

Comparative table of national STI strategies or plans, OECD countries and some major non-OECD economies, 2016

NATIONAL STI PLAN(S) OR STRATEGY	PERIOD COVERED	MAIN OBJECTIVES
ARGENTINA		
Innovadora 2020	2013-20	Extend the scope of the former National Plan for STI (PNCTI) (2012-15) in order to cover a decade. The PNCTI aimed to: i) promote the transition towards further knowledge-based societies and economies by enhancing national S&T capabilities; improve national economic competitiveness; iii) increase quality of life and foster social development; iv) support sustainable development mainly through the protection of natural resources.
AUSTRALIA		
National Innovation and Science Agenda (NISA)	2015-20	A cohesive and comprehensive plan with a focus on four key pillars: Culture and capital, Collaboration, Talent and skills, and Government. It is a blueprint for a more innovative and entrepreneurial business culture that aims to transform the country into a leading innovation nation with a generous social welfare safety net.
Innovation and Science Australia	Since 2015, revised in 2016	A new independent body with a mandate to provide strategic whole-of-government advice to the government on all science, research and innovation matters.
AUSTRIA		
Becoming an Innovation Leader: Realising Potential, Increasing Dynamics, Creating the Future	2011-20	Be one of the EU's most innovative countries EU by 2020 and among the "Innovation Leaders": i) a well-equipped education system; ii) basic research as a fertile ground for the innovation system; iii) intensified R&D activities in companies ensured by knowledge transfer between scientists and businesses; iv) new framework conditions and funding governance structures, and distribution of responsibilities in a multi-level political system, from regional co-ordination to internationalisation; v) efficiency and effectiveness of funding, as well as the principle of competition-based funding allocation. <i>Quantitative target:</i> ✓ Raise R&D expenditures to 3.76% of GDP by 2020.
Action Plan for a Competitive Research Area	Since 2015	Presents the measures taken by the Federal Ministry of Science, Research and Economy, in order to implement the RTI strategy of the Federal Government that aims at stimulating the R&D performance of Austria.

BELGIUM (<i>Federal government</i>)		
Federal Government Agreement	Since 2008	<p>i) Reduce costs of researcher employment (through tax allowance on R&D wages); ii) increase share of workers in medium high-technology industry and services as a percentage of total active population; ii) increase applied and awarded EPO, USPTO and PCT-patents per capita; iii) increase the share of Innovative companies as a percentage of all industrial and services companies (per firm size and industry/services).</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2020.
BELGIUM (<i>Brussels Capital</i>)		
Regional Innovation Plan	Forthcoming, 2016-20	<p>i) Improve the innovation chain (with two main aspects: improve knowledge and technology transfer and support to innovative companies); ii) support new types of innovation (social innovation, organisational innovation, etc.) and emerging RDI actors (including the non-profit sector); iii) improve communication and RDI promotion; iv) ensure a broad participative and efficient governance of the RDI eco-system; v) subscribe to and deepen a smart specialisation approach (with the definition of three main “strategic business/innovation areas”).</p> <p>No financial resources committed yet.</p>
BELGIUM (Flanders)		
Governing of Flanders’ coalition agreement	2014-19	<p>i) Improve overall human resources, skills and capacity building and a demand-driven and market-oriented public policy in the field of economy and innovation; ii) Improve returns and impact of science a simplification and rationalization of structures and instruments with faster and easier procedures, more transparency, better client-friendliness and a clear one-stop-shop function; iii) Address challenges of STI globalisation and increasing international cooperation a higher focus on business-oriented innovation and valorisation, strong knowledge organizations with excellent research and a growth path for the 3% target for R&D, whereby public outlays strive towards 1% by 2020.</p>
New policy letter for Work, Economy, Science and Innovation	Since 2014	<p>Describes the policy priorities for scientific research and innovation in the on-going parliamentary year and presents the current situation, recent accomplishments and the implementation of policy and foresight policy initiatives in the near future.</p>
Reform Programme EU 2020	2010-20	<p>The Programme defines the strategic objectives for R&D&I in Flanders to elaborate the EU2020 targets on R&D&I. The five strategic objectives mentioned in the Flemish Reform Programme EU2020 that relate to research and innovation are: i) realise breakthroughs in research and innovation by focusing innovation strategies and by joining forces in spearheaded areas; ii) accelerate the transformation of the Flemish economy; iii) sustain Flanders as a strong, international network location for research and innovation.</p>
Pact 2020	2009-20	<p>Monitor progress towards ViA targets in 20 thematic chapters, including one on innovation.</p> <p>Current innovation indicators:</p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2020. ✓ Innovation Output indicator (since 2015). ✓ Increase the share of turnover from new or improved products or services by company size and industry/ services.

BELGIUM (Wallonia)		
Strategy for an Integrated Research Policy, Marshall Plan 4.0	2015-19	<p>Five main axes: i) Innovation and growth: sustain the industrial development by an innovation policy and growth of enterprises ; ii) education and orientation: work-linked training offers, life-long learning, learning languages with the “Plan Langues”; iii) territorial development: establishment of an appropriate framework for creating businesses and quality jobs, infrastructure projects; iv) digital innovation: sustain digital innovation as a vehicle for economic development; v) <i>energy and Circular Economy</i>: stronger focus on sustainable development, renewable energies, and environmental issues.</p>
Creative Wallonia Action Plan	Since 2010	<p>Put creativity and innovation at the heart of economy and society. Three main axes: i) stimulating creative society; ii) encouraging innovative practices; iii) support for innovative production. Some 20 actions already implemented, including: university courses; co-working spaces; “smart work centres”; an observatory of trends; a support tool for the start-up of innovative processes (Boost-up/Creative Industries and Crossmedia); a plan for development of connectivity in Wallonia.</p> <ul style="list-style-type: none"> ✓ Increase R&D tax credits and sustained efforts in aerospace sector. ✓ Raise R&D expenditures to 3% of GDP by 2020.
Smart Specialisation Strategy	2015-19	<p>Give a coherent strategic framework for innovation and industrial policy in Wallonia, supporting the development of a coherent policy mix and defining strategic priorities for smart specialisation. In this context, the cluster policy constitutes the backbone of the approach, driving the entrepreneurial discovery processes within the regional ecosystem. Furthermore, the strategy aims at developing further collaborative approaches and supporting the driving cluster-forming role for the whole regional economy and for building new industrial value chains.</p> <p>Four axes for deepening the smart specialisation approach have been identified: i) developing innovation and creativity; ii) commercialisation of RDI; iii) involving SMEs in innovation dynamics; and iv) circular economy and internationalisation.</p>
BRAZIL		
National Strategy for Science, Technology and Innovation (ENCTI)	2016-19	<p>Decrease the technological gap through science and innovation; promote a green economy; contribute to eradicating poverty and decreasing social and regional inequalities by: i) increasing resources for financing innovation; ii) expanding and strengthening infrastructure for S&T research; and iii) increasing support for human resources capacity building in strategic fields, especially engineering.</p> <p>Priority areas: renewable energy, subsea oil, health, biodiversity, climate change, defence, nuclear, space and social technologies.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Increase the number of innovative firms ad of those that conduct continuous R&D. ✓ Raise R&D expenditures to 2% of GDP by 2019..
Pluriannual Government Plan	2016-19	Provide strategic orientation for public resource allocation.

CANADA		
Canada's Innovation Agenda	Since 2015	Expand effective support for incubators, accelerators, the emerging national network for business innovation and cluster support, and the Industrial Research Assistance Programme.
Seizing Canada's Moment: Moving Forward in Science, Technology and Innovation 2014	Since 2014	The 2014 Strategy continues and builds upon the 2007 Strategy "Mobilizing Science and Technology to Canada's Advantage" : <i>i)</i> Promote world-class excellence; <i>ii)</i> focus on priorities; <i>iii)</i> foster partnerships; <i>iv)</i> enhance accountability. Investments in these areas will target key growth sectors to attract FDIs or grow export-oriented companies.
Science, Technology and Innovation Strategy	Forthcoming	Updated STI Strategy.
CHILE		
Growth, Innovation and Productive Agenda	Since 2014	<i>i)</i> Facilitate and encourage diversification and productive development, <i>ii)</i> promote economic sectors with high growth potential, <i>iii)</i> increase firms' productivity , <i>iv)</i> boost exports. Include priority sectors for social and economic development.
"Surfing towards the Future: Chile on the 2025 Horizon"	2014-25	Consider future "strategic orientations" rather than specific guidelines for action with cultural issues one of the main challenges for Chile. Priority areas: energy, biotechnology and education.
Chile Innovation Plan	2014-25	Guide the actions of STI institutions in the period of the present government and aims to improve innovation, science, technology and entrepreneurship as key pillars to improve productivity, competitiveness and foster economic dynamism. Chile intends to extend its culture of innovation and its culture of entrepreneurship to generate productive scaling possibilities. Six axes to address innovation in the private and public sector: <i>i)</i> Selectivity <i>ii)</i> Institutional strengthening <i>iii)</i> Boosting innovative SMEs <i>iv)</i> Ecosystem and culture of entrepreneurship and innovation <i>v)</i> Innovation for inclusive growth <i>vi)</i> Comprehensive vision and strengthening human capital, science and technology
National Innovation Strategy for Competitiveness – Innovation Plan	2010-14	Improve productivity and competitiveness as key drivers of growth and economic and social development by <i>i)</i> creating a culture of innovation and entrepreneurship, <i>ii)</i> increasing critical mass in scientific and entrepreneurial capacity, <i>iii)</i> removing bottlenecks to business creation and competitiveness, <i>iv)</i> encouraging global connections, <i>v)</i> improving technology absorption and transfer; and <i>vi)</i> generating, attracting and retaining top talent to become an innovation hub in South America. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 0.4% of GDP (indefinite).
PEOPLE'S REPUBLIC OF CHINA		
Medium and Long-term National Plan for Science and Technology Development	2006-20	<i>i)</i> Enhance China's S&T and innovation capabilities ; <i>ii)</i> use innovation as a tool to restructure Chinese industry and shift growth from investment-driven to innovation-driven; <i>iii)</i> build a conservation-minded and environmentally friendly society; and <i>iv)</i> enhance independent innovation capabilities as a national priority. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 2.5% of GDP by 2020. ✓ Rank among the world's top five in patenting and international citations.

