Review of foresight studies and exercises

This list of activities has been elaborated based on the information collected in COST strategic workshop series "Foresight on Future Demand for Forest-based Products and Services" and on a web review (January 2011) carried out by EFI for the University of Eastern Finland Forest Foresight Unit. It complements the EFI Technical report 29, 2008 Review on Forest Sector Foresight Studies and Exercises (EFI TR 29/2008) http://www.efi.int/portal/virtual_library/publications/technical_reports/29/ For more updates see also the foresight section in the EuroForestPortal at http://forestportal.efi.int/ launched in September 2011.

LIST OF CONTENTS

1. Forest sector outlook studies and reports directing to futures

European Forest Sector Outlook Study II (2009-2011)

1. Scope: Analysing structural trends regarding forest products markets and forest resources to produce an outlook for the European forest sector, looking up to 2030
2. Process: help decision and policy makers in the European forest sector explore the possible long-term consequences of various options
3. Initiator / coordinator: UNECE timber section (UNECE Timber Committee & FAO European Forestry Commission)
4. Participants: UNECE, EFI, Hamburg University, vTI (DE), LNU (SE), SLU (SE) Future Forest Program, BOKU (AT), Wageningen University Alterra (NL)
5. Activities: econometric modelling of wood product markets; forest resource projections (EFISCEN), trade modelling (partial equilibrium optimization model EFI-GTM), Wood Resource Balance, Competitiveness Analysis (CMS)
6. (expected) Results: quantitative, detailed scenarios, differentiated by policy choices or external circumstances, report and discussion papers
7. Further information: Ragnar Jonsson, Southern Swedish Forest Research Centre, ragnar.jonsson@ess.slu.se

Further information: http://www.unece.org/trade/timber/OutlookStudies.html and about other FAO **forest sector outlook studies (global, West and central Asia, Africa, Asia Pacific, Latin America)**, see http://www.fao.org/forestry/outlook/en/ There is no one single approach in compiling the regional outlook studies, but the emphases of the themes covered (e.g. role given to non-wood goods and services) as well as the data and information sources and methods vary from region to region. Both quantitative and qualitative approaches are used (e.g. scenario modelling and expert panels, workshops).

FAO State of the World's Forests biannual reports

1) Scope: Reports on the status of forests, recent major policy and institutional developments and key issues concerning the forest sector in a global viewpoint (e.g. in the 2009 report the time horizon is 2030).
2) Process: to make current, reliable and policy-relevant information widely available to facilitate informed discussion and decision-making with regard to the world's forests. Different themes for reports: The 2009 issue considered the theme of 'Society, forests and forestry: adapting for the future' by presenting a 'demand-side' perspective on forest trends and topics, and the latest, the ninth issue State of the World's Forests 2011 report has been released just recently with the theme 'Changing pathways, changing lives: forests as multiple pathways to sustainable development'.
3) Initiator / coordinator: FAO Forestry Department
4) Participants: Key partners: Collaborative Partnership on Forests (CPF), the Convention on Biological Diversity (CBD), the Center for International Forestry Research (CIFOR), the International Tropical Timber Organization (ITTO), the International Union of Forest Research Organizations (IUFRO), the Global Mechanism of the United Nations Convention to Combat Desertification (UNCCD), the United Nations Environment Programme (UNEP), the United Nations Forum on Forests (UNFF) and the United Nations Framework Convention on Climate Change (UNFCCC). Key target group: National and global policy and decision makers.
5) Activities: econometric modelling of production and consumption of wood products, review of the regional forest outlook studies (regional level analyses are drawn from the Global Forest Resources Assessment, FRA)
6) Results: regional scenarios, final report
7) Further information: http://www.fao.org/forestry/sofo/en/

The above outlooks and reports are rich in detail and they are based on an extensive analytical work. There are also reports published to improve the reach for policy and decision makers as well as to general public. See e.g. *The Vital Forest Graphics* (2009) produced in cooperation between **UNEP**, **FAO**, **UNFF** as an advocacy tool to promote conservation and sustainable management of the world's forests.
http://www.grida.no/_res/site/file/publications/vital_forest_graphics.pdf

Timber and forest products trade related outlook studies, market reviews, trend analysis and projections are carried out e.g. by **UNECE/FAO**, **ITTO** and several research institutes regionally and nationally (see e.g. **IIASA** Forestry programme http://www.iiasa.ac.at/Research/FOR/). Recently several studies on e.g. illegal logging, plantation forests etc. In Europe these include impact assessment studies for the *EU FLEGT Action Plan* (2004) and impact of potential further measures related to illegal logging and imports (2008), see e.g. at http://ec.europa.eu/environment/forests/pdf/ia_report.pdf also **EFI** contributed to the latter mentioned by **INDUFOR**.

