The role of science, technology and innovation (STI) to foster the implementation of the SDGs

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Marialuisa Tamborra
Deputy Head of the Strategy Unit
Climate Action and Resource Efficiency Directorate
DG Research and Innovation
Agenda 2030 in brief

- Adopted in September 2015

- A set of 17 goals and 169 targets that form the bulk of the 2030 Agenda ("Transforming our world: the 2030 Agenda for Sustainable Development"), which is:
  - Transformational
  - Universal
    The agenda applies to both developed and developing countries (unlike the MDGs)
  - Inclusive
    No one left behind principle

- The goals are integrated and indivisible and balance the three dimensions of sustainable development.
SDGs stand for Senseless Dreamy Garbled

An opportunity companies can’t afford to ignore

A “golden thread” in which governments, private enterprise and civil society work together to create open societies and open economies, end conflict and corruption, and enshrine the rule of law, free speech and property rights. (UK PM David Cameron)

Today we commit ourselves to new Sustainable Development Goals […]. We do so understanding how difficult the task may be. We suffer no illusions of the challenges ahead. But we understand this is something that we must commit ourselves to. (US President Obama)

If only the SDGs were as concise as Moses’ 10 commandments …

These are not impossible goals. We have innovation on our side to find solutions – if we have the will to act. In Europe we are determined to do this jointly, and we want to fully engage with the UN in experience sharing, capacity building, and progress monitoring. We want to do this together. (FVP Timmermans)

SDGs show how aid is changing for the better
The SDGs as a business opportunity

- Companies look at the SDGs as a new market, as new business opportunities, rather than just the purview of charity work or the aid community.
- A "trillion business": 2-3 trillion dollars per year (SDSN report on Financing the SDGs)
- 71% of businesses say they are already planning how they will engage with the SDGs and 41% of businesses say they will embed SDGs into strategy and the way they do business, within five years (According to a study of PWC)
- 60% of consumers willing to pay more for sustainable products
STI in the 2030 Agenda

- The 2030 Agenda includes the Addis Ababa Action Agenda (AAAA) agreed before the Rio +20 Summit
- Data & Earth Observation mentioned with regard to the follow-up and review of the 2030 Agenda
- Role of business to promote innovation highlighted
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development
- Launch of the Technology Facilitation Mechanism
A chapter on **Science, Technology and Innovation (STI)**, mentioning:

- The role of new innovations, technologies and associated know-how, [...] as powerful drivers of economic growth and sustainable development.
- The importance of an enabling environment in nurturing STI and the dissemination of technologies.
- A commitment to promote social innovation to support social well-being and sustainable livelihoods.
- Knowledge-sharing and the promotion of cooperation and partnerships between stakeholders, [...] for the achievement of the SDGs.
- The important role of public finance and policies in RTD, as well as the use of public funding to enable critical projects to remain in the public domain, and open access to research for publicly funded projects.
- STI as integral elements of national sustainable development strategies.
- Stepping up international cooperation in science, research, technology and innovation, including through public-private and multi-stakeholder partnerships, and on the basis of common interest and mutual benefit.
- To reach food security, international cooperation, in earth observation, rural infrastructure, agricultural research and extension services, and technology development by enhancing agricultural productive capacity in developing countries.
The decision to establish a **Technology Facilitation Mechanism** that will be composed of:

- a *United Nations inter-agency task team on science, technology and innovation for the SDGs*
- a *collaborative multi-stakeholder forum on science, technology and innovation for the SDGs*
- an *online platform.*
Sustainable development in the EU

• **Art 3.3. TEU** – "The Union shall establish an internal market. It shall work for the **sustainable development** of Europe [...]. It shall **promote scientific and technological advance**".

• **Europe 2020** - A strategy for smart, sustainable and inclusive growth
  
  • **Sustainable growth**: promoting a more resource efficient, greener and more competitive economy.

• **Horizon 2020** - **Commitment to sustainable development** with 60% of its budget (35% to CC)

• **FVP Timmermans’** horizontal responsibility for **sustainable development**.

