



**Coalition for Digital Environmental Sustainability (CODES):  
Action Plan for a Sustainable Planet  
in the Digital Age**

In Support of the UN Secretary General's  
Roadmap for Digital Cooperation

**CODES Roundtable  
7 February 2022**

**UN** environment programme  
**Umwelt Bundesamt**  
  
 **United Nations**  
Office of the Secretary-General's  
Envoy on Technology  
**futurearth**  
Research. Innovation. Sustainability.  
 **International  
Science Council**  
The global voice for science  


# Action Plan for A Sustainable Planet in the Digital Age





# Score your level of support for the six strategic priorities to enable Shift 1 (ENABLE):

Shift 1  
Align vision,  
values,  
objectives



# Are any strategic priorities missing from Shift 1?

Align digital and political agendas

Set specific quantitative goals for these collaborations

Stable digital finance for demonstration projects in support of climate change mitigation

Marketing Plan

Focus on the largest systems that will need to be transformed, namely, energy, food and waste.

Enabling the change of business models

Frontrunner coalitions need to be representative of different types, sizes and industries of organisations with tangible reasons WHY they are a "frontrunner" rather than just a big name.

measurement and scoring ?

Competition is important for efficiency and cost so don't worry about frontrunners.



# Are any strategic priorities missing from Shift 1?

-FINANCING!!-Transfers of Technology (capacity & tool)-  
Intellectual property

Unforeseen impacts

Software technology Modernisation

prioritize systems design

Data collection & transparency

Digital Transformation and no left behind principle

improve the financing of the incuation and scale up of  
innovative startups

measurement and indicators

help the transition in developing countries

# Are any strategic priorities missing from Shift 1?

data collection

Equitable financing to support digital transformation

Frontrunner -- too many large organizations, need more grassroots, how to fill in boxes with our NGOs

Building capacity should also ensure training target audience on how to use the data being made available via the digital platforms

accomodate the question of system-questioning digitalisation

How to track progress

New business models needed — new patterns of interdisciplinarity — do not forget power issues and inequakities

Inclusion and Diversity

Focus on impact on the ground vs alignment

# Are any strategic priorities missing from Shift 1?

General discussion how many digitalization would be suitable to the globe and different parts of the world?

inclusion of local knowledge / "on the ground" engagement

More predictive / anticipatory assessment of impacts

regulations and adoption

Media plan, as I have added before

Capturing complex business models and impacts

For building front runner coalitions, that implies having multiple but this can be challenging managing and getting diverse stakeholders across multiple.

Proposed Execution Governance Team across priorities (work charter) and focus groups

Need to focus on transforming the root cause of environmental problems (e.g. extractive, linear economies)



# Are any strategic priorities missing from Shift 1?

Consider using for norms and standards the Hazard Information Profiles: Supplement to UNDRR-ISC Hazard Definition & Classification Review - Technical Report  
<https://www.undrr.org/publication/hazard-information-profiles-supplement-undrr-isc-hazard-def>

Clear frontier technology application to further strategic priorities.

Regional priorities

Stronger focus on Carbon accounting infrastructure.

Multilateralism is a little fuzzy

Digitainability (digitalization for sustainability) assessment  
Metrics to track changes and alignment

IMPACT PLANNING & ASSESSMENT

IGF has just released: "Recommendations on Using Digitalisation for Our Common Future". It would be great to connect with them to work together as the objectives have a lot in common

Link with developer programs of large tech (disclaimer I'm NVIDIA we have millions in our program).

# Are any strategic priorities missing from Shift 1?

Data driven

degrowth

Normative Frameworks

Creating a marketplace with pro bono options from the private sector

strategic engagement strategy to governments

data collection in the SDGs

Assign enablers to particular SDGs (mapping of SDGs vs strategic priorities). It's mentioned elsewhere in the doc I think

Introduce vulnerable populations into the value chain as a fundamental part, actively participating in the process of co-creation of the technological solution of all digital innovations

Not sure if title to align values is covered fully, seeing a WEOG priority



# Are any strategic priorities missing from Shift 1?

Other sectors not in this, faith traditions

Local communities and legacy systems integration- tech, culture, policy, etc

Academia not seen, meaning also future generations

More work on ethics

Coordinate with PGA non-mandated and mandated events during remainder of the 76th GA Session

Call it rather sustainable digitalisation. Not as it stands now... Or digitally fostered sustainability

Need an NGO Champion who knows the NGO community in NY and outside of NY, many coalitions going on.

embrace web3

economic returns/affordability

# Are any strategic priorities missing from Shift 1?

Life-cycle thinking

data standardization

trade-offs between shift1 and shift2

Complex business models and impact

Make halving and overall ambitions this decade as important as the long term net zero and other longer term targets

Waste (related to consumption)

Raise awareness the impacts about the fashion industry.Help the consumer and the producer to create sustainable fashion.