2. National and regional forest sector foresight exercises

Finland: Forest Foresight Unit in the University of Eastern Finland (several projects 2003–)

1) Scope: Foresight of the forest sector and factors affecting it. Surveys will also focus on the more scarcely-reported aspects, e.g. addressing consumer behaviour and social change.
2) Process: The main goal is to promote the forest and wood based businesses and to support decision making in the forest sector.
3) Initiator (funding): Regional Council of North Karelia, Ministry of Agriculture and Forestry, Ministry of Education, Forestry centres, Employment and economic development centres, etc.
4) Participants/key target organisations: Enterprises, R&D and educational organizations, officials preparing policy programmes, regional development authorities etc.
5) Activities: Future surveys (several methods), innovation workshops, seminars, stakeholder meetings etc.
6) Results (examples of ended or on-going surveys):
   - Changes in the forest sector's global environment and opportunities for new livelihoods. The probable and possible trends and tensions of the change will be assessed from the following viewpoints: economics of natural resources, natural resources and land use, climate and energy policy, regional development policy, consumption and politics.
   - Possibilities for collaboration at the interface of the wood products and energy production industries.
   - Consumer attitudes to wood in housing and to bioenergy.
   - The potential profiles and division of responsibility between higher-level forestry, wood and paper education in eastern and south-eastern Finland.
7) Further information: www.metsaennakointi.fi, www.metsafoorumi.fi; saija.miina@uef.fi

Sweden: Future Forests (first phase in 2009-2012)

1) Scope: Future challenges are placing increasing demands on forest resources and at the same time biodiversity, recreational needs and ecosystem services need to be safeguarded. The programme is about finding the right balance between these diverse needs.
2) Process: The aim is to produce a comprehensive knowledge base for sustainable forest use.
3) Initiator /coordinator: The Swedish University of Agricultural Sciences (SLU). Funded through Future Forests, a multi-disciplinary research program supported by Mistra (the Foundation for Strategic Environmental Research), the Swedish Forestry Industry, the Swedish University of Agricultural Sciences, Umeå University, and the Forestry Research Institute of Sweden
4) Participants: Key partners: Swedish University of Agricultural Sciences (SLU), Umeå University and the Forestry Research Institute of Sweden. Key target organisations: forest owners (such as private forest owners, associations of forest owners and forest companies), authorities and politicians (such as the Swedish Forest Agency, Swedish Environmental Protection Agency and County Administrative Boards), other stakeholders (such as other sectors of industry and stakeholder organisations) and the international research community.
5) Activities: Stakeholder panels, workshops, scenario building and analysis
6) (expected) Results: management recommendations, scientific publications, reports, seminars, conferences, adaptive forest management strategies, develop new forest management methods.
7) Further information: http://www.futureforests.se

Including the **scenario analysis in Future Forests**, Sweden (2009-2010)

1) Scope: Scenarios (possible futures) for the Swedish forests and forestry 2050
2) Process: Policy consequences for stakeholders, and interdisciplinary research exercise for the research program
3) Initiator / coordinator: The research program Future Forests
4) Participants: Researchers within the research program and representatives from stakeholder groups (incl. forestry and NGOs)
5) Activities: Workshops, literature reviews
6) (expected) Results: Reports and information materials, strategic discussions with stakeholders, increased interdisciplinary research skills
7) Further information: www.futureforests.se Contact persons: jon.moen@emg.umu.se / annika.nordin@genfys.slu.se

Germany: Zukünfte und visionen Wald 2100 / Futures and visions – Forests 2100 (2007-2008)

1) Scope: examination of processes of change in forest and land stewardship from a social perspective; to inspire the debate surrounding forests and land use with a time horizon to 2100.
2) Process: The aim of the scenario work is to support discussion about the possible and preferred futures.

3) Initiator: Funded by the Bundesministerium für Bildung und Forschung (German Ministry for Education and Research)
4) Participants: Key partners: a multidisciplinary team of forestry, environmental management and ethics, business management, regional studies, and social sciences. Furthermore, the exercise involved futures researchers and practitioners from forest management and the timber industry. Key target group: a wide group of participants from science, society, policy and economy.
5) Activities: Expert survey (Delphi), workshop series for factor analysis and scenario building. Conference for interest groups, conference for the young and a regional conference.
6) Results: Conferences, policy paper, recommendations for further activities.
7) Further information: http://www.waldzukuenfte.de/

France: several projects

La prospective INRA sur "la forêt, sa filière et leurs liens aux territoires" (1998)