12th Five-year Plan for S&T Development	2011-15	<p>i) Improve indigenous innovation capability, especially in firms; ii) strengthen S&T competitiveness and international influence with a focus on development of human resources, creativity and innovation culture; iii) make breakthroughs in core and critical technologies in key areas to support economic restructuring; iv) develop a functional, well-structured and efficient national innovation system through reform of the public research and S&T governance systems and better co-ordination and collaboration among stakeholders.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 2.2% of GDP. ✓ Raise investment of large and medium-sized industrial enterprises in R&D to an average of 1.5% of their revenue. ✓ Increase proprietary core technologies. Increase the role of large-scale enterprises in driving technological innovation. Foster world-leading innovative SMEs. ✓ Raise the number of researchers to 43 out of every 10 000 employees. ✓ Raise the share of citizens with basic scientific proficiency to over 5%.
COLOMBIA		
Departmental Strategic Plans and Agreements on STI	Since 2015	i) Serve as the tool for territories and the Nation to define their priorities and to articulate efforts and resources to determine and standardise their STI plans and projects; ii) structure and define a regional strategy to strengthen STI policies at a local level.
National Policy on STI – CONPES-3582	2009	Generate economic and social development based on knowledge. i) Promote innovation in production systems; ii) strengthen the institutional framework of the National STI System; iii) strengthen the training of human resources for research and innovation; iv) promote social appropriation of knowledge; v) focus public action in strategic areas; vi) develop and strengthen STI capacities.
COSTA RICA		
National Development Plan (PND)	2015-18	The plan includes three major goals: i) fostering economic growth by increasing the quantity and quality of jobs; ii) reducing poverty and economic and social inequality; iii) and combating corruption and promoting a more transparent state.
National Science, Technology and Innovation Plan (PNCTI)	2015-21	Contribute to social welfare and strengthen knowledge-based activities through social appropriation, articulation and application of science, technology and telecommunications. The Plan also promotes human capital formation and outstanding research.
CROATIA		
Industrial Strategy of the Republic of Croatia 2014-2020	2014-20	<ul style="list-style-type: none"> • Growth of industrial production volume at an annual rate of 2.85%. • Creation of 85 619 new jobs in the industry by 2020, of which at least 30% for the highly educated. • Increase exports in the period 2014-2020 by 30%, focus on products with high added value. • Increase in productivity by 68.9% in the most competitive sectors.
Action Plan “Science and Society”	2014-20	Create an adequate policy environment and provide incentives to i) remove legal barriers to the recruitment, retention and career progression of female researchers while fully complying with EU law on gender equality and to ii) strengthen the gender dimension in research programmes.

Strategy for fostering innovation in the Republic of Croatia 2014-2020	2014-20	<p>Four strategic goals:</p> <p>i) Improve performance of the Croatian innovation; ii) Increase share of business sector investment in total investment in research and development; iii) increase number of basic and applied research to strengthen the competitiveness of the economy; iv) increase human capacity for research, technological development and innovation.</p> <p>Four thematic pillars:</p> <p>i) develop the innovation system of the Republic of Croatia and develop legislative and fiscal framework to encourage innovation; ii) Strengthen innovation potential of the economy; iii) foster cooperation and knowledge flow between private, public and scientific research sector; iv) strengthen human resources for innovation and enable the creation of an attractive environment for world class researchers.</p>
Competitiveness and Cohesion OP (OPCC)	2014-20	Boost economic competitiveness, support alignment with the EU environmental acquis, invest in transport infrastructure (TEN-T) and network infrastructure.
Strategy for Education, Science and Technology	2014-20	<p>i) build internationally competitive public universities and public research institutes in Croatian higher education and research; ii) enable and encourage interaction and transfer mechanisms between the research community, innovative economy and social activities; iii) support universities, polytechnics and research institutes involved in smart specialisation processes and related guidelines for technological development; iv) provide national and innovation infrastructure with public access, and connect them with European infrastructure; v) increase investments in research and development by improving the system of public funding and encouraging investments in research and development by business and social sectors; vi) support faster initiation of changes in the higher education and science system.</p>
Operational Programme Efficient Human Resources 2014-2020	201-20	<p>Improvement of the socio-economic conditions in Croatia, special attention is directed to the people at the risk of poverty and social exclusion. Four objectives:</p> <p>i) high employment and labour mobility; ii) social inclusion; iii) education and lifelong learning; iv) good governance.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise employment rate (percentage of the 20-64 year-olds to be employed) to 62.9. ✓ Raise GERD as a percentage of GDP to 1.4. ✓ Raise energy from renewables to 20%. ✓ Increase in energy efficiency by 20%. ✓ Reach a school drop-out rate of 4%. ✓ Raise third level education attainment to 35%. ✓ Reduce the number of people at risk of poverty and social exclusion to 150 000.
Entrepreneurship Development Strategy 2013-2020	2013-20	Increase the competitiveness of SMEs by raising the number of successful businesses, by increasing exports and the degree of innovation, quality education employees, by stimulating business environment, and by facilitating access to financing.
Electronic Resources for Croatian Academic and Scientific Community (portal)	2016-20	Improve access to research tools by increasing access to foreign scientific publications and databases.
Croatian Research and Innovation Infrastructures Roadmap	2014-20	Provide support for the implementation of the Strategy for Education, Science and Technology and the National Innovation Strategy, the purpose of this document is to identify research potential and the direction for further development of scientific research infrastructure.

CZECH REPUBLIC		
National Innovation Strategy	2012-20	Raise the importance of innovation and use top-of-the-range technologies as a source of competitiveness and increase their contribution to long-term economic growth, high-quality jobs creation and the development of quality of life in the Czech Republic through <i>i)</i> excellent research; <i>ii)</i> co-operation between research institutions and enterprises; <i>iii)</i> innovative entrepreneurship; <i>iv)</i> human resources as originators of new ideas and initiators of changes.
International Competitiveness Strategy	2012-20	Strengthen the competitiveness of the Czech economy in nine pillars: institutions, infrastructure, macroeconomics, health care, education, labour market, financial markets, business environment and innovation. Institutions, infrastructure and innovation ("3i") are considered the most important areas for future competitiveness. Create friendly conditions for creative business, innovation and growth.
National Research, Development and Innovation Policy (NRDIP) – 2013 Update	2009-15	Create a framework for the implementation of R&D and innovation-related measures stimulating the development of the knowledge society, further increasing the competitiveness of the Czech economy and improving the quality of life in the Czech Republic. Main objectives: <i>i)</i> establish a strategic management of R&D and innovation at all levels based on systematic impact assessment of the National Policy objectives fulfilment as well as in depth analyses of R&D and innovation system as such; <i>ii)</i> target the public support to R&D and innovation in line with demands of sustainable development; <i>iii)</i> Increase efficiency of the public support to R&D; <i>iv)</i> utilise the R&D results in innovation processes and enhance the co-operation between public and private sector in R&D and innovation; <i>v)</i> intensify the Czech Republic's involvement in the international R&D and innovation co-operation ; <i>vi)</i> provide qualified human resources for R&D and innovation; <i>vii)</i> create an environment stimulating R&D and innovation in the Czech Republic; <i>viii)</i> ensure the compatibility and linkages of the National Policy with other sectoral policies; <i>ix)</i> ensure consistent evaluation of the R&D and innovation system. <i>Quantitative targets:</i> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 2.7% of GDP by 2020. ✓ Raise government spending on R&D to 1% of GDP by 2020.
Reform of the Research, Development and Innovation System	Since 2008	Increase the competitiveness of the Czech economy and improve the quality of life in the Czech Republic through institutional arrangements, legislative changes regarding public support of R&D and funding to: <i>i)</i> improve efficiency and simplify R&D support; <i>ii)</i> support excellence in R&D and facilitate application of R&D in innovation; <i>iii)</i> strengthen co-operation with users of R&D results based on co-financing from public and private resources; <i>iv)</i> improve organisational flexibility of public research institutes; <i>v)</i> ensure a supply of HRST; and <i>vi)</i> increase involvement in international co-operation.
DENMARK		
The Innovation Strategy – Denmark: A Nation of Solutions	2012-20	Improve national capacities to find solutions to the global societal challenges and ensure that the substantial public investments in research, innovation and education translate into more growth and jobs
INNO+ Catalogue	Since 2013	Identify promising focus areas for strategic investments in innovation. The focus areas target fields where Denmark has particular industrial and research strengths and capabilities.