Complexity and measurement of impact

Complexity of business models and lack of capacity - tools to measure impact



# Are any strategic priorities missing from Shift 1?

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Along with Science and Systems Thinking, I would add "Design Thinking" and "New Economic Thinking"

No

Yes the priorities will always be adjusted in accordance with location context and different location always have different priorities

no

Pilot & Scale

No

No.

So far so good

# Score your level of support for the six strategic problems to mitigate in Shift 2 (MITIGATE):





# Are any strategic priorities missing from Shift 2?

Life-cycle thinking

Robust knoweldge....

Misinformation can be mitigated with AI - active research ongoing.

Recycling

Economic returns/affordability

recycling

Circularity

Possible trade-offs between shift1 and shift2. We might actually need more ICT

Lack of authoritative independent benchmarks

# Are any strategic priorities missing from Shift 2?

Sustainable Circular Software tech

Digital Responsibility

Material base - silicon - will be improved once asteroid mining starts in next decade.

Connect Urban Agenda with new Nexus

right to repair

privacy and data sovereignty

Correlate against the aggregated topics from various CDR definitions in the CDR manifesto. Seven principles cover similar areas to this shift

Inclusive innovation

resilient decentralized smart electric grids/smart micro-grids to power the digital networks.



# Are any strategic priorities missing from Shift 2?

Harmful applications (e.g. AI for oil & gas exploration)

Nothing is missing, it's great :)

Business process clarity and think which elements inject

Impact on water bodies

Major problems - how digital tech impact child mental health and behavior (could be included in rights violation) - huge impact expected for the next generation

Transforming food systems so the environmental impact of food production and consumption is reduced by about 2/3 by 2050

addressing health impacts and using public health to support the need for the Action plan

This must include specific ethical frameworks combined with ethical framework is a new Sustainable Development Goal that integrates the three shifts and their 18 aspects (enablers, problems and innovations). Transversally, optimizes the whole.

desforestationcrisis water

# Are any strategic priorities missing from Shift 2?

What are the Programme Budget Implications for any of these in the UN system? (PBIs)

Raise awareness the impacts about the fashion industry. Help the consumer and the producer to create sustainable fashion.

Urban agenda connection

Live cycle approach

Cloud computing will address waste materials (laptops etc.)

Lack of data/reporting to be even able to quantify misinformation.

not just mitigate but also to avoid negative impact.

Need to achieve a near-zero-waste society (fully circular) by 2050.

Lack of Circular Economy comprehensive economic framework (granular)



# Are any strategic priorities missing from Shift 2?

"how to spread human rights, as well as health and animal protection for their respect, protection and implementation"

AI algorithmic fairness and bias

Global Law Enforcement

Missing information is a complicated term that needs to be further interrogated and problematized. Oftentimes the fight against misinformation can result in the censorship and de-platforming of marginalized voices.

Reuse of technology instead of pushing for the latest technologies

Skills enforcement

Maker movement and circular economy more in the forefront?

shift in worldviews and values to reduce consumptive behavior

Broader set of planetary boundaries

# Are any strategic priorities missing from Shift 2?

New Urban Agenda yes, NGOs have already identified over 70 essential meetings leading to 2023

linking to the 2015 UN landmark agreements

Exchange Data with International Resource Panel (UNEP)

technology good for society..

Smart cities and digital tool, how will this reshape the sustainable agenda

Circularity of major transportation components (e.g. batteries, magnets, motors)

do no harm principle as a mandatory guideline

circularity

Not enough on the roadmap to 2023 and beyond.



# Are any strategic priorities missing from Shift 2?

Hazard definitions would be really helpful

Consumption of land in rural and city areas

Along on taxonomies

Hub of All things not mentioned -- different from Internet of All Things

Also digital responsibility goals as being discussed with EU

Transparency of the so called AI black-box

Connection with key conventions

FAIR data Findable. Accessible, Interoperable and Reusable

Clear circular targets like what we have for Climate Change targets, global targets for circularity are missing.