1) Scope: Scenarios for the forest cluster development in France and related research needs to 2020
2) Process: Research agenda for forest sector themes in agricultural research at INRA
3) Participants: coordin. By DADP/INRA and the French Ministry of Agriculture, app. 100 participants in France representing research, industries, administration and decision-makers
4) Activities: System analysis, micro and macro scenarios, workshops
5) Results: Report (incl. workshop discussions), alternative scenarios and research needs related to them
6) Further information: e.g. http://www.inra.fr/dpenv/pdf/SaviniD20.pdf (in French) and a short summary also in the EFI TF 29/2008

France: other national and regional exercises

The challenges of French forest in time horizons 2050 and 2100 with respect to climate change and competing land uses, were elaborated in the report "*La forêt française en 2050-2100: essai de prospective*" (2008) for **Ministère de l'alimentation, de l'agriculture et de la pêche – CGAAER** http://agriculture.gouv.fr/la-foret-francaise-en-2050-2100

There are also regional exercises ongoing in France, e.g. the foresight study on *Massif des Landes de Gascogne* (a region affected by recent storms, and facing challenges for the future) by **GIP-ECOFOR**, further information Luc Peyron, peyron@gip-ecofor.org

Other countries

Often forest sector futures are investigated as a part of wider foresight exercises, either for national foresight (innovation strategies, research priorities; agricultural and rural futures; land use investigations). For further references for exercises in Europe, see the EFI TF 29/2008. Here below examples outside Europe:

USA: Southern Forest Futures Project (2008-2011)

1) Scope: scenario-based analysis futuring applied to the south-eastern United States
2) Process: Public scoping/scenario definition/forecast modelling coupled with expert led analysis of natural resource issues
3) Initiator / coordinator: Initiated by the US Forest Service and the Southern Group of State Foresters/ coordinated by US Forest Service Research and Development
4) Participants: US Forest Service, states, interested public
5) Activities: public meetings/webinars, expert panel, integrated market/ecological/climate/demographic models, science teams
6) Results: Multiple chapter technical report on scenarios, forecasts, and issues, Summary Report, and reports on implications for management and policy.
7) Further information: dwear@fs.fed.us and http://www.srs.fs.usda.gov/futures/

USA: WRI Southern Forests for the Future (2010)

1) Scope: Outlook on ecosystem products and services provided by forests in the southern United States. The time horizon is 2040.
2) Process: Raise awareness and provide information on southern forests.
3) Initiator /coordinator: World Resources Institute (WRI). The study is supported by Toyota.
4) Participants: Key target group: citizens, forest owners, conservation organisations and academic institutions.
5) Activities: Review of literature and existing data
6) Results: Final report, internet-based information portal, current and historic satellite images, data, maps, and other forms of information about southern forests, their condition, and trends, identification of drivers of change.
7) Further information: http://www.wri.org/ and http://www.seesouthernforests.org/discover-southern-forests/welcome

Other outlook and foresight studies by the World Resources Institute (WRI) are e.g. "*Seizing the Moment: WRI's Five-Year Strategic Plan*" (http://www.wri.org/publication/strategic-plan) and "*Reducing Greenhouse Gas Emissions in the United States Using Existing Federal Authorities and State Action*" (http://www.wri.org/publication/reducing-ghg-emissions-using-existing-federal-authorities-and-state-action)

Also other regional exercises can be found, e.g. the **Willamette Basin Alternative Futures – Analysis Environmental Assessment Approach that Facilitates Consensus Building** by the Pacific Northwest Ecosystem Research Consortium, consisting of scientists from EPA, Oregon State University, and the University of Oregon (project completed 2002). Future horizon for the exercise was 2050. For further information see, http://www.fsl.orst.edu/pnwerc/wrb/proj_summary.pdf and the article in the Ecological Applications (2004) http://ecobiblio.science.oregonstate.edu/files/ecoinfodev/Baker%20Alternative%20Futures%20Ecol%20Ap_0.pdf

Canada: Sustainable Forest Management Network – Forest Futures (2007-2009)

1) Scope: The Forest Futures Project is a Network-wide initiative aimed at focusing the expertise and experience of the Network's research, industry, government, Aboriginal and NGO communities on the future of Canadian forest and the societies and economies it supports. The time horizon is 2050.
2) Process: The goal of the project is to assist in moving toward a sustainable future for Canada's forests by enhancing the knowledge available to decision-makers.
3) Initiator / coordinator: Sustainable Forest Management Network, Canada
4) Participants: Key partners: academic and research institutes, representatives from industries, government, aboriginal communities and NGO's. Key target group: Policy and decision makers.
5) Activities: Scenario planning approach was the same as the one developed by the Royal Dutch Shell, identification of drivers, storyline development, workshops.
6) Results: workshop reports, scenarios, identification of drivers, Future Forests Essays
7) Further information: http://www.sfmnetwork.ca/html/forest_futures_e.html