RESEARCH2020 (Forsk2020)	Since 2012	<p>Find the most promising research areas for growth, employment and welfare using major societal challenges as a starting point and the basis for decision on strategic funding of research. RESEARCH2020 replaces RESEARCH2015.</p> <p><i>Quantitative targets (by 2020):</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP. ✓ 95% of a youth cohort to complete an upper secondary education programme. ✓ 60% of a youth cohort to complete a higher education programme. ✓ 25% of a youth cohort to complete a long-cycle higher education programme.
EGYPT		
National strategy for science, technology and innovation	2015-30	n.a.
Sustainable Development Strategy: Egypt Vision 2030		Building a balanced, knowledge-based, competitive, diversified, market economy characterised by a stable macroeconomic environment, capable of achieving sustainable inclusive growth. The Knowledge, Innovation and Scientific Research pillar of the Egypt 2030 Strategy aims to foster a creative and innovative society producing science, technology and knowledge.
ESTONIA		
R&D and Innovation Strategy – Knowledge-Based Estonia (KBEIII)	2014-20	<p>Create favourable conditions for increased productivity and standard of living, good education and culture, preservation and development of Estonia. It has four main objectives: i) strengthen excellent and diverse research; ii) perform R&D in the interests of the society and the economy; iii) make the structure of the economy more knowledge-intensive, iv) make Estonia active and visible in international RDI cooperation.</p> <p><i>Quantitative targets (by 2020):</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP. ✓ Raise business expenditures on R&D to 2% of GDP (2/3 of GERD).
Entrepreneurship Growth Strategy	2014-20	Raise productivity and employment through a single strategic framework that ensures coherence of entrepreneurial and innovation policies. Focuses on areas (smart specialisation) and groups of enterprises with major potential.
Research Infrastructures Roadmap	Since 2010, revised in 2014	Focus on 18 research infrastructures of national importance, either new or in need of upgrading.
FINLAND		
Strategic Programme of the Prime Minister “Finland, a land of solutions”	2015-19	<p>The strategic objectives are materialised in the form of 26 key projects, out of which 11 are relevant concerning research and innovation policies. These 11 projects are positioned on each portfolio of objectives (employment and competitiveness, knowledge and education, wellbeing and health, bioeconomy and clean solutions, digitalisation, experimentation and deregulation, structural reforms).</p> <p>Quantitative targets:</p> <ul style="list-style-type: none"> ✓ Maintain R&D intensity at 4% of GDP to 2020 (public R&D funding at 1.2%).

FRANCE		
National Research Strategy (SNR)	2015-20	<p>Acts as a scientific strategy and a technological roadmap to address priority challenges identified at the national and at the European level Ten challenges: sustainable resource management and adaptation to climate change; safe, effective and clean energy; stimulate industrial revival; health and wellness; food security and demographic challenge; sustainable mobility and urban systems; information society and communication; innovative, integrative and adaptive societies; spatial ambition for Europe; freedom and security for Europe, its citizens and its residents.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2020.
Plans for Industrial Recovery	Since 2013	<p>Build a new and competitive industry in France, which will be able to increase its market share domestically and abroad and thereby create new jobs. Development of sectoral contracts in partnership with entrepreneurs and guidelines for funding bodies. The Plans are supposed to fund high-tech readiness projects which are established as PPPs.</p>
Innovation 2030	Since 2013	<p>Major innovations to meet the needs of tomorrow's society by eight strategic goals: recycling of rare metals, development of marine resources (metals and desalination of seawater), plant proteins and plant chemistry, personalised medicine, silver economy (innovation in the service of longevity), development of big data, innovative projects on public security</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Development phase from 2016 onwards: finance projects with 20 million euros.
National Strategy for Higher Education (SNES)	2014-18	<p>Complement the National Research Strategy (SNR) with five major objectives regarding future challenges: <i>i/</i> raise the general level of knowledge and skills; <i>ii/</i> promote equality of opportunities; <i>iii/</i> include training in the European area of higher education; <i>iv/</i> make better use of training for employability, <i>v/</i> renew the governance of higher education.</p>
GERMANY		
High-Tech Strategy (HTS)	Since 2006	<p>The HTS sets the mid-term strategic orientations for Germany's R&D and innovation activity. In August 2014, the third edition (after 2006 and 2010) of the High-Tech Strategy was adopted. The HTS is developed further as a comprehensive, interdepartmental innovation strategy. New topics were added and new instruments for funding innovation introduced. The concept of innovation was expanded, now including not only technological innovation but also social innovation – with society as a central player. The upward trend in investments in research and development is continued. The HTS is characterised by better transfer (regional, national and international networking between science and industry), greater dynamism in innovation, an improved framework, and intensified dialogue Priority task areas: digital economy and society, sustainable economy and its energy, the innovative workplace, healthy living, intelligent mobility and civil security</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2020.
GREECE		
Strategic Plan for Research, Technology and Innovation	Forthcoming	<p>New legal framework for research and technological development (including a National Strategic Framework for Research, Technological Development and Innovation and a National Action Plan for its implementation) to replace the existing legal framework in order to address emerging STI policy issues and long-term challenges in Greece.</p>

National Research and Innovation Strategy For Smart Specialization 2014-2020	2014-2020	<p>Increase and improve investments in knowledge and excellence with a view to create sustainable development and promote innovation as well as the dissemination of new technologies and entrepreneurship to generate economic and social value.</p> <p>i) Strategy Pillar 1: investing in the creation and dissemination of new knowledge to promote excellence in research. Strengthening mechanisms, networking, human resources in research, research infrastructure and innovation Support of RTDI structures (capacity building), promotion of access to information and research results.</p> <p>ii) Strategic Pillar 2: strengthening investment in research and innovation, supporting innovative enterprises in international markets through research and innovation, and development of new innovative “players”</p> <p>iii) Strategic Pillar 3: developing innovative attitudes, institutions and RTDI links with the society to address social challenges.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 1.2% of GDP by 2020.
Creation of “One stop shop/ fast track” procedures for the licensing of strategic procedures that include scale investments in the field of high end technology and innovation	Since 2013	Overcome administrative burdens that investors encounter during their investments implementation.
HUNGARY		
National Research and Development and Innovation Strategy – Investment in the Future	2013-20	<p>Focus on utilisation-oriented R&D and innovation activities of companies through: <i>i)</i> internationally competitive knowledge bases that underpin economic and social progress; <i>ii)</i> promoting co-operation on knowledge and technology transfer that is efficient at national and international levels, and <i>iii)</i> innovative enterprises and the public sector intensively utilising the results of modern science and technology.</p> <p>Priority areas: ICT, biotechnology, nanotechnology, renewable energy and natural resources, environmental technologies.</p> <p><i>Quantitative targets (by 2020):</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 1.8% of GDP. ✓ Raise business expenditures on R&D to 1.2% of GDP.
National Transport Infrastructure Development Strategy	Since 2014	Introduces a long-term national strategy, which focuses on the development of infrastructure and its economic and environmental sustainability.
National Biodiversity Strategy	2014-20	Support research on genetically modified organisms (financed by OTKA).
National Energy Strategy 2030	2012-30	Provides several objectives to be achieved by 2030 in terms of energy efficiency, increased use of renewable energy and of low CO ₂ -emission transport.
Research Infrastructures in Hungary	2014-20	Achieve the RDI objectives envisaged in the National Reform Programme related to the Europe 2020 Strategy.
National Smart Specialisation Strategy (S3)	Since 2014	Aims to improve research capacities in all regions, especially research infrastructures that can accelerate the growth of the Hungarian economy.
Higher Education Strategy “A Change of Pace in Higher Education”	2014-29	Sets the directions for achieving a competitive higher education system in the coming 15 years.

