

TRANSFORMATIVE INNOVATION POLICY 2020 FORUM

VIRTUAL 20-22 OCTOBER 2020

Science, technology and innovation have significant transformative potential. For developing countries, STI, and specifically innovation, can support economic growth and employment, create livelihoods at grassroots level, and improve government performance and service delivery. While innovation is not the only factor in faster economic growth, industrialisation and inclusive development, it remains a significant and vital catalyst. Innovation can enhance South Africa's development and improve the quality of life of its citizens.

WHITE PAPER ON SCIENCE,
TECHNOLOGY, AND INNOVATION, 2019

THE TRANSFORMATIVE INNOVATION POLICY CONSORTIUM

South Africa is a founding member of the Transformative Innovation Policy Consortium (TIPC). Inaugurated in 2017, the consortium is giving substance to a new focus for Science, Technology and Innovation (STI) policy based on ‘Transformative Change’ to tackle global societal challenges, including climate change, inequality, education, health, employment and pathways to economic growth and development. This is known as Transformative Innovation Policy (TIP).

TIPC is co-ordinated by the Science Policy Research Unit (SPRU) at the University of Sussex in the UK, the Utrecht University Centre for Global Challenges in the Netherlands and INGENIO (CSIC-UPV), a joint research centre of the Spanish National Research Council and the Universitat Politècnica de València.

Current TIPC members comprise of ministries and funding agencies from Colombia, Finland, Norway, South Africa and Sweden. In addition, China, Brazil, Ghana, Kenya and Senegal are participating in associated pilot projects. Working together in a co-created five-year programme, TIPC is mobilizing empirical research in combination with policy experimentation, evaluation, capacity building and mutual learning.

Building on the international network, regional hubs have now been established in Europe, Latin America and Africa. The Africa Hub was established in 2018 at Science Forum South Africa (SFSa) bringing together South Africa, Ghana, Kenya, and Senegal.

BUILDING RESEARCH AND CAPABILITY IN SOUTH AFRICA

By leveraging on the international and continental effort, a 5-year national effort began in 2019 aimed at:-

- Building a diverse community of practice of no less than 200 change agents including policy-makers, researchers, and other change agents.
- Evolving a common framework that informs and influences system-level transformation efforts of the DSI, its entities, and its partners
- Applying transformative innovation policy frameworks and tools to a portfolio of no less than 10 policy experiments
- Building research and capacity-building capability in South Africa

Core to advancing the national effort is the Annual Forum of the community of practice. The inaugural forum, held in October 2019, took the form of three complementary capacity-building interventions.

The central capacity-building intervention was an in-depth two-day training programme for ten of the 15 policy experiments that constituted the South African portfolio at the time (see graphic below). Training programme participants were introduced to transformative innovation policy, the socio-technical approach, and the multi-level perspective for deep transitions.

Policy Experiment 1 – Transformative Innovation Community of Practice

Policy Experiment 2

Roll out of stationary fuel cells in informal settlements and rural communities

Policy Experiment 4

Sanitation Transformation Initiative (SANITI)

Policy Experiment 3

A roadmap to achieve smart and innovative sustainable human settlements in South Africa

Policy Experiment 5

Innovation-driven Local Economic Development in the Vhembe District Municipality

Policy Experiment 6

21st Century Education Sandbox

Policy Experiment 7

Digitally-enabled network of technology centres

Policy Experiment 15

Pathway Management for Youth Employment

Policy Experiment 14

Industrial Parks and SEZ's as innovation catalysts

Policy Experiment 8

Living Catchments

Policy Experiment 9

Just Transitions in Mpumalanga

Policy Experiment 10 – WEF Centre for 4IR – South African Affiliate

Policy Experiment 11 – Foresight based Planning in the Eastern Cape

Policy Experiment 12 – Procurement for locally developed technologies and innovations

Policy Experiment 13 – Open data and open science

PILOTING NEW MODELS FOR CO-CREATION

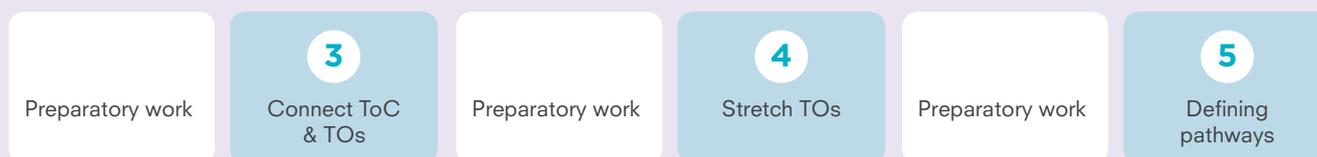
To advance further ‘second-order learning’, the South African national programme recently concluded a pilot co-creation intervention, designed to enhance the design of the policy experiment, as well as supporting capacity-building and strengthening theoretical frameworks.

The 14-week intervention (see graphic below) included the development and/ or strengthening of a Theory of Change, introduction of the concept of ‘transformative outcomes’, and designing a monitoring and evaluation framework towards transformative change. The Living Catchments Policy Experiment team volunteered to pilot the intervention.