Congo Basin, 2010-2020

1) Scope: Congo Basin, 2010-2020
2) Process: valuation and changes in informal/domestic forest products and their revenues
3) Initiator / coordinator: V Ingram/S Grouwels
4) Participants: FAO, Ministries, COMIFAC
5) Activities: VCA, socio-economic assessment, market valuations, impact analysis, sphere of influence analysis, Poverty-Forests Linkages Toolkit
6) Results: values
7) Further information: v.ingram@cgiar.org

See also the materials and publications available at the Center for International Forestry Research (CIFOR) website, e.g. Realising Community Futures – A Practical Guide to Harnessing Natural Resources, http://www.cifor.cgiar.org/realizingfutures/ an example of participatory modelling approach.

Foresight methods are used for development issues, governance, and poverty reduction. For example, the **Institute for Alternative Futures** (IAF) is working on preferred futures themes in e.g. health, ethical future in biomedical and globalisation issues. IAF, with support from the Rockefeller Foundation, has been developing an approach to applying foresight methods to expand social and economic opportunities for poor and marginalized populations worldwide, see e.g. the scenario development toolkit by pro-poor foresight http://www.altfutures.com/?q=pro_poor

3. Research agendas, roadmaps, incl. technology platforms and industry exercises

National Research Agenda for the forest based Sector in Austria 2007-2008

1) Scope: Future RTD demand for forest based research organisation with a time horizon 2025
2) Process: RTD priorities in and for the Austrian forest sector
3) Initiator / coordinator: Kooperationsplattform Forst-Holz-Papier, Coordinator: Martin Greimel
4) Participants: ÖZEPA, Holzverband, Landwirtschaftskammer Österreich, University of Life Science, the 4 relevant Ministries for RTD in Austria, Verband der Land- und Forstwirtschaftsbetriebe, etc.
5) Activities: WS, questionnaires, conference
6) (expected) Results: printed Research Agenda
7) Further information: www.forestplatform.org / martin.greimel@lebensministerium.at

Other **Forest-based sector Technology Platform (FTP)** materials, e.g. Vision 2030, Strategic Research Agenda (SRA), National Research Agendas (NRA) are available at http://www.forestplatform.org. Different approaches were used for defining the national research agendas. For example, in Finland the FTP research agenda building utilised internet consultation and *Robust Portfolio Modelling* for screening the research themes (Helsinki University of Technology), for a brief overview and further reading, see http://www.foresight-platform.eu/wp-content/uploads/2010/04/EFP-Brief-No.-166_Forst-Based-Technology-Platform.pdf. The **Mediterranean Forest Research Agenda (MFRA)** was elaborated in a wide consultation in the *EFIMED* network (http://www.efimed.efi.int/). The FTP vision and Strategic Research Agenda are under update in the beginning of 2011

PAS: Strategic Action Priorities for the Pulp & Paper Sector Research (2009-2010)

1) Scope: foresight on future pulp, paper and fibre based products and related research needs by 2020
2) Process: Research priorities in the pulp, fibre and paper sector
3) Initiator / coordinator: Centre Technique du Papier (CTP)
4) Participants: CTP researcher and other pulp & paper experts
5) Activities: Brainstorming and workshops, based on expertise, literature survey and contacts with the industry
6) Results: Definition of Strategic Action Priorities for the development of research for the pulp & paper sector
7) Further information: www.webCTP.com

European federations CEPI and CEI-Bois, and exercises by industry associations

The **Confederation of European Paper Industries** (CEPI) www.cepi.org is at present preparing a *Roadmap 2050*. An investigation of megatrends likely to influence on forest products industries is underway within the framework of the International Council of Forest and Paper Associations (ICFPA). *Sten Nilsson* a senior scientist of IIASA is involved in the ICPFA exercise.

The **European Confederation of Woodworking Industries** (CEI-Bois) defined its *Roadmap 2010* in order to realise the CEI-Bois Vision i.e. making wood Europe's leading material in building system solutions and high-quality home and office furnishing by the year 2010. The Roadmap 2010 was evaluated in 2009 by *AGENDA Business Development*, a consultancy for wood products industry. See http://www.cei-bois.org/en/roadmap-2010/ An example of foresight exercise in the sector, is:

Furniture Foresight Centre – CEFFOR (2008 -)