National Reform Programme	2013-20	i) Introduce measures for dynamic economic growth; ii) boost employment; iii) ensure a sustainable level of public debt; while following the guidance by the European Commission for structure and content of presentation.
National Environmental Technology Innovation Strategy (NETIS)	Since 2011	Renewal and implementation of the country's RDI programme.
ICELAND		
Science and Technology Policy	2013-16	<p><i>i)</i> Human resources (e.g. a goal-oriented and diverse education system from the primary to the tertiary level, robust recruitment in scientific research and innovation in Iceland); <i>ii)</i> collaboration and efficiency (e.g. active collaboration between business and research and education institutions); <i>iii)</i> growth and value creation (e.g. increase the impact of science and innovation funding, increase investment in innovative enterprises, effective participation in international programmes.); and <i>iv)</i> results and follow-up (e.g. improve evaluation of the quality of research and innovation and of the economic value created).</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2016.
INDIA		
Decade of Innovations	2010-20	<p><i>i)</i> Design and develop a national innovation system based on national priorities; <i>ii)</i> implement policy instruments to encourage business R&D and innovation on public and social goods including clean energy; <i>iii)</i> improve international S&T co-operation.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 2% of GDP (indefinite).
INDONESIA		
Vision and Mission of Indonesian S&T Statement	2005-25	<p>Improve the global competitiveness of the national economy and foster the transition toward a knowledge-based economy by: <i>i)</i> building an ethical foundation for the development and implementation of S&T; <i>ii)</i> supporting the diffusion of S&T; <i>iii)</i> strengthening national capabilities (human resources, infrastructure and institutional actors for S&T).</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 1% of GDP by 2014.
Second National Medium-Term Development Plan (RPJMN)	2010-14	<p>Refine development priorities set in the Vision and Mission of Indonesian S&T Statement: <i>i)</i> quality of human resources; <i>ii)</i> development of S&T through improved R&D capabilities (institutions, resources and domestic and international networks); and <i>iii)</i> economic competitiveness.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 1% of GDP by 2014.
IRELAND		
Innovation 2020 Excellence Talent Impact: Ireland's Strategy for Research and Development, Science and Technology	2015-20	<p><i>i)</i> Become a global innovation leader; increase public and private investment in RDI; <i>ii)</i> enhance the impacts of RDI for enterprise; <i>iii)</i> ensure the quantity and quality of talent needed to become an innovation leader; <i>iv)</i> focus RDI activities on social and economic development; <i>v)</i> support innovation through protection and transfer of knowledge; and <i>vi)</i> increase international engagement in RDI. <i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 2.5% of GNP by 2013.

ISRAEL		
Israeli Innovation Authority	Since 2016	New independent authority that replaces the Office of the Chief Scientist (OCS) of the Ministry of Economy and Industry and the Israeli Industry Centre for R&D (MATIMOP). Its goal is to adapt the innovation strategy of the former OCS to changing circumstances. This implies emphasising traditional industries, linking the innovation ecosystem to the public sector, and attracting new R&D employees from underrepresented groups of the population.
Various national reports and STI-related policy documents		Increased investment and greater policy focus on biotechnology, nanotechnology and low-technology industries. Growing interest in cleantech sectors (renewable energies, water and oil substitutes). Establish and develop an information system on innovation (i.e. innovation survey and database).
Higher Education Plan	2011-16	Expanded budget for improving the quality of the higher education system and its competitiveness.
Programme For Investment In Oil-Substitute Technologies	2011-20	Promoting global reduction of oil consumption and increased development and uptake of oil substitutes through: i) co-operation with the industry sector to reduce bureaucracy in introducing and testing new technologies; ii) increasing venture capital investments through government participation; and iii) increasing the budget for applied academic study in the field.
ITALY		
National Research Plan	2014-20	Define objectives and modes of implementation of all public research activities in Italy: i) internationalisation: Coordination and integration of national, European and international resources; ii) human capital: focusing on people as the main actors of research by encouraging mobility, dynamism and generational change; iii) research infrastructures: assessment and selective support to research infrastructures, the pillar of international research, in particular of fundamental research; iv) public-private partnerships: strengthening of the public-private collaboration in order to reinforce applied research, innovation capability and the link between research and societal challenges; v) Southern Italy: focusing on the potential of Southern Italy by promoting its specificities, avoiding waste and overlapping actions; vi) efficiency and quality of expenditure: reinforcement of monitoring and transparency of investments, simplification of procedures and strengthening of administrative management. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 1.53% of GNP by 2020.
Horizon 2020 Italia	Since 2014	Document of strategic vision on national research and innovation. One of its objectives is to increase by 50% the resources for innovation from EU funds for the next programming cycle 2014-20.
Industry 2015	2006-15	Identify three strategic areas: i) industrial innovation; ii) innovative finance and iii) enterprise networks. Five industrial programmes in strategic technology areas have already been earmarked in energy efficiency, sustainable mobility, life sciences, new technologies for "made in Italy", and technologies for the cultural heritage.
Italian Economic and financial Document (DEF)	2015	Programming instrument that aims to maintain financial stability while enhancing potential growth through major structural reforms.
Strategy for the Internationalisation of Italian Research	2010-15	Renew the vision of Italian research in the European/international context of implementing the EU 2020 strategy, adapt the national context to the present global situation, in the perspective of a sustainable society.

National Programme for Research Infrastructures (NPRI)	2014-20	Identify research infrastructures of excellence in all areas of demand in Italian scientific communities recognised by all stakeholders, taking into account the international and European context and expressed priorities for the next 5-10 years.
Destination Italy (Destinazione Italia)	Since 2013	Sketch a coherent national policy to attract foreign investment and improve the competitiveness of Italian firms (e.g. start-ups, SMEs) through 50 measures designed to reform a broad range of sectors, including research and higher education. Underpin the connection between basic research and the production system by focusing on university spin-offs.
Italy towards Europe: the Italian Technological Alliances	2011-14	Address the contribution of the business/private sector to Horizon 2020.
Reform of the National Doctoral Programme	Since 2013	<i>i)</i> Better respond to the needs of enterprises and academia; <i>ii)</i> improve their interaction within the framework of the European Research Area; and <i>iii)</i> better respond to the challenges sketched in Horizon 2020 EU research programme.
JAPAN		
Comprehensive Strategy on STI	2013-30	Five policy challenges: <i>i)</i> Challenges for future industrial creation and social reform during the revolutionary age; <i>ii)</i> promotion of STI contributing to regional reform; <i>iii)</i> promotion of STI using the 2020 Tokyo Olympics and Paralympics as an opportunity; <i>iv)</i> establishment of an environment that promotes chain reactions with regard to innovation; <i>v)</i> dealing with solutions for socioeconomic issues.
5th S&T Basic Plan	2016-20	Four visions: <i>i)</i> sustainable growth and social improvement; <i>ii)</i> security, safety and affluent high-quality of life; <i>iii)</i> contribution to global issues and the world development by a comprehensive promotion of initiatives for future industry creation and social reforms; initiatives which forestall economic and social issues; initiatives to extract the latent power of scientific and technological innovation and initiatives for innovation systems which induce a virtuous cycle of human resources, knowledge and capital. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 4% of GDP by 2020.
KOREA		
3rd S&T Basic Plan	2013-17	High Five Strategy: <i>i)</i> expand national R&D investment and improve its efficiency; <i>ii)</i> develop national strategic technologies; <i>iii)</i> strengthen mid- and long-term creative capability; <i>iv)</i> identify and support new industries; and <i>v)</i> create S&T-related jobs. Succeeds the 2nd S&T Basic Plan (a.k.a., 577 Initiative). <i>Quantitative targets:</i> ✓ Contribution rate of R&D to economic growth: 40%. ✓ S&T-related job creation: 640 000. ✓ STI capacity: World Top 7th.
Action Plan for implementing the 3rd S&T Basic Plan	Since 2015	Expand and promote efficiency of national R&D investment: government R&D investment 18.9 trillion KRW in 2015 (17.8 trillion KRW in 2014, total 53.8 trillion KRW since 2013) and shift from project-oriented to researcher-oriented basic research, from supply side to demand-side applied research, and focus on more qualitative assessments and management systems. <i>i)</i> Strengthen investment to create new industries and to improve the quality of life; <i>ii)</i> promote the growth of high potential enterprises by established 5 years plans; <i>iii)</i> create S&T related jobs (launch of the "start-up fund for youth" [4,000 billion KRW], develop entrepreneurship education programs such as the Co-operative Education program at the Korea Advanced Institute of Science and Technology).

