**Pledge: to develop a holistic toolkit for use by all partners in P2C that will enable them to assess the environmental impact of their proposed interventions and activities**

*The context*

All of P2C's Focus Areas (access, adoption, value creation, accelerate) place strong emphasis on the importance of the sustainability of the initiatives that are supported through P2C, in terms of financial, policy, advocacy and programmatic sustainability. The need for all digital interventions to be implemented in a way that is environmentally sustainable is also central to the UN's Agenda 2030 and the ITU's contribution to it. As the UN SG's report *Roadmap for Digital Co-operation* states, "By harnessing them appropriately, the digital revolution can be steered to combat climate change and advance global sustainability, environmental stewardship and human well-being".[i] However, as the ITU has also recognised, the creation and use of digital technologies has not only the potential to enhance environmental stewardship but also to create significant environmental harms that go far beyond the limited conceptualisation of their impact primarily on climate.

The UNESCO Chair in ICT4D launched the Digital-Environment System Coalition (DESC) in 2021 as a wide-ranging coalition of academics, companies, international agencies and civil society organisations committed to developing a novel holistic approach to understanding better the positive and negative impacts of digital technologies on the physical environment and developing a multi-dimensional framework for assessing and evaluating these impacts.[ii] In essence this is designed to support a holistic assessment of

- the *impact of digital technologies*, in terms of their production, use, repair, recycling and waste,
- on the *physical environment*, consisting of the lithosphere, biosphere, hydrosphere and atmosphere (including outer space),
- both *directly and also through their need for energy/electricity* (renewables, nuclear and fossil),
- within their *social, cultural, political and economic* contexts,
- and both *spatially* (geographically) and *temporarily* (historically).

*The pledge*

We pledge to work with P2C partners and colleagues within DESC to develop an easy-to-use framework and Toolkit that will help partners to comply with existing required standards relating to the environmental impact and sustainability of digital technologies, whilst also taking into consideration the more holistic framework being developed by DESC. This Toolkit will therefore comprise two parts:

1. A compendium of existing standards developed mainly by the ITU, but also including those by relevant other organisations relating to the sustainability requirements of digital technologies. It will be regularly updated to include standards under development and relevant generic legislation by regional groupings (such as the EU).
2. A holistic framework developed through DESC's ongoing research and practice within which any P2C partners that so wishe can consider and report on the environmental impact of their deliverables for P2C. This can be implemented at various levels of refinement, and we recognise that while

most organisations will be able to report on some of these impacts, none will yet be able to do so fully.

This evolving toolkit will enable P2C and its partners to be at the cutting edge of good practices relating to ensuring that digital interventions are delivered as sustainably as possible, with their environmental harms being mitigated, and thereby enabling their benefits to be maximised.

*The four focus areas*

The Partner2Connect focus area action framework makes little direct reference to sustainability, sustainable practices or the physical environment,[iii] yet these are absolutely central to the SDGs and Agenda 2030, and more importantly to the future use of appropriate digital technologies. More specifically to P2C, sustainable access, sustainable adoption, sustainable value creation and sustainable acceleration are absolutely central to the global value proposition of then initiative as a whole.

*Pledge characteristics*

P2C has identified four important characteristics of strong pledges:

- The support for and use by partners within P2C of the DESC toolkit will substantially enhance the successful and above all sustainable digital transformation of societies. Increasingly in the future, it will be essential for digital interventions to show clearly how they are sustainable, and therefore for organisations implementing them to be able to account transparently for their environmental impacts.
- This pledge is relevant across all four focus areas of P2C, and it provides a vehicle through which all partners can come together to contribute resources that show how they are contributing to one of the most pressing challenges of our time, the sustainability of our digital interventions. DESC will develop the toolkit through its own resources, but the speed with which this can happen will depend in part on the willingness of other partners to contribute information about the environmental impact of their existing practices, or contribute specific resources to DESC to develop its toolkit more rapidly.
- We are confident that all partners within DESC will wish to be seen as being committed to environmental sustainability and minimising their impact on the natural world. Increasingly, this is something that all organisations and companies will be required to do, and will need to be seen to be doing. We therefore hope that multiple entities will wish to endorse, help develop and implement use of the toolkit.
- It will be easy to monitor progress of the toolkit, both in terms of its development and iterations, and also in terms of the number of entities within P2C supporting and endorsing it. Measuring the impact on the ground over time will be less easy, but anything that P2C is able to do to reduce the environmental impact of initiatives designed to achieve universal connectivity will be a positive contribution. Digital connectivity has significant environmental impacts at present; ensuring connectivity for the remaining 2.9 billion people in the world will more than double such impact.[iv]

[i] UN SG (2020) *Roadmap for Digital Co-operation*, New York: UN, p.2; although it is interesting to note that none of the 15 aspirational targets for achieving universal and meaningful; digital connectivity agreed in 2022 make any mention of sustainability.

[ii] Details of the initial conceptual framework are available at https://ict4d2004.files.wordpress.com/2021/09/conceptual-framework-v3.pdf.

[iii] In the P2C slide deck dated 21 March 2022, the word “sustainable” is mentioned five times (slide 2 under FA4, slide 8 FA1 relating to energy, slide 13 FA3 smart sustainable hubs, slide 14 FA3 unsustainable digital economy, and slide 15 FA4 sustainable changes) and sustainability once (slide 14 FA3 under digital economy). The word “environment” is mentioned four times, but never in the sense of the physical/natural environment.

[iv] Although 2.9 billion people represents less than half of the world’s population, the fact that it becomes increasingly more difficult and thus resource intensive to connect ever more marginalised people means that the total environmental impact is likely to be significantly higher than double its present state.