1) Scope: provide strategic information to furniture companies in high-cost countries (Spain, Canada Australia) by utilising foresight methodology for a systematic analysis of the constructed scenarios to identify possible futures of the furniture sector (macroeconomic, sector-based and business models scenarios). Time horizon 2016.
2) Process: The aim is to promote the sustainable development in terms of all three pillars (economic, social and environmental) and improve competitiveness of participating companies.
3) Initiator / coordinator: Furniture, Wood and Packaging Technology Institute in Spain (AIDIMA) together with partners in Australia and Canada.
4) Participants: Key Partners: Furniture, Wood and Packaging Technology Institute in Spain (AIDIMA), Canada's Wood Products Research Institute FPINNOVATIONS-Forintek Division and Research Centre CRC-Wood Innovations of The University of Melbourne in Australia. The project is sponsored by the "Instituto de la Mediana y Pequeña Industria Valenciana" (IMPIVA) and "Federación Empresarial de la Madera y Mueble de la Comunidad Valenciana" (FEVAMA).
5) Activities: Seminars, market analyses, product demand analyses.
6) Results: the Furniture Foresight Centre CEFFOR: Information on integration of European distributors, how to improve trademarks image and quality and other information which might help to gain a competitive advantage over low-cost countries.
7) Further information: http://www.ceffor.com/ and http://www.aidima.es/ see a short introduction at http://www.foresight-network.eu/index.php?option=com_docman&task=doc_view&gid=356

World Business Council for Sustainable Development – Vision 2050 (2010)

1) Scope: definition of a vision of a world well on the way to sustainability by 2050. The project outlines a future in which 9 billion people live well, enjoying health, food, shelter, energy, mobility, education and other basics of life.
2) Process: The aim of this foresight exercise is to lead businesses and societies towards a sustainable development agenda – changes needed in governance structures, economic frameworks, business and human behaviour and business opportunities for companies that turn sustainability into strategy.
3) Initiator / coordinator: World Business Council for Sustainable Development (WBCSD)

4) Participants: Key partners: the Vision 2050 was an 18-month collaborative effort among representatives from 29 member companies (incl. a large number of external stakeholders), supported by the WBCSD secretariat. Key target group: leading businesses and policy makers.
5) Activities: dialogues, interviews, workshops.
6) Results: Final report, a vision for 2050 and identification of the opportunities and challenges.
7) Further information: http://www.wbcsd.org and the Vision 2050 report http://www.wbcsd.org/web/projects/BZrole/Vision2050-FullReport_Final.pdf

Examples of projects and studies investigating forest sector / forest-based industries in Europe

- **IIASA Xevents** project investigates game changers (chocks and extreme events based on human behaviour), and aims at setting up an observatory and simulator for weak signals and early-warning system. One case study is on the printing paper industry. http://www.iiasa.ac.at/xevents/index.html
- **SMILE Synergies in Multi-scale Inter-Linkages of Eco-social systems** (FP7 in SSH and in connection with a FP6 DECOIN project: Development and Comparison of Sustainability Indicators). http://www.smile-fp7.eu/ Project is coordinated by the *Turku School of Economics*, *Finland Futures Research Centre (FFRC)*. The Finnish case study is on the forest industry, see report at http://www.smile-fp7.eu/deliverables/SMILE%20D11%20Finnish%20case%20study%20report.pdf
- **Study of the Effects of Globalization on the Economic Viability of EU Forestry** (2007) by *IIASA* for *EC DG AGRI*. The study was a part of the *EU Forest Action Plan* activities, and the analysis take future horizon of 2030 http://ec.europa.eu/agriculture/analysis/external/viability_forestry/index_en.htm

Corporate foresight consulting companies, non-profit organisations…

There are several consulting companies specialised in corporate foresight and foresight consulting. For example, **Z_punkt The Foresight Company** carries out foresight studies on demand, mainly corporate foresights to define business strategies, trends, scenarios and emerging issues. Z_punkt contributed to the *Wald 2100* project (developing scenarios within the framework of the project which allow for credible statements on the future of forests in 2020, 2050, and 2100), but there are also several reports, tools available from the company website e.g. Top 20 Megatrends, a study on changing consumer behaviour in China or a report on a survey assessing 12 future markets in 2020, see http://www.z-punkt.de

Other examples of companies providing services for horizon scanning and other foresight tools: the **FastFuture** Research, UK (see e.g. *Possible New Careers Emerging from Advances in Science and Technology (2010-2030)* http://fastfuture.com/wp-content/uploads/2010/01/future_jobs_sheet.pdf), a global design and engineering firm for built environment **Arup Foresight**, US (see e.g. *drivers of change* http://www.driversofchange.com/doc/2009/), an international innovation and design firm **IDEO** (see e.g. *Future of the Book* http://vimeo.com/15142335).