LATVIA		
Guidelines for Science, Technology Development and Innovations	2014-20	<p>Establish S&T as a basis for enduring development of civil society and long term economic growth, thereby securing the evolution of the knowledge based economy and sustainable development.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditure to 2% of GDP by 2020.
Smart Specialisation Strategy (RIS3)	2014-20	<p>Transformation of the economy towards higher added value, productivity and more efficient use of resources. Its goal is to increase the capacity for innovation and to develop an innovation system that facilitates and stimulates technological progress in the economy through: i) the change of production and export structures in traditional economy sectors; ii) development of sectors of future growth, where products and services with a high added value are set to emerge; iii) development of those sectors that have a significant horizontal impact and contribute particularly to the transformation of economy.</p>
LITHUANIA		
Innovation Development Programme	2014-20	<p>i) Develop a favourable environment for capable and motivated individuals to become highly qualified professionals; ii) create new knowledge and provide an environment in which science, business and culture interact with each other; iii) ensure the functioning of a system of education and R&D that is based on data, information and evidence as well as on professionalism and trust. <i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditure to 1.9% of GDP by 2020.
Action Plan for the National Programme for the Development of Studies, Research and Experimental Development	2013-15	<p>Encourage sustainable development and competitiveness and create conditions for innovation by developing higher education and R&D. i) create an environment favourable for individuals to acquire high professional qualifications; ii) create new knowledge and conditions for the integration of science, businesses and culture in society; iii) ensure the functioning of an education and SR&ED system that is based on data, information, evidence, professionalism and trust.</p>
Programme on the Implementation of the Priority Areas of Research and Socio-Cultural Development and Innovation and their Priorities	2014-20	<p>Increase the impact of high value-added, knowledge-intensive and highly-qualified-labour-intensive economic activities on the GDP and structural changes of the economy: i) Create innovative technologies, products, processes and/or methods and, using the outputs of these activities address global and long-term national challenges; ii) increase competitiveness and opportunities to access global markets through the commercialisation of R&D and innovation and greater collaboration of science and industry.</p>
RDI Priority Action Plans for the Programme on the Implementation of the priority areas of the Priority Areas of Research and Socio-Cultural Development and Innovation and their Priorities	2015-20	<p>Each RDI Priority Action Plan sets out the RDI measures for public and private sector contribution to the implementation of the relevant RDI priority, funding earmarked for the implementation of the measures and funding sources, and the estimated implementation timeframe.</p>
MALAYSIA		
National STI Policy (NSTIP)	2013-20	<p>i) Advance scientific and social R&D and commercialisation; ii) Develop, harness and intensify talent; iii) energise industries; iv) transform STI governance; v) promote and sensitise to STI; and vi) enhance strategic international alliances.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 2% of GDP by 2020.

Science to Action (S2A)	Since 2013	Aims to translate the broad policy framework of the NSTIP into specific action measures. Efforts have been undertaken to identify these action measures.
New Economic Model (NEM)	Since 2010	i) create a high income economy; ii) create an inclusive society; iii) build a sustainable economy and society.
Economic Transformation Model (ETP)	Since 2010	Implements the NEM by identifying 12 National Key Economic Areas (NKEAs) and six strategic reform initiatives (SRIs).
MEXICO		
National Development Plan (PND)	2013-18	i) Make S&T development and innovation the pillars of sustainable economic and social growth; ii) design the new Special Programme for STI 2014-18 (PECITI). <i>Quantitative targets:</i> ✓ Raise R&D expenditure to 1% of GDP (indefinite).
Special Programme for Science, Technology and Innovation (PECITI)	2014-18	Transform Mexico into a knowledge-based economy.
NETHERLANDS		
New White Paper on Science Policy “2025 Vision for Science”: Choices for the future	Since 2014	Outline the plans of the Dutch government regarding science policy through three key ambitions: i) world-class Dutch research; ii) maximise the impact of Dutch research by stronger links with society and industry; iii) and giving researchers the opportunity to develop their talents to their full potential. The three ambitions include open access to research, renewing research infrastructures, improving the outreach and impact of science communication, increasing the number of PhD researchers in government and industry, strengthening cooperation between science and the private sector to address societal challenges, and promoting equal opportunities for women in science.
Enterprise Policy – “To The Top”	Since 2011	Strengthen Dutch competitiveness by giving room for Dutch companies to do business, invest, innovate and export and to become one of the top five knowledge economies in the world (by 2020) through: i) fewer subsidies in exchange for lower taxes; ii) fewer and less complicated rules; iii) broader access to corporate financing; iv) better utilisation of the knowledge infrastructure by the business sector; and v) better alignment of the tax system, education and diplomacy with the needs of the business sector. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 2.5% of GDP by 2020. ✓ Establish top consortia for knowledge and innovation to which public and private parties contribute more than EUR 500 million, at least 40% of which is financed by the business sector (by 2015).
Strategic Agenda for Higher Education, Research and Science	2015-19	i) Strengthen the quality of education; ii) strengthen applied research at the universities of applied science. iii) create regulatory free zones for innovation of education; iii) stimulate professors to innovate education by introducing Comenius-grants for innovation of education. To achieve this, the Ministry of Education, Culture and Science will increase the budget for applied research at the universities of applied science.
Offices for Sciences and Technology – Innovation Attachés (IA) Network	n.a.	Provide information to researchers (from public or private sector), research institutions, and policy makers to stimulate international R&D co-operation. The former S&T officers have been renamed “Innovation Attachés”.

NEW ZEALAND		
Business Growth Agenda	Since 2012	<p>Build a more productive and competitive economy based on export markets, innovation, infrastructure, skilled and safe workplaces, natural resources and capital markets.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise business R&D expenditures to more than 1% of GDP. ✓ Increase the ratio of exports to GDP from 30% to 40% by 2025.
The National Statement of Science Investment (NSSI)	2015-25 NEW!	<p>Create a highly dynamic science system that enriches New Zealand, making a more visible, measurable contribution to productivity and wellbeing through excellent science. The objectives are supported by two main pillars: impact and excellence.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise business R&D expenditures to more than 1% of GDP.
NORWAY		
Strategy for Research and innovation co-operation with the EU: Horizon 2020 and ERA	Since 2014	<p>Formulate four objectives for Norway's participation in Horizon 2020 and ERA: i) research and innovation quality; ii) innovation capacity, value creation and sustainable economic development; iii) social welfare and more sustainable social development; iv) development of Norway's research and innovation sector, STI policies, and patterns of cooperation.</p>
National R&D Strategy for ICT	2013-22	<p>Identify priority areas for the Norwegian efforts in ICT and for government allocations with three objectives for public investments in ICT R&D: i) ICT R&D of high international quality; ii) innovation, industrial development and increased productivity and value creation; iii) societal challenges.</p>
National R&D Strategy for Nanotechnology	2012-2021	<p>Contribute to increased competitiveness of the Norwegian industry sector and improved dealing with global societal challenges, without generating undesirable effects on health, the environment and society by three priorities: i) basic knowledge development; ii) innovation and commercialisation; iii) responsible technological development.</p>
National Strategy for Biotechnology	2011-20	<p>Exploit the potential of biotechnology in a responsible manner in order to strengthen value creation, improve health and safeguard the environment.</p>
OG21 – Oil and Gas in the 21 st century	Since 2001	<p>i) Value creation through production and reserve replacement; ii) energy efficient and cleaner production; iii) value creation through increased export of technology; iv) value creation through employment and competence development.</p>
SKOG21	Since 2014	<p>Increase competitiveness in the forestry-based value chains. The strategy has set as an objective a fourfold increase (forestry; construction; fibre and biorefineries; bioenergy) of the value creation in the forestry sector until 2045.</p>
21-Forums	Since 2001	<p>Draw up sectoral research and innovation strategies and serve as advisory bodies and stakeholders forums, focused on: petroleum industry (Oil and Gas in the 21st Century –OG21), renewable energy, energy efficiency and CO₂ capture and storage (Energi21), climate research (Klima21), maritime industry (Maritim21), sustainable management of marine resources and the marine industry (Hav21), knowledge-based construction sector (Bygg21), health and care services (Health&Care21), forestry sector (Skog22).</p>
Technological R&D strategies	Since 2009	<p>National R&D strategies for the prioritised technology areas of ICT (2013), nanotechnology (2012), biotechnology (2011), as well as for environmental technology (2011) and marine bioprospecting (2009).</p>