"These are not impossible goals. We have innovation on our side to find solutions – if we have the will to act."
What is Horizon 2020?

- The EU programme for R&I for 2014-2020 with a budget of €77 billion (in current prices)
  - The largest and most comprehensive programme of its type in the world

- A core part of Europe 2020, Innovation Union & European Research Area:
  - Responding to the economic crisis to invest in jobs and growth
  - Addressing people’s concerns about their livelihoods, safety and environment
  - Strengthening the EU’s global position in research, innovation and technology

- Three pillars:
  - Excellent Science; Industrial Leadership; Societal Challenges
**Horizon 2020: a tool for achieving the SDGs?**

- The SDGs provide a common ground for engaging all countries and different partners in the implementation of a universal and transformational agenda.
- **H2020 promotes sustainability in Europe and globally.**
- **Its 60% expenditure commitment to Sustainable Development and 35% to Climate Change place the EU-funded research at the heart of the realisation of the Post-2030 Agenda.**
- **H2020 openness to the world is an opportunity for increased international R&I cooperation in support of the SDGs.**
<table>
<thead>
<tr>
<th>Funding for Societal challenges (€ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health, demographic change and wellbeing</strong></td>
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<tr>
<td><strong>Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy</strong></td>
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<tr>
<td><strong>Secure, clean and efficient energy</strong> *</td>
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<td><strong>Smart, green and integrated transport</strong></td>
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<td><strong>Climate action, environment, resource efficiency and raw materials</strong></td>
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<td><strong>Inclusive, innovative and reflective societies</strong></td>
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<td><strong>Secure societies</strong></td>
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<td><strong>Science with and for society</strong></td>
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<td><strong>Spreading excellence and widening participation</strong></td>
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* Additional funding for nuclear safety and security from the Euratom Treaty activities (2014-2018)
Examples of science-policy for the SDGs activities under Horizon 2020

• *SC5* 'Climate Action, environment, resource efficiency and raw materials' Work Programme for 2014-2015
  
  
  • Topic 'Consolidating global knowledge on the green economy in support of sustainable development objectives in the EU and internationally'
    
    Selected project: green.eu (www.inno4sd.net)
    Events, briefs and databases to be developed with Future Earth (www.futureearth.org)
  
  • Topic 'Coordinating European Observation Networks to reinforce the knowledge base for climate, natural resources and raw materials'
    
    Selected project: ConnectinGEO (www.connectingeo.net)
    Identify gaps in observations and the models that translate observations into practice-relevant knowledge
Next steps:

- Participation in the first STI Multi-Stakeholder Forum (New, York, 6-7 June) to build an implementing framework for STI in support of the SDGs.
  - Connecting to the process existing STI platforms, such as the S&T Alliance for Sustainable Development (UN agencies, WMO, Belmont Forum, ISSC and ICSU + WBCSD, SDSN) and its Future Earth initiative.
- By the end of 2016, new Commission initiative aimed at:
  - Setting out the architecture of the SDGs implementation;
  - Mapping existing policies in support of the SDGs;
  - Reporting and monitoring on the SDGs by Eurostat;
  - Proposing an update of the Consensus on Development.
- Preparing the next Horizon 2020 Work Programme 2018-2020 in view of achieving 60% budget on Sustainable Development.
Food for thought from the Expert Group (EG) on STI policies for the SDGs

A reference framework - R&I as engines of a transformative agenda built around the SDGs by a Group of Expert chaired by Prof Enrico Giovannini

• STI policy is fundamental to implement the new “2030 Agenda” for sustainable development
• STI for SD policies (STI4SD) are a vital asset for the EU to continue to be the global frontrunner of SD
• Orienting public and private investments in the real economy to the SDGs will help create markets for new solutions that respond to the challenge of sustainability
• Achieving the SDGs is not just a political commitment or a moral imperative. It is an opportunity for promoting jobs and growth, and achieving prosperity

Implementing the agenda
Towards 2030