



Background

The *STI Outlook* is a biennial OECD flagship publication that aims to inform policy makers on recent and possible changes in global STI patterns and their potential implications for national and international policies. It provides a comparative analysis of new policies and instruments used in OECD countries and a number of major emerging economies to boost the contribution of science and innovation to growth and to address global and social challenges.¹

The 2016 edition seeks to project current STI and policy trends into a 10 to 15-year future and identify challenges and implications for STI policy makers. The OECD is undertaking a "Forward Look" exercise during 2015 to support this work. The exercise has five elements:

Megatrends: Large transformative forces are shaping the future of STI, for example, affecting universities' and firms' capacity to engage in research and innovation, and changing the policy agenda. The Forward Look considers the implications of these megatrends for STI systems and policy.

Technology trends: Emerging technologies are set to have profound impacts on economies and societies over the next 10-15 years. The Forward Look identifies 10-12 technology areas that are among the most promising and potentially most disruptive and that carry significant risks. The choice of technologies considered is largely shaped by the findings of countries' existing foresight exercises.

STI system trends: STI systems have their own 'internal' dynamics driven by several key trends and issues. For public sector research, these include shifts in where R&D is performed, changes in sources and modes of R&D funding, moves towards a more "open science", increasing internationalization, growing pressures on research careers, and renewed concerns around research integrity.

Policy trends: STI policy also has its own trends deserving analysis. For example, there has been a broadening in the policy mission for STI policy, which has translated into more goals and more actors in the policy system. The sub- and supra-national levels have become increasingly active in complementing national STI policy, although this has not necessarily translated into more resources: continuing fiscal consolidation and tight budgetary constraints will likely have major impacts on STI policy over the coming years. There is a growing array of policy instruments in use, with notable growth in demand side instruments and R&D tax incentives. Growing concerns over managing socio-technical risk and uncertainty are also driving renewed policy interest in technology assessment and "responsible research and innovation".

People, communities and societies: This is a horizontal element of the Forward Look exercise that seeks to put the "human" factor at the heart of change in the STI landscape and its outlook.

¹ The 2014 edition can be viewed online at <https://www.innovationpolicyplatform.org/sti/e-outlook>