BYGG21	2014-20	Solve challenges in the construction industry related to sustainability, productivity and cost. The programme shall prioritise, motivate, challenge and coordinate the industry, and make it more knowledge intensive.
Energi21 – National Strategy for Research, Development, Demonstration and Commercialisation of new energy technology	Since 2008	i) Increase value creation on the basis of national energy resources and utilisation of energy; ii) restructure energy through efficient use and increased flexibility in energy systems; iii) development of internationally competitive industry and expertise in the energy sector in six priority focus areas for energy RD&D: hydropower; flexible energy systems; solar power; offshore wind power; raising energy efficiency; carbon capture and storage.
Long-term Plan for Research and Higher Education	2015-24	Ensure that public investments in research and higher education are long-term, well-coordinated and with clear priorities through three overarching objectives: i) enhance competitiveness and innovation; ii) tackle major social challenges; iii) develop research communities of outstanding quality.
Marine Bioprospecting – a source of new sustainable Wealth	Since 2009	Facilitate better utilisation of marine resources, and guide investments in infrastructure and research that stimulates a broad spectrum of opportunities for wealth growth.
Maritim21	Since 2010	Research and innovation strategy for the maritime industry that recommends seven strategic focus areas: i) maritime knowledge hub and infrastructure; ii) maritime policies and regulations; iii) innovation and maritime business development; iv) energy efficiency; v) LNG; vi) demanding maritime operations; vii) arctic transport and operations.
Action Plan for Entrepreneurship	Since 2015	<p>Improve conditions for starting and developing new business, and to create and reinforce a culture for entrepreneurship in three focus areas: i) better access to capital at an early stage; ii) increased access to competence; iii) a more attractive country for entrepreneurs.</p> <p>Some of the measures in the plan are to strengthen the pre-seed capital fund, the Innovation Norway start-up grants, the FORNY commercialisation programme, and introduce a new programme "Vekst" to increase entrepreneurship in groups of society underrepresented among entrepreneurs (minorities, women etc.)</p>
Master Plan for Marine Research	Since 2015	Contribute to solving social challenges and further growth in established businesses by developing new and existing marine resources. Measures include: i) increase economic investments in research, monitoring, and development for an environmentally sustainable aquaculture industry; ii) grant new development licenses that will facilitate testing and implementation of new farming technology solutions; iii) strengthen infrastructure needed for marine research, including finalizing a new ice-class research vessel in 2017; iv) develop the knowledge base for the breeding of new species with particular emphasis on species at lower trophic levels, such as the cultivation of algae or copepods.
Action Plan for the Implementation of the Health&Care21 Strategy – Research and Innovation in Health and Care Services	2015-18	Outline the government's follow-up of the Health&Care21 research and innovation strategy with three overarching objectives: i) better public health; ii) breakthrough research at a high international level; iii) national economic and business development.

PERU		
Create to Grow Strategy	Since 2014	Provide solutions to overcome the bottlenecks that impede the effectiveness of the Peruvian Innovation System by the help of six objectives: i) research results serve the needs of the production sector; ii) increase the number of well qualified researchers and practitioners; iii) improve the quality levels of research centres; iv) generate information about the state of the National System for Science and Technology (SINACYT); v) strengthen SINACYT governance; vi) development of incentives for innovation.
National Plan for Production Diversification	Since 2014	i) Facilitating productive diversification: accompany the private sector in expanding the export basket, correcting market and state failures which deter the development of sectors with high potential; ii) Adjustment of regulations and administrative simplification: improve the investment climate through optimised regulations and more efficient procedures in the public entities; iii) productivity growth: increase productivity and reduce production heterogeneity between firms and regions (subnational level).
National STI Plan (PNCTI)	2006-21	Ensure the coordination and consultation between the actors of the SINACYT, focusing its efforts to meet the technological demands in several strategic priority areas, in order to increase the added value and competitiveness, improve quality of life the population and contribute to the responsible management of the environment.
POLAND		
Strategy for an Innovative and Efficient Economy– “Dynamic Poland 2020”	2013-20	<p>i) Adjust the regulatory and financial environment to the needs of innovation; ii) provide the economy with appropriate knowledge and human resources; iii) ensure sustainable use of resources; iv) increase the internationalisation of Polish economy.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 1.7% of GDP by 2020. ✓ Raise the Summary Innovation Index (SII) rank among EU countries to the innovation followers group by 2020. ✓ Raise the Global Competitiveness Report innovation index rank among EU countries to 15 by 2020. ✓ Raise resource productivity (GDP/DMC) to 0.5 by 2020.
Science Strategy in Poland	2009-15	<p>i) Promote the drivers of a knowledge-based economy, such as biotechnology, nanotechnology, materials and information technologies; ii) select relevant priorities and research programmes.; iii) reform governance and restructure HEIs (e.g. creation of the Science and Innovation Council for the preparation of strategic development directions); iii) increase competitive funding <i>vis-à-vis</i> statutory funding and revise performance assessment criteria.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise S&T expenditures to 1.7% of GDP by 2015. ✓ Raise allocation to science to 1% of GDP.
National Reform Programme for Europe 2020 Strategy (NRP)	2011-14	Show how Poland will respond to current challenges: i) develop a knowledge and innovation-based economy (smart growth); ii) promote a sustainable economy that is environmentally friendly, resource efficient and competitive at the same time (sustainable growth); iii) strengthen economic, social and territorial cohesion (inclusive growth).
Strategy for Increasing the Innovativeness of the Economy	2007-13	Support clusters development and networking.

Operational Programme – Innovative Economy	2007-13	Create the conditions for the improvement of competitiveness of Poland's economy, which should be based on knowledge and entrepreneurship, more jobs and a higher level of social, economic and spatial cohesion: i) support R&D in new technologies, improve human potential of science, support R&D projects; ii) strengthen R&D and higher education infrastructure, development of research centres, shared research infrastructure and ICT infrastructure in science; iii) strengthen human capital, develop didactic potential of universities, increase the number of university graduates in key knowledge areas, develop staff qualifications in the R&D and raise awareness of science.
National Cohesion Strategy	2007-13	Create the conditions for the improvement of competitiveness of Poland's economy, which should be based on knowledge and entrepreneurship, provide more jobs and ensure a higher level of social, economic and spatial cohesion by: i) improving human capital and ii) improving the innovativeness of enterprises, including in particular the manufacturing sector with high added value and development of the services sector.
Programme on Development of Higher Education and Science	2015-30 NEW!	i) Increase the quality of higher education and align it with social and economic needs; ii) improve of the quality of research conducted in Polish scientific institutions; iii) improve higher education and science through changes in the areas of organisation, management and financing; iv) Increase the impact on the social, economic, and international environment,
PORTUGAL		
Research and Innovation Strategy for Portugal	2014-20	i) Promote scientific and technological knowledge; ii) promote cooperation between public and private sector through reinforcing clustering policy and the improvement of knowledge transfer; iii) invest in tradable goods and services as well as in the internationalisation of companies and market diversification; iv) promote entrepreneurship by increasing employment and enhancing qualification; v) transition to a low carbon economy. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 3% of GDP by 2020.
RUSSIAN FEDERATION		
Series of Presidential Decrees of 7 May 2012	Since 2012	Set the major goals in Russian STI policy for the coming years. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 1.77% of GDP by 2015. ✓ Raise R&D expenditures of universities from 9% to 13.5% of GERD by 2018. ✓ Raise overall funding of public science foundations to RUB 25 billion by 2018. ✓ Raise average salaries of researchers to 200% of the regional average by 2018. ✓ Raise the share of Russian publications in total scientific journals indexed in Web of Science to 2.44% by 2015. ✓ Establish and modernise 25 million high-performance workplaces by 2020. ✓ Raise the share of goods produced by high-technology and knowledge-intensive industries in GDP by 1.3 times from the level in 2011 by 2018.
National Technology Initiative - NTI	Since 2015 NEW ?	Promote the Russian leadership in the global technology market by 2035 by: i) creating novel technology-based markets (non-piloted drones for the industrial and services sectors, neurotechnological products, network-based solutions for customised food delivery, etc.); ii) funding national technological projects with a high innovation component through public-private partnerships, with a focus on smart power engineering, agriculture, transport systems and health services.

Government Programme Development of Science and Technology	2013-20	i) Support basic research; ii) divide the S&T foundation for the advancement of the Russian economy in priority fields; iii) develop R&D institutions and improve their structure, management and finance system; iv) integrate science and education; v) build a technological basis for the R&D sector; vi) ensure the integration of the Russian R&D sector into the international R&D space.
Innovation Development strategy	2012-20	i) Promotion of R&D in universities; ii) strengthen communication between universities, industries and research centres; iii) strengthen the integration of Russian universities into education and research communities worldwide; iv) enrich the research environment with new laboratories and world level competence centres; v) establish a competitive market for specialists trained in Russia and abroad; vi) enable Russian university graduates to respond to the needs of the business environment and the public sector; v) make the skills gained by the graduates of the Russian universities interesting also for foreign partners.
Long-term S&T Foresight towards 2030	Since 2014	Define the most promising areas of S&T development to 2030 with seven priority areas: i) ICTs; ii) biotechnology; iii) medicine and health care; iv) new materials and nanotechnologies; v) environmental management; vi) transport and space systems; vii) energy efficiency and energy saving. In 2015, it was decided to start a new cycle of foresight exercises. As a result, "Long-Term S&T Foresight towards 2040" will be prepared.
SLOVAK REPUBLIC		
Research and Innovation Strategy for Smart Specialisation (RIS3) – Through Knowledge towards Prosperity	2014-20	Drive structural change to promote self-sustaining growth in income, employment and standard of living. Main strategic goals are to: <i>i)</i> integrate key industries through co-operation of local supply chains in embedded clusters; <i>ii)</i> increase the contribution of research to economic growth via global excellence and local relevance; <i>iii)</i> create a dynamic, open and inclusive innovative society as a precondition for the rise in the standard of living; <i>iv)</i> improve the quality of human resources. R&D priorities: material research and nanotechnology, ICTs, biomedicine and biotechnology; technological priorities: industrial technologies, sustainable energy, environment and agriculture; social priorities. <i>Quantitative targets:</i> ✓ Raise R&D expenditures to 1.0% of GDP by 2020.
Long-term Plan of the Science and Technology Policy	2012-15	Reduce information inequality and increasing transparency, as well as on improving the efficiency of state R&D investment.
Phoenix Strategy	Since 2011	i) Increase transparency and efficiency; ii) use universities as a tool for human resource development; iii) effective R&D funding and reform of R&D support from public funds; iv) reduce red tape in drawing and administration of the Structural Funds; v) internationalisation of R&D in promoting co-operation between Slovak institutions with foreign institutions; vi) improve co-operation between the academic sector and the industry; vi) create high-quality technical infrastructure; vii) promote human resources development and popularisation of science and technology.