# Are any strategic priorities missing from Shift 2?

Collaborative governance AND measurement of complex impact

GHG Protocols, Scopes 1,2,3.

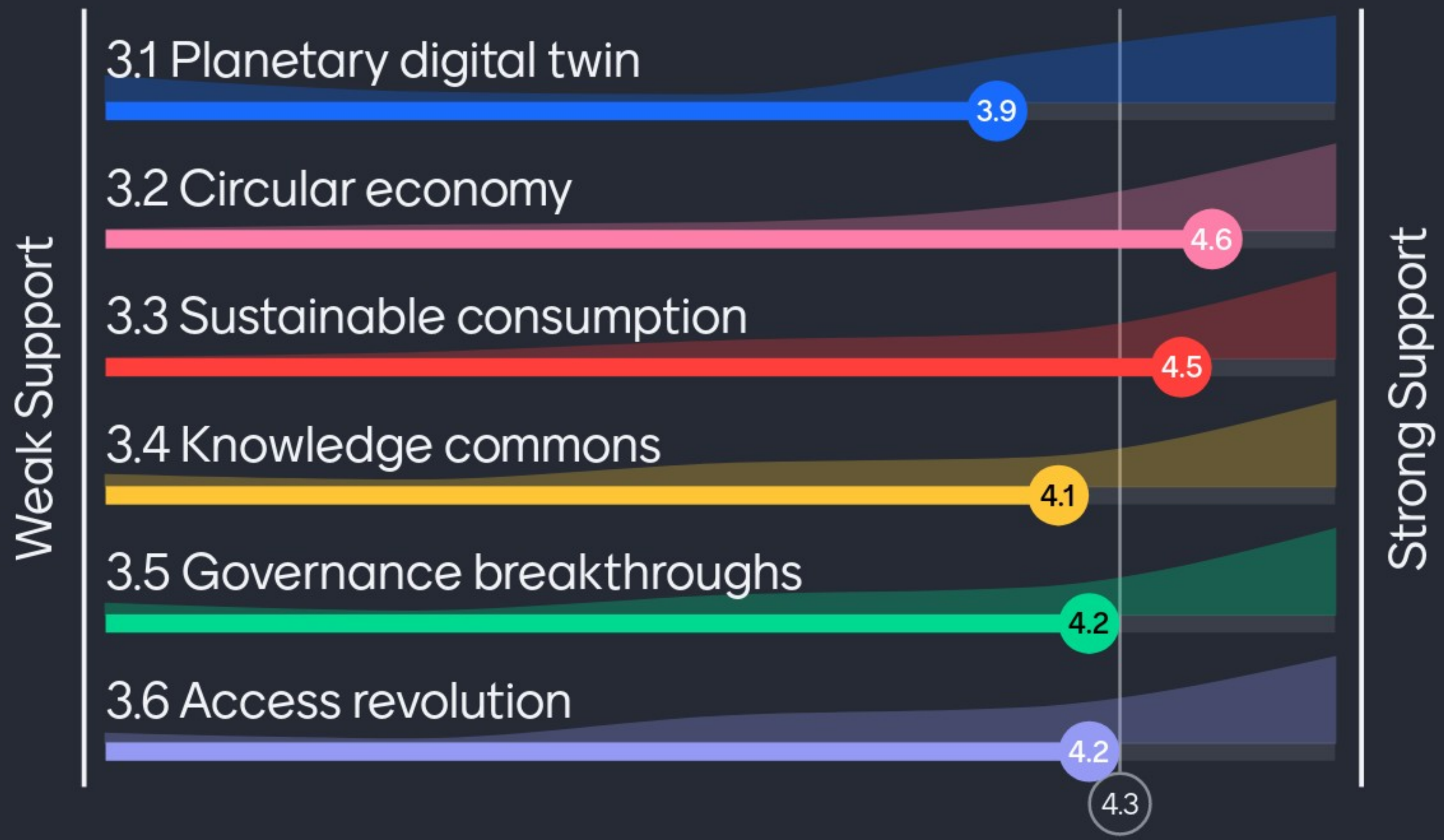
Sensing, Monitoring and Measurement -- You cannot manage what you cannot measure. What you measure gets done." -- Bill Hewlett, co-founder Hewlett Packard.

no

No.