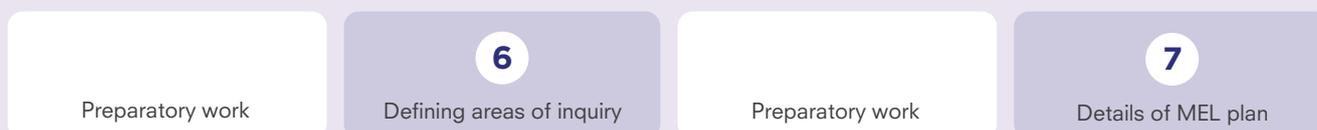
MODULE 1 – THEORY OF CHANGE (ToC)



MODULE 2 – CONNECTING TOC & TRANSFORMATIVE OUTCOMES (TOs)



MODULE 3 – DEVELOP A MONITORING, EVALUATION AND LEARNING (MEL) PLAN



OTHER KEY DEVELOPMENTS

Further milestones since the 2019 Forum include:

- The Africa regional hub, which has developed and matured since its launch in December 2018. Transformative Innovation case studies on ICT in Higher Education (Senegal), mobile schools (Kenya), and e-waste (Ghana) were developed and published using TIP tools and frameworks. The 2020 Forum will showcase the scholarship and efforts of the Africa Regional Hub
- A Trilateral Chair on *Transformative Innovation, the Fourth Industrial Revolution and Sustainable Development*, which started operating in July 2019. Funded by the South African National Research Foundation and the British Council, the programme is an international research collaboration between the University of Johannesburg, the African Centre for Technology Studies (ACTS) in Nairobi and the Science Policy Research Unit (SPRU) at the University of Sussex in the UK. The programme builds on the expertise of the three partners to strengthen African scholarship for examining transformative innovation and its policy dimensions, in the context of the fourth industrial revolution (4IR) and efforts to achieve sustainable development. The Trilateral Chair will share progress and an update at the 2020 Forum.
- As part of ongoing efforts to implement the 2019 White Paper Policy imperatives, several new and significant innovation-focused initiatives and partnerships have emerged as potential candidates for inclusion in the South African portfolio. This includes the United Nations Development Programme (UNDP) SDG Accelerator, a large-scale employment stimulus programme, Hydrogen Fuel Cell industrial development corridor, the Imbali Education and Innovation Precinct, and the Covid-19 data observatory.

AIMS FOR THE 2020 FORUM

On the basis of the above developments, the 2020 Forum is designed to:

- Enable existing policy experiments to reconnect and share developments, as well as allow for critical reflection on the utility of transformative innovation concepts, frameworks, and tools (sessions 8 and 10).
- Critically reflect on the 14-week pilot intervention with the Living Catchments policy experiment to inform the roll-out of the intervention to other policy experiments (session 6).
- Introduce the core concepts and tools that underpin transformative innovation policy – that is, transition management, theory of change, and transformative outcomes (session 2 and 5). These sessions will be of specific value to potential new policy experiments.
- Look at how transformation innovation policy is unfolding both at the continental level (session 3 and 7) and internationally (session 9)
- The 2020 forum will also include a special session to explore the ideas detailed in ‘The Age of Sustainability: Just Transitions in a Complex World’ by Professor Mark Swilling.

PROGRAMME AT A GLANCE

	TUESDAY 20 OCTOBER	WEDNESDAY 21 OCTOBER	THURSDAY 22 OCTOBER
9:00 – 10:30	Session 1 Mobilising the power of innovation to address societal challenges – Developments in Transformative Innovation Policy in national, regional and global contexts	Session 5 TIP foundations – Theory of change and transformative outcomes	Session 10 South African portfolio of policy experiments – Progress, lessons, and future directions
11:00 – 12:30	Session 2 TIP foundations – Introducing Transitions Management and the Multi-Level Perspective	Session 6 Reflections – Living Catchments pilot: outcomes and learnings	Session 11 Annual Executive Update and Engagement
13:30 – 15:00	Session 3 Showcase – Trilateral Research Chair, Transformative Innovation, the Fourth Industrial Revolution, and Sustainable Development	Session 7 Regional Showcase – Implementation of TIP in Senegal, Ghana and Kenya	Session 12 By invitation – Towards a regional community of practice
15:30 – 17:00		Session 8 Applying the tools and frameworks – Off-grid energy provision and sustainable human settlements roadmap	
16:30 – 18:00	Session 4 Book club – The Age of Sustainability: Just Transitions in a Complex World, Mapula Tshangela in conversation with the author, Mark Swilling		
18:00 – 19:30		Session 9 Global fireside chat – Initiatives to implement transformative innovation around the world	

Registration: To participate, please register through Eventbrite at <https://www.eventbrite.co.uk/e/transformative-innovation-policy-2020-forum-tickets-124607599685>. You will then receive further information on the programme and joining instructions for the virtual meeting platform, Zoom.