Research and Innovation Strategy for Smart Specialisation	2014-20 NEW !	Stimulate a structural change in the Slovak economy towards a growth based on increasing innovation ability, excellence in research and innovation in order to support sustainable growth of incomes, employment and quality of life: i) deepen integration and embeddedness of key major industries increasing local value added through the cooperation of the local supply chains; ii) increase contribution of research to the economic growth via global excellence and local relevance; iii) create a dynamic, open and inclusive innovative society as one of the preconditions for the increase in the standard of living; iv) improve the quality of human resources.
SLOVENIA		
Research and Innovation Strategy of Slovenia (RISS)	2011-20	Establish a modern research and innovation system that will allow for a higher quality of life for all, critical reflection in society, efficiency in addressing social challenges, increased value added per employee, and assurance of more and higher-quality workplaces. Main priorities are: <i>i)</i> smart specialisation; <i>iii)</i> science excellence; <i>iv)</i> co-operation between universities, research institutes and industry and technology transfer; <i>v)</i> implementation of the National Roadmap for Research Infrastructure 2011-20; <i>vi)</i> transnational R&D and international mobility; <i>vii)</i> more autonomous and responsible research organisations; <i>viii)</i> increase public funding of innovation-oriented R&D and a greater share of innovation-active enterprises; <i>ix)</i> public awareness of the impact of industrial R&D activities; <i>x)</i> full implementation of the Research and Innovation Strategy
Research Infrastructure Roadmap	2011-20	<i>i)</i> Better exploit the existing national research infrastructure (i.e. to integrate their activities, enable more synergy and avoid duplication, and thereby enable more effective distribution of public funds); <i>ii)</i> upgrade and build new research infrastructure in priority areas; <i>iii)</i> foster the national integration to access large research infrastructures; <i>vi)</i> monitor the implementation of policies relating to research infrastructures.
Smart Specialisation Strategy	Since 2016	Establishing an “innovative knowledge society” by concentrating development investments in areas where Slovenia has the critical mass of knowledge, capacities and competences and where there is innovation potential for placing Slovenia within global markets and thus enhancing its recognisability. Smart specialisation is a strategy aiming to: <i>i)</i> strengthen the competitiveness of the economy by enhancing its innovation capacity, <i>ii)</i> diversify existing industries and service activities, <i>iii)</i> boost growth of new and fast-growing industries and enterprises. Priority areas are: <i>i)</i> healthy working and living environment, <i>ii)</i> natural and traditional resources for the future, <i>iii)</i> Industry 4.0.
Digital Slovenia 2020 - Development strategy for the information society	2016-20	Becoming an advanced digital society and a reference environment for introducing innovative approaches in the use of digital technologies. <i>i)</i> raising of general awareness as to the importance of ICT and the internet for society's development , <i>ii)</i> sustainable, systematic and focused investments in the development of the digital society, <i>iii)</i> general digitisation according to the 'digital by default' principle, <i>iv)</i> competitive digital entrepreneurship and digitised private sector for digital growth, <i>v)</i> intense and innovative use of ICT and the internet in all social segments, <i>vi)</i> high-speed access to the open internet for all, <i>vii)</i> inclusive digital society, <i>viii)</i> safe cyberspace, <i>ix)</i> trust in cyber space and protection of human rights.

Resolution on the National Higher Education Programme	2011-20	<p>The basic goals of the Slovenian higher education sector by 2020 are quality and excellence, diversity and accessibility with supporting instruments of internationalisation, diversification, study structures, and funding of higher education.</p> <p><i>i)</i> Employability and mobility of graduates within Europe and worldwide; <i>ii)</i> diversity and equitable accessibility through internationalisation, diversification, study structures and funding of higher education.</p>
SOUTH AFRICA		
National R&D Strategy	Since 2002	<p><i>i)</i> Increase private R&D investment; <i>ii)</i> achieve technological change in economy and society; <i>iii)</i> increase investment in science base (human capital and transformation); <i>iv)</i> create an effective government S&T system (alignment and delivery).</p>
National Development Plan (NDP): A Vision for 2030	2011-30	<p>Give South Africa a diversified economic base by extracting more local value from mineral resources, ensuring access to good quality water and alternative sources of energy, identifying new and innovative ways to address poverty, inequality and the burden of disease.</p> <p>Priorities areas: water, power, marine, space and software engineering.</p>
Ten-Year Innovation Plan (TYIP)	2008-18	<p>The country's transformation to a knowledge economy through:</p> <p><i>i)</i> human capital development (HCD), <i>ii)</i> knowledge generation and exploitation (R&D), <i>iii)</i> knowledge infrastructure development, and <i>iv)</i> policy and institutional enablers to address the gap between research results and socio-economic outcomes.</p> <p>Priority areas: biotechnology, pharmaceuticals, space, energy, climate change, understanding of social dynamics.</p>
Department of Science and Technology (DST) Strategic Plan	2011-16	<p>Develop the innovation capacity of the national innovation system and contribute to socio-economic development by:</p> <p><i>i)</i> enhancing knowledge-generation capacity to produce world-class research outputs and turn them into innovation products and processes; <i>ii)</i> developing appropriate STI human capital; <i>iii)</i> building world-class STI infrastructure, training the next generation of researchers and enabling technology development and transfer as well as knowledge interchange; <i>iv)</i> making South Africa a strategic international R&D and innovation partner.</p>
SPAIN		
Spanish Strategy for STI(EECTI)	2013-20	<p>Set out long-term STI policy and approaches to maximize economic and social benefits. Promote talent and its employability, scientific and technical research of excellence, business leadership in RDI, and RDI solutions for global societal challenges by: i) developing an efficient and flexible environment for conducting RDI activities both for the public and private sectors; ii) Promoting RDI specialisation together with strong cooperation mechanisms allowing aggregation of RDI capabilities and fostering the critical mass required for international leadership to be attained; iii) fostering knowledge distribution across agents and sectors in open and flexible RDI collaborative environments; iv) supporting internationalisation and international leadership; v) creating an articulated RDI System based on synergies between RDI policies and smart specialisation regional strategies to boost research and innovation as drivers of change and progress; vi) nurturing a scientific, innovative and entrepreneurial culture that pervades society, fosters creativity and achieves a greater degree of social and institutional acceptance of the endeavour.</p>

National Plan for Scientific and Technical Research and Innovation (PEICTI)	2013-16	<p>i) Fund and stimulate, by means of competitive tendering, the training and specialisation of the human resources involved in RDI and promote their employment within public and private sectors; ii) facilitate international mobility within the public sector (universities and research bodies), as well as between private companies; iii) fund and provide incentives to the generation of S&T knowledge; iv) promote businesses' ability to carry out R&D; v) facilitate the development and subsequent dissemination and adoption of key technologies; vi) promote public-private collaboration as a result of the early identification of a business interest in the RDI results deriving from the activities performed by public research agents and other centres.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 2% of GDP by 2020.
SWEDEN		
National Innovation Strategy	Since 2012	<p>i) innovative people; ii) high-quality research and higher education for innovation; iii) framework conditions and infrastructures for innovation; iv) innovative firms and organisations; v) innovative public organisations; vi) innovative regions and environments.</p>
Research and Innovation Bill 2012	2013-16	<p>Increase investment in research and innovation by about 15% over 2012-16, with a focus on universities and excellence, life sciences, research infrastructure and targeted initiatives, collaboration with universities, strategic innovation areas, sustainable community development, innovation offices, test and demonstration facilities, industrial research institutes.</p>
Swedish Innovation Strategy	Since 2010	<p>Increase service innovation as a first step.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 4% of GDP by 2020.
Research bill for research and innovation in the next decade	2017-26	Policy for R&D&I and funding for 2017-20
SWITZERLAND		
Promotion of Education, Research and Innovation (ERI-Dispatch)	2017-20	<p>i) Reinforce and expand international networking activities; ii) encourage brain circulation to make Switzerland an even more appealing location; iii) achieve international recognition of the quality of the Swiss education system.</p>
TURKEY		
Tenth Five-Year Development Plan	2014-18	<p>Three programs have been created to directly build STI ecosystems: i) Program for Technology Development and Domestic Production Through Public Procurement; ii) Program for Commercialisation in Priority Technology Areas; and iii) Attracting Qualified Human Resources Program.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2023. ✓ Reach an average 5.5% of GDP growth. ✓ Raise GDP to USD 1.3 trillion. ✓ Raise GDP to USD 16 000 per capita. ✓ Raise export volume to USD 277 billion. ✓ Create 4 million new jobs. ✓ Reduce unemployment rate to 7.2%.