# Score your level of support for the six strategic innovations to address in Shift 3 (INNOVATE):



# Are any strategic priorities missing from Shift 3?

Already working on Earth digital twin including full physical processes.

digitainability assessment (digitalisation for sustainability concrete evaluation)

An ethical & rights based framework that enables combining in practice the digital revolution with sustainability in a way that does not sacrifice but actually upholds the best from our values in terms of freedom, privacy, democracy, and equal oppo

Sustainable Consumption and Production is usually the term

"human-centered design, respectful with the health and protection of animals and the planet's ecosystems".

embrace web3 as tools to access planetary digital twin

crisis water

Having a central place for sustainable development would be great (my second life).

The earth is so complex that digital twins can give wrong answers



# Are any strategic priorities missing from Shift 3?

Many tools exist for access revolution, happy to help.

Twin is too hard to understand -- needs better term

E-Government as institutional Innovation

to increase equity financing for the incubation and scale-up of innovative digital startups that develop clean tech

Scaling of innovations as important as innovating - and often not focused

"towards a evolution"

Digital twin should have involvement of all stakeholders

Avoid SCAM like NFT and web3

Resource efficiency

# Are any strategic priorities missing from Shift 3?

More digital solutions and AI in impact assessment

Impact planning & assessment

Impact measurement for the complex business models

Overlapping environmental challenges mean that digital twins would need to be extremely complex in order to be informative

Innovative funding mechanisms: to support testing and experimenting of solutions, reduce costs and risks

Planetary Digital Twin is a brilliant idea that could meld well within Central Bank Digital Currencies to monitor transaction level planetary costs & benefits. However, the other parts of the strategy should be in place to make this aspiration real.

Planetary digital twin is in my opinion the most important initiative.

links to the Sendai Framework for disaster risk reduction - essential for digital twin

knowledge commons as a hub to help realize the vision of the Action Plan



# Are any strategic priorities missing from Shift 3?

Degrowth

Circular Economy to be combined w net-zero

Global Outlook 2023/24 (International Resource Panel)

"Promoting digital inclusion through prosperous and dignified work"

Foster rebound of cleantech and circular economy processes (i.e., 'positive rebound' or 'push impacts')

Digital twin concept useful at city scale / regional scale. I am unsure about the relevance (and accuracy) at global scale, it's complicated and ambitious

Knowledge Commons re Teilhard de Chardin, where is the philosophical basis (noosphere -- might be part of Twin solution in terminology)

EO data are a key factor

focus on systems appropriate scale and use of digital twin rather than planetary scale

# Are any strategic priorities missing from Shift 3?

public-private partnerships for financing digital and green transformation

address being federated (politically, legally, culturally) - nb: this is not a tech question

More funding for SMEs, support for new business models

Open Government

Compared to the other proprieties, digital twin is less so a concept/management/behaviour change but a tool which still needs a lot of work, data, validation, etc.

Visibility and transparency on who are the actors building the digital twins

Disabled persons needed to be included

Full circularity must most focus on upstream innovations, redesign, remanufacture, rather than only recycle.

Addressing new frames and tools for impact measurement in complex systems



# Are any strategic priorities missing from Shift 3?

Use of technology to spread learning around successful policies for sustainability

digitalization and sdgs

"technological appropriation and adoption"

