how digital transformation can change the traditional story about climate change (mitigation and adaptation notably disaster resilience)**
5. **Not examining Digital for SDGs, but Digital for Climate Risks.**
6. **Will propose three scenarios**
 - a. Positive: digital-beneficial for climate
 - b. Negative: digital- exacerbates climate change, at least in short term
 - c. Neutral: digital – no impact on climate

5. Asia-Pacific Digital Transformation Report



THANK YOU



**ICT and Disaster Risk Reduction Division
United Nations Economic and Social Commission
for Asia and the Pacific (ESCAP)**