Forum For The Future is a non-profit organisation promoting sustainable development, themes include e.g. consumer behaviour, urban futures, health, sustainable procurement etc. Further information http://www.forumforthefuture.org/

Technology foresight

Technology foresight has evolved from technology forecasting to more futures analysis and foresight for innovation at large. The **European Commission's Joint Research Centre Institute for Prospective Technological Studies (JRC-IPTS)** is presented in a later section in this document, but here below are international organisations active in the field:

- **NISTEP International Conferences** (the National Institute of Science and Technology Policy of Japan) connect technology foresight experts world-wide to explore recent issues on science, technology (S&T) and innovation policies, and consider how to conduct effectively and to advance further the innovation policy based on scientific evidence. The NISTEP website provides reports on science and technology development http://www.nistep.go.jp/ but even more is to explore in the international conference presentations.
- **MIT Technology Review** ranks every year the 10 Emerging Technologies http://www.technologyreview.com/tr10/
- **APEC Centre for Technology Foresight** (Asian Pacific Economic Cooperation) www.apecforesight.org/ , see "The Futures of Low-Carbon Society: An Asia-Pacific Vision Beyond 2050" later in this document.
- **United Nations Industrial Development Organisation UNIDO** Technology Foresight: in Europe during 2006-2009 activities in the Central and Eastern European region (CEE) and Newly Independent States (NIS). For further information see http://www.unido.org/index.php?id=o5216

4. Agriculture sector, rural futures

Standing Committee on Agricultural Research: SCAR Foresight - Sustainable Food Consumption and Production in a Resource-Constrained World

The SCAR Foresight is an ongoing process since 2006 to develop innovative solutions to challenges facing agriculture and food security. It provides long-term assessment and analysis of expected environmental and resource issues and their meaning for future agricultural research; prepare the ground for a smooth transition towards a world with resource constraints and environmental limits; consider the role the Knowledge-Based Bioeconomy (KBBE) can play in addressing these challenges; assemble basic building blocks for a long-term vision of more resilient and sustainable agriculture systems able to feed nine billion people by 2050. So far forestry questions have not been specifically addressed in the exercise, but in 2011 there is an initiative for the Standing Committee to establish a SCAR Collaborative Working group on forest value chain and climate change with a focus on North and Central Europe.

Methods used in SCAR foresight are:

- Expert Group selected to conduct scanning and monitoring exercise
- Input from SCAR Foresight Group, Workshop with representatives from Technology Platforms, KBBE-ERA-Nets, other FP7 projects
- Focus is on environmental and resource issues (e.g. land, water, energy, biodiversity) that may impede the further use of current technologies
- Focus is on new insights to identify potential risks, opportunities and likely future developments and challenges for agricultural research in the EU
- Preparation of reports suggesting new research priorities and current research areas to be stopped
- Outline elements for building long-term vision for resilient, sustainable and equitable agricultural systems

3rd SCAR Foresight: Broadening the agricultural challenges to green growth (2010 – 2011)

1) Scope: The 3rd SCAR foresight will focus on major challenges to agriculture and food production such as resource scarcity, adverse environmental impacts, competition for land use and growing demands for food and non-food products. The time horizon for this study is 30-40 years.
2) Process: direct the work of Standing Committee on Agricultural Research and the EU agricultural research directions (see COM(2008)862 final, 15.12.2008 "*Towards a coherent strategy for a European Agricultural Research Agenda*" for communicating the results of the SCAR Foresight 1 to the Council, the European Parliament, EESC and COR).
3) Initiator / coordinator: SCAR Standing Committee on Agricultural Research, supported by the European Commission, Directorate General for Research with funding from the EU 7th framework Programme FP7
4) Participants: expert groups, representatives from most European countries from the fields of agriculture, food, forestry, aquaculture, rural development, consumer science/behaviour, etc
5) Activities: In 2010, a Foresight Expert Group (FEG3) was appointed to undertake a review of recent and on-going foresight studies to help in the analysis of expected environmental and resource issues impacting on long-term food supply and the implications for future agricultural and related research in Europe. The report is currently under finalisation and will be the main document of the conference to be held in Budapest (Conference on sustainable food consumption and production, 4-5 May 2011, Budapest, Hungary).
6) Results: Identification of emerging and innovative solutions which would enable agriculture to cope with a range of complex and interlinked challenges, such as rapidly increasing globalisation, climate change and unsustainable consumption of natural resources.
7) Further information: http://ec.europa.eu/research/agriculture/scar/foresight_en.htm and annette.freibauer@vti.bund.de / lance.obrien@teagasc.ie

Several European Commission DGs carry out foresight studies, scenario analysis and impact assessment studies – e.g. the DG AGRI Study on globalisation in the framework of the EU Forest Action Plan was already mentioned. Here below recent examples from the agriculture and rural sectors:

SCENAR 2020 – Scenario Study on the Future of Agriculture and the Rural World (2006) & Scenar 2020-II – Update of scenario study on agriculture and the rural world (2009)

1) Scope: The SCENAR 2020 study aims at identifying future trends and driving forces that will be the framework for the European agricultural and rural economy on the horizon of 2020.
2) Process: to assist directing rural development and CAP policies. SCENAR 2020 provides a systematic review of the primary variables that rural and agricultural policies have to take into account (incl. rural

demographic patterns, agricultural technology, the agricultural markets and the natural and social constraints on land use that are likely to exist in 2020). The Scenar 2020-II study was to refine and improve the identification of major future trends and driving factors.