mindfulness about how co-create digital humane technology

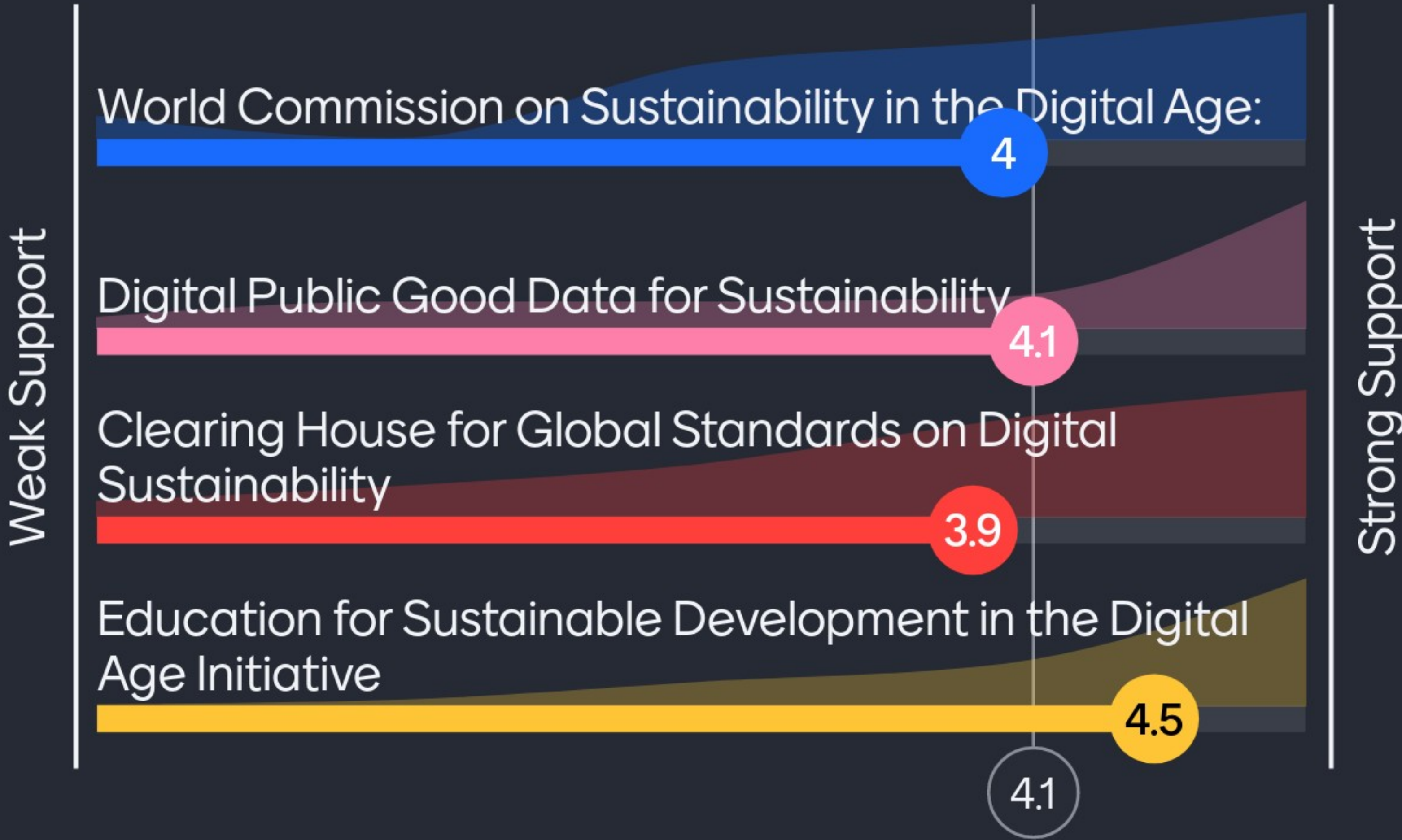
Economic research, modeling on how sustainable digitalization reduces resources waste, carbon/GHGs will creating new value .

no

No.

So far so good.

# Score your level of support for the recommended catalytic impact initiatives in Shift 1:





# Do you have other ideas for catalytic impact initiatives to support Shift 1?

Stable digital currencies for projects

Energy is key. Obligations instead of pledges.

Anchor tenancy support from the government

What are the boundaries of the 'digital world'? Are we including the waste generated by e-commerce packaging?

What is the model for the World commission??  
The WSIS process??

measuring impacts

Using common hazard definitions

Global Ethical Framework on 2030 Agenda

social value development

# Do you have other ideas for catalytic impact initiatives to support Shift 1?

Connect to the European Action Plan on Circular Economy (CEAP)

Work of Inge Kaul on Global Public Goods 20 years ago

Joint methodologies to compare solutions

Public digital infrastructure (e.g. UN blockchain) that is embedded with SDG policy, UN best practice, and a leave no one behind equitable inclusion.

New and emerging business models - from big tech to NFTs - balancing the measurement of impacta

I think defining what we are including in the definition of environmental sustainability of digitization. This definition is critical to moving towards action.

"humanism renewed, making presence with wisdom, empathy and ethics".

Transparency on pledges or common agendas

Need to ensure that if people want to participate in the education, how to link to the Education Summit in September?



# Do you have other ideas for catalytic impact initiatives to support Shift 1?

Include behavioural change for impact initiatives

Connect to the restrictions drafted in the EED underway at Brussels.