Industrial Strategy Document – Towards EU Membership	2011-14	To become the Eurasia production base in medium- and high-technology products by increasing the competitiveness and efficiency of Turkish industry and expediting the transformation of the industry structure (higher share in world exports, production of mainly high-technology products with high value added, qualified labour, sensitivity to environment and society).
National STI Strategy (UBTYS)	2011-16	Contribute to new knowledge and develop innovative technologies to improve the quality of life by transforming new knowledge into products, processes, and services for the benefit of the country and humanity through: i) R&D focus on three priority sectors; in which national RDI capacity has already matured: automotive, manufacturing and ICT; ii) R&D focus on six priority sectors; in which Turkey has to improve its RDI capacity: energy, water, food, health, defence industries and space; iii) frontier research and bottom-up approaches at which universities and private sector will determine the RDI themes.
National Innovation System Targets for 2023	2011-23	<i>Quantitative targets:</i> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2023. ✓ Raise business R&D expenditures to 2% of GDP by 2023. ✓ Raise the total number of FTE researchers to 300 000. ✓ Raise the total number of FTE researchers in private sector to 180 000.
New STI Strategy	2017-23 Under preparation	Advance the society to high prosperity levels through STI with the help of various partnership models and well-focused initiatives in priority areas, in line with the 2023 targets.
UNITED KINGDOM		
UK Industrial Strategy	Since 2012	Identify areas of competitive advantage to build on in the next 20 years based on the government's commitment to a long-term partnership with business through: i) access to finance (e.g. the new national British Business Bank to provide SMEs lending and guarantee solutions); ii) skills (giving businesses more say over how funding for skills is spent, e.g. through the Employer Ownership Pilot and the Employer Ownership Fund); iii) procurement (e.g. Small Business Research Initiative to support pre-commercial procurement, simpler and more transparent public procurement and strengthening of private-sector supply chains); iv) eleven key sectors: aerospace, agri-tech, automotive, construction, information economy, international education, life sciences, nuclear, offshore wind oil and gas, and professional and business services; v) catapult centres and eight great technologies: big data, space, robotics and autonomous systems, synthetic biology, regenerative medicines, agri-science, advanced materials, energy.
UK Innovation and Research Strategy for Growth	2011	Strengthen UK ability to accelerate the commercialisation of emerging technologies and to capture related value chains linked and succeed in the global innovation economy through: i) blue skies research and discoveries and inventions; ii) better interface between higher education institutions and business; and iii) a better environment for commercialising research.
Our Plan For Growth: Science and Innovation	Since 2014	Making the UK the best place in the world for science and business via six elements: i) decide priorities; ii) nurture scientific infrastructure; iii) invest in the scientific infrastructure; iv) support research; v) catalyse innovation; vi) Participate in global science and innovation

Fixing the Foundations: Creating a more Prosperous Nation (Productivity Plan)	Since 2015	Encourage long-term investment and promote a dynamic economy through: i) business investing for the long-term; ii) a competitive tax system; iii) rewards for saving and long-term investment; iv) skills and human capital; v) a highly skilled workforce; vi) world-leading universities, open to all who can benefit; vii) economic Infrastructure; viii) a modern transport system; ix) reliable and low carbon energy; x) world-class digital infrastructure; xii) flexible fair markets; xiii) productive finance; xiv) financial services that lead the world in investing for growth; xv) openness and competition; and competitive markets with less regulation and openness to international investment.
A Better Deal: Boosting Competition to Bring Down Bills for Families and Firms (Competition Plan)	Since 2015	Focus on the competition aspects of the government's productivity plan, in particular announcing steps to boost competition and eliminate market distortions. This plan responds to the recent slowdown of productivity growth in the UK and, perhaps more importantly, to the long-standing gap compared to other countries.
UNITED STATES		
Strategy for American Innovation	Since 2009 (revised in 2011)	<p>i) Invest in the building blocks of American innovation, including R&D and human, physical and technological capital; ii) promote competitive markets that spur productive entrepreneurship; and iii) catalyse breakthroughs for national priorities such as developing alternative energy sources and improving health outcomes; iv) create quality jobs and lasting economic growth; v) deliver innovative government with and for the people.</p> <p>Priority areas: ICT (wireless broadband), energy (clean energy technologies), biotechnology, health and health care, nanotechnology, advanced manufacturing, space, educational technologies.</p> <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP (indefinite).
EU28		
Open Innovation	2015-19	i) Intends to capitalise on the results of European research and innovation; ii) bring more companies and regions into the knowledge economy and iii) create ecosystems for attracting investment.
Open to the World	2015-19	i) Develop of a Global Research Area focused on researchers' mobility; ii) addressing common challenges and mutual access to infrastructure. Engage in science diplomacy and global scientific collaboration as well as strengthening the partnership between regions and countries are keys to remain relevant and competitive on global level.
Open Science	2015-19	i) Promote the international excellence of the EU's research and science; ii) strengthen research capacities and innovation across all member states; iii) set up standards for the management, interoperability and quality of scientific data; iv) support open access initiatives (cloud solutions).
Innovation Union Flagship Initiative	2014-20	Ensure Europe's global competitiveness by creating an innovation-friendly environment that will drive smart, sustainable and inclusive growth and jobs creation by: i) making Europe a world-class science performer; ii) removing obstacles to innovation (e.g. expensive patenting, market fragmentation, slow standard-setting, skills shortages); and iii) revolutionising the way public and private sectors work together (e.g. innovation partnerships). Also: strategic use of public procurement for innovation, an Innovation Scoreboard based on 25 indicators, a European knowledge market for patents and licensing, and measures to reinforce successful initiatives (e.g. the Risk Sharing Finance Facility).

EU Framework Programme for Research and Innovation – Horizon 2020	2014-20	<p>Financial instrument to achieve the Innovation Union through:</p> <ul style="list-style-type: none"> <i>i)</i> excellent science: reinforce the science base and make the European Research Area more competitive at global scale; <i>ii)</i> industrial leadership: speed up the development of technologies and innovations for tomorrow's businesses and help innovative SMEs become world-leading companies; <i>iii)</i> meeting societal challenges: address concerns of citizens in Europe and elsewhere (health and well-being, food security, sustainable agriculture, bioeconomy, secure and clean energy, smart and integrated transport, environment, resource efficiency, inclusive, innovative and secure societies). <p><i>Quantitative targets:</i></p> <ul style="list-style-type: none"> ✓ Raise R&D expenditures to 3% of GDP by 2020.
Research and innovation as new sources of growth	Since 2014	<p>Builds on the Europe 2020 strategy and its Innovation Union flagship initiative with three key objectives:</p> <ul style="list-style-type: none"> <i>i)</i> diagnose Europe's knowledge and innovation economy, based on an analysis of its economic performance in research and innovation, the impact of EU innovation policy, and the evolution of data on EU and global trends, identifying threats and opportunities; <i>ii)</i> provide a robust evidence base in support of the necessary increase in the efficiency of EU and national research and innovation systems, pointing to the structural reforms and investments needed to improve the EU's innovation eco-system and make it more attuned to industry's needs, including those of fast-growing firms; <i>iii)</i> conduct a strategic analysis of the priority areas where, against the backdrop of the single market reform packages, it appears crucial for the EU and its member states to facilitate the development and exploitation of new technologies and innovations which allow the EU and its Member States to compete in the high-tech and fast growing markets of tomorrow.
European Research Area (ERA) Communication	Since 2012	<ul style="list-style-type: none"> <i>i)</i> More effective national research systems, including increased competition within national borders and stable or increased investment in research; <i>ii)</i> excellent transnational co-operation and competition (e.g. common research agendas on grand challenges, key research infrastructures on a pan-European basis); <i>iii)</i> an open labour market for researchers; <i>iv)</i> gender equality and gender mainstreaming in research; <i>v)</i> optimal circulation, access to and transfer of scientific knowledge including via digital ERA.



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