3) Initiator / coordinator: European Commission, Directorate General Agriculture and Rural Development
4) Participants: European Centre for Nature Conservation (ECNC), Landbouw-Economisch Instituut (LEI), the Leibnitz-Zentrum für Agrarlandforschung e.V. (ZALF), Leibnitz Institut für Länderkunde, the Central European University and the European Landowners Organisation. The Scenar 2020-II was carried out by ECNC, LEI and ZALF.
5) Activities: The method used was to build a reference scenario ('baseline') based on an analysis of trends from 1990 to 2005, which was projected forward to 2020. The impact between various policy frameworks was evaluated by comparing two alternative scenarios ('liberalisation' and 'regionalisation') to the reference scenario. The comparison between scenarios occurred in two steps: the first was a modelling exercise that analysed the likely outcome of each scenario using simulation models and other quantitative analyses. When necessary, scenario analyses were complemented by qualitative analyses and expert judgement. The second step was a SWOT analysis, which was applied to each scenario in order to understand the implications. The Scenar 2020-II study illustrates three policy scenarios.
6) Results: Detailed quantitative scenarios, identification of the main driving forces, analysis of the possible consequences of policy decisions.
7) Further information: http://ec.europa.eu/agriculture/publi/reports/scenar2020/index_en.htm and Scenar 2020-II http://ec.europa.eu/agriculture/analysis/external/scenar2020ii/index_en.htm

Situation and Prospects for EU Agriculture and Rural Areas (2010)

1) Scope: Analysing trends and identification of drivers and challenges of a common agricultural policy. The time horizon is 2020.
2) Process: The study was carried out within *DG AGRI Economic analysis and market forecasts*. Aim is to help EU policy and decision makers in the agricultural sector to explore the medium-term challenges which may help in formulating a common agricultural policy.
3) Initiator / coordinator: European Commission, DG AGRI
4) Participants: study was a joint effort by DG AGRI and JRC-IPTS
5) Activities: review of literature and national statistics of EU member states, market projections.
6) Results: a report identifying the drivers and challenges and a medium-term forecast for the EU agricultural markets.
7) Further information: see the report at http://ec.europa.eu/agriculture/publi/caprep/prospects2010/index_en.htm

For further information about **DG AGRI Economic analysis and market forecasts**, see http://ec.europa.eu/agriculture/analysis/markets/index_en.htm For global market projections of key agricultural commodities, see the **OECD-FAO Agricultural Outlook** www.agri-outlook.org

Regional: Mediterranean Foresight analysis (ARP-PARME 2010-2011) – workshop series

1) Scope: This project focuses on four research themes: agriculture - food - health, energy demand, cultures and societies, spaces-resources-territories.
2) Process: The aim is to identify research and innovation fields which require cooperation actions today and for the next ten years between Europe and the Mediterranean countries
3) Initiator / coordinator: financing from the French National Research Agency (ANR), and coordination by Agropolis International.
4) Participants: around 100 experts from the Mediterranean region, research and training institutions, economic stakeholders (competitiveness clusters, experts and companies).
5) Activities: Workshops and stakeholder panels; The workshop is now in its third stage "Which researches and partnerships for the Mediterranean?" eight meetings of the four thematic working groups are scheduled between January and March 2011.
6) Results: Identify priority fields for future research; workshops in 2011 aim at defining research lines, corresponding to previously identified issues, to be implemented by 2030
7) Further information: http://www.agropolis.org/project-management/workshop-mediterranean-prospective-analysis.php

INRA – Institut National de la Recherche Agronomique

The French National Institute for Agricultural Research (INRA) uses foresight to help it to define its research policies, see the INRA Foresight Unit website http://www.international.inra.fr/the_institute/foresight and studies on e.g. agriculture and food in the world of 2050; Agriculture 2013 – a foresight study for French agriculture; New Ruralities: the future of French rural areas in the Europe of 2030; Technologies of the future.