UN Cross cutting Inter agency

Need PGA buyin, 77th GA

The 1.4 per cent global food print in the action plan seems very small to me.

contabilidad ambiental

DPGs - getting the commitment from MNOs

Build perennial Task Force to ensure goals are met (CODES is already doing that)

no

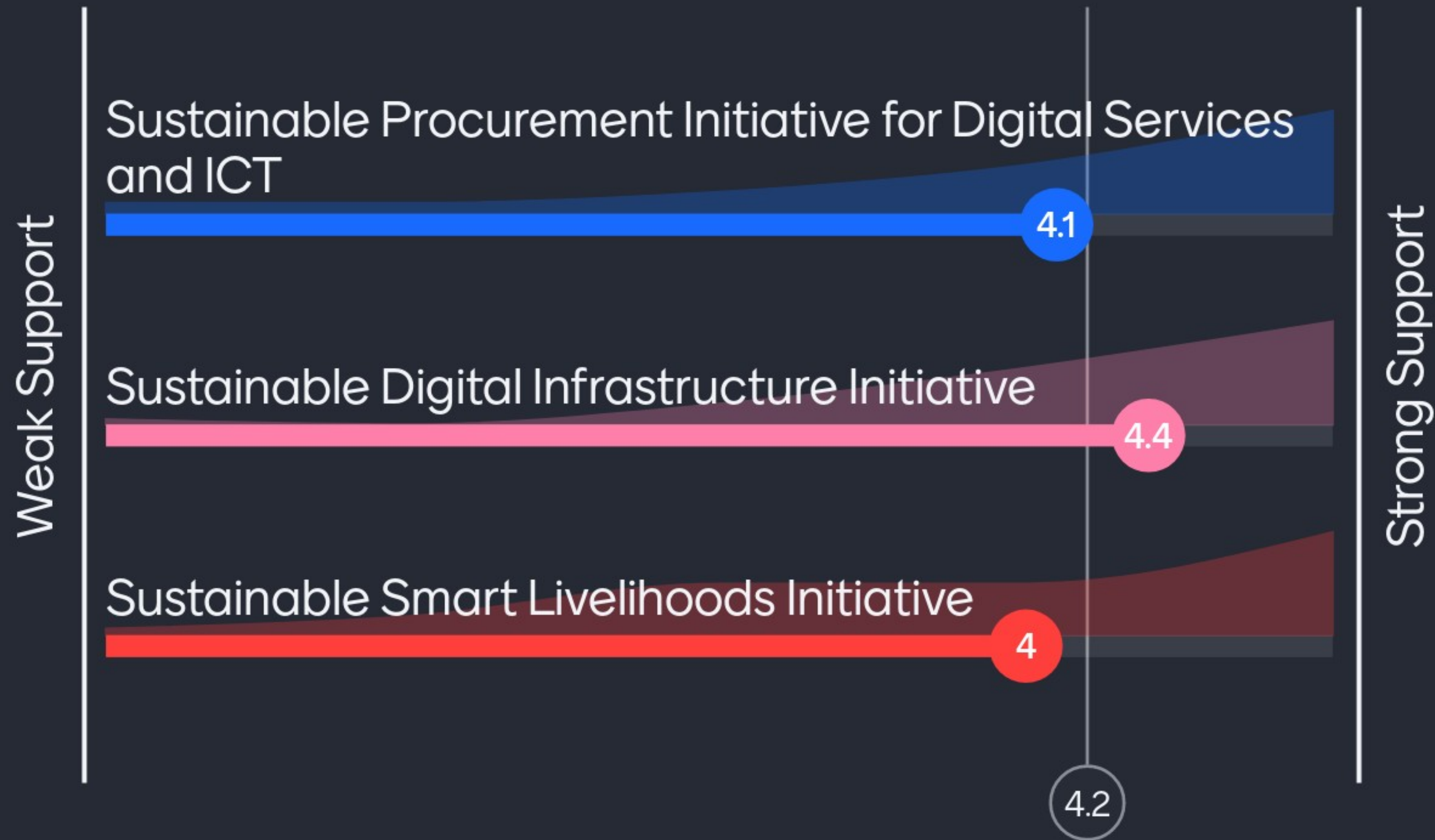
# Do you have other ideas for catalytic impact initiatives to support Shift 1?

No.

Not now



# Score your level of support for the recommended catalytic impact initiatives in Shift 2:



# Do you have other ideas for catalytic impact initiatives to support Shift 2?

Is the airtable link up??

How can we model the energy demand from digital technologies?

Mandatory disclosure & accounting

indicator to measure impact of digital tools towards sustainability

Regional approaches. No European "leadership".

Multistakeholder AND MULTISTRATEGIC alliances

Smart Sustainable Urban Initiative

Are we including renewable energy technologies within the digital technology sphere?

Data and measurement innovation and integration



# Do you have other ideas for catalytic impact initiatives to support Shift 2?

Role of ILO?

Ethical AI Framework

What about UNEP FI

rural development

Permanent monitor trends observatory with a forum for discussion

Fostering system-questioning digitalisation --> challenging prevailing economic dynamics

UN Statistics Division Handbook on Sust. Envl. Accounting

Besides linking to SDGs and Paris agreement, also link to the Sendai Framework and its Monitor

Citizen Project

# Do you have other ideas for catalytic impact initiatives to support Shift 2?

work with NGOs, iNGOs and Foundations

Establishment of a global research network for Digital & sustainability topics

Not as at now.

How are the negative social impacts of digital technologies (e.g. isolationism, addiction) being dealt with?

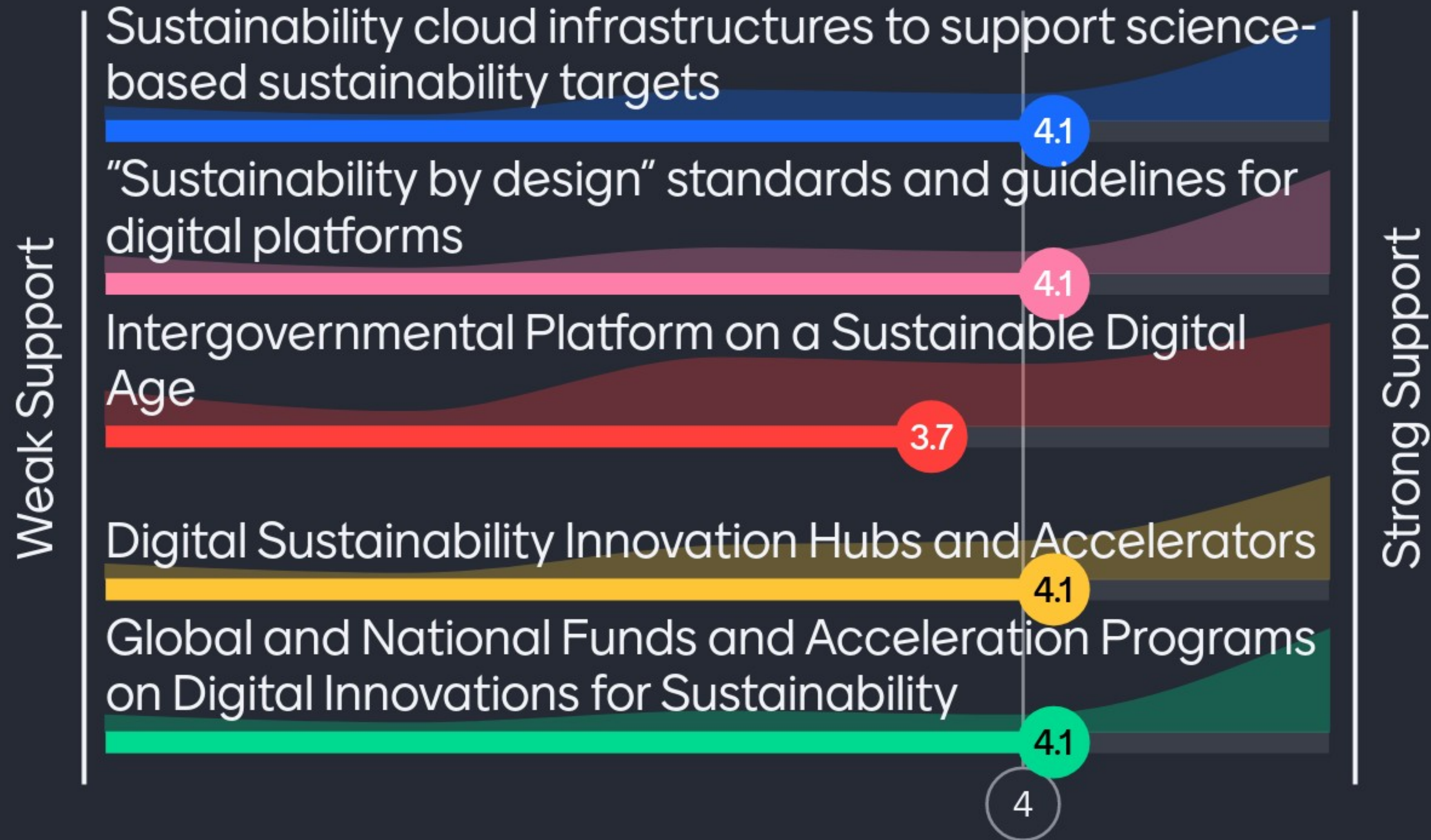
the growing elderly population

There's some potential for more working together on some of the initiatives, e.g. we've got some project this year which links some of the initiatives so it could be interesting to do a stock-tacking exercise, especially with the UN

No.



# Score your level of support for the recommended catalytic impact initiatives in Shift 3:





# Do you have other ideas for catalytic impact initiatives to support Shift 3 ?

What about the Climate Investment Funds model?

Global Digital Citizen Project

Strategic collaboration

Digital twins for sustainability

Again, defining the boundaries and language around what we mean by digital sustainability is critical for defining action.

case studies on sustainability hazard impacts

The NGO and civil society process re election through RESULTS is excellent, including real gender balance

open source, high efficacy, interpersonal collaboration ecosystem

Skills development and not just education/knowledge exchange, especially to close the digital divide.



# Do you have other ideas for catalytic impact initiatives to support Shift 3 ?

Mirror Camda Data 2.0 Process

empowering public health engagement for sustainability action plan

commons-based cosmological production for an open design knowledge commons for rapid design dissemination for local production.

Support developers & provide education (secondary/tertiary) on sustainability in the digital age.

Look for Incentives for citizens and at larger scale - carrots are important. Word incentive is missing but key for change in behavior