TOWARDS 2030: Teagasc's Role in Transforming Ireland's Agri-Food Sector and the Wider Bioeconomy (2008)

1) Scope: Teagasc 2030 was a foresight exercise designed to establish a broadly shared vision for the Irish agri-food and rural economy in 2030 and its knowledge requirements with a view to strengthening the strategic capabilities of Teagasc and its relevance to its stakeholders.
2) Process: The initiative aims to create a shared vision of the agri-food and rural economy and of its science and technology needs; secure the involvement of a wide spectrum of stakeholders in the process; and create public awareness of the importance of S&T in the development of the agri-food sector; Set the agenda for the development of the Irish agri-food sector; Redefine the role of Teagasc in developing the Irish Bioeconomy.
3) Initiator / coordinator: Board of Teagasc, The Irish Agriculture and Food Development Authority
4) Participants: The Steering Committee (SC) included key Teagasc managers, high level representatives from relevant organisations such as government departments, the university system and the Environmental Protection Agency, influential business leaders from both the farming and food sectors, as well as international experts. The Working Group (WG), consisting of Teagasc employees aided by two international consultants, was responsible for the detailed planning and execution of the exercise. The Foresight Panel (FP) consisted of experts from Teagasc, representatives of the farming and food sectors, as well as experts from the research community, including a commercial research service provider.
5) Activities: The Foresight was completed through seven workshops involving representatives from government departments, universities, other State agencies, farming organisations, food companies and international experts. It also involved a scenario building workshop, SWOT analysis, scanning and literature review, as well as interviews and consultations with a wide range of individuals and organisations.
6) Results: vision for the Agri-Food and Rural Economy in 2030 as a 'knowledge intensive, innovative, internationally competitive and market-led BIO-ECONOMY'.
7) Further information: lance.obrien@teagasc.ie and http://www.teagasc.ie/foresight/index.asp

5. Environment, Climate, Biodiversity

UNEP – United Nations Environment Programme – Global Environment Outlook 1-5 (1995 -)

Global Environment Outlook (GEO) is a global, consultative, participatory process that builds capacity for conducting global environmental assessments and for reporting on the state and trends of the environment, future outlooks and policy options. GEO is also a product that informs environmental decision-making. It aims to facilitate the interaction between science and policy. Currently the Global Environment Outlook 5 is under preparation. Further information: http://www.unep.org/geo/

Global Environment Outlook 4 (2007)

1) Scope: Evaluation of the state of the global environment. The time horizon is 2015 and beyond.
2) Process: the purpose of the evaluation an urgent call for actions for policy makers, policy advice and a call for good governance
3) Initiator / coordinator: UNEP United Nations Environment Programme. The Governments of Belgium, The Netherlands, Norway and Sweden together with the UNEP Environment Fund funded the GEO-4 assessment.
4) Participants: over 500 experts contributed to the report. Key target group: Policy makers, politicians, governments.
5) Activities: Integrated Environmental Assessment, expert working group meetings, consultations inviting policy makers and stakeholders.
6) Results: regional, sub-regional and national integrated environmental assessments, technical and other background reports, final report, policy recommendations, call for actions, media presentations, multimedia releases, GEO data portal.
7) Further information: http://www.unep.org/geo/geo4.asp

UNEP regional exercises, e.g. Mediterranean Blue Plan and Carpathian Convention

- **UNEP Blue Plan** is a regional activity for environment and development in the Mediterranean, incl. the aim of shaping future scenarios to guide decision-taking processes http://www.planbleu.org/
- UNEP has also been active in other regional processes, e.g. the **Carpathian Convention** http://www.carpathianconvention.org incl. the Carpathian Environmental Outlook (KEO) report (2007)

UNEP – United Nations Environment Programme – Green Economy Initiative (2009 -)

1) Scope: To improve human well-being and equity while at the same time reducing environmental risks and scarcities. The time horizon is 2050.
2) Process: The aim is to demonstrate that investment in greening the economy across a range of sectors, including agriculture and forestry, can drive economic recovery and lead to future prosperity and job creation, while at the same time addressing social and environmental challenges.
3) Initiator: UNEP United Nations Environment Programme. Funded by the governments of Norway, Switzerland and the United Kingdom of Great Britain and Northern Ireland and the UN Foundation.
4) Participants: Key partners: UN organisations, academic institutes, think tanks, businesses and environmental groups. Key target group: decision-makers and business leaders, and solicit the support of the public in calling for increased environmental investments to promote sustainable economic growth, decent job creation and poverty reduction.
5) Activities: Policy analysis, quantitative analysis, macroeconomic models and impact assessment.
6) Expected results: brochures, multimedia presentations, information materials, final report, vision on the green economy, policy advice, advisory services
7) Further information: http://www.unep.org/greeneconomy

Global Biodiversity Outlook 3 (2010)

1) Scope: The outlook contains the sobering facts and figures while pin pointing several key reasons as to why the challenge of conserving and indeed enhancing biodiversity remains unmet. The time horizon