Perhaps strategic collaboration through the NGO Declaration for UNEA and the document for UNEA we are working on

e gov Innovation hub

digitalisation for degrowth

Strategic collaboration in a efficient and effective manner taking actions to support the political commitment to follow on digital agendas

# Do you have other ideas for catalytic impact initiatives to support Shift 3 ?

make sure to include as much local stakeholders and their knowledge in any process

Would like to see closer UNEP, UNDP and ITU collaboration, especially with next steps and leading on some of the initiatives jointly.

Describe better what exactly the Digital Compact would look like and do?

create a safe space for a community of practice where people can share their experience and fears openly to address them properly

include other players outside of the UN-world (NGOs, private sector, philanthropies, ...)

make sure to pay attention to privacy and data protection, and keep all parties accountable and transparent about it

no

No.

Strong cooperate institutions in sub saharan Africa.



# Open Ended Comments

Focus on efficiency, even in messaging.

Please define what CODES role is within the overall discussion on digital sustainability would be very helpful. This is still confusing for me.

Again, UNEA NGOs who worked for 8 hours yesterday on our declaration, and there are 5 days of meetings this week, have no idea about CODES



Very inclusive - but, still more tech people needed?

Today's process: Useful but hard to think and write at the same time. Probably good to share questions before meeting to allow for further reflection time

The questions were very dependent on having previously read and understood action plan. If somebody had not, risk is skew of the voting.

Action Plan Communication as Part of Action Plan in Form of Global Campaign

Include civil society, Global South and indigenous communities,

# Open Ended Comments

Infinite gratitude!

Agree: More tech people needed

Gray but need more of the integrators in the middle - lessons, process and frameworks from Camda, big tech etc

How the action plan will take place and how the other entities will be engage and to take the lead

Good progress to develop synergies across different UN agencies (in Tables in the doc) - but increasing communication in house is important

What exactly will the Digital Compact do?

Imagine a global unit of value that would be the designated form of value embedded with the policy aims of the 2030 agenda.

More concret target, timelines, connections to real political processes at the regional level (GRULAG, European; ASEAN) and UNEP Level

More acess to tech skills needed in sustainability



# Open Ended Comments

Should we consider to develop a methodology for countries to understand how ready they are to embed environmental sustainability?

none

CODES is a great project and initiative. Congratulations to the whole team. Greetings from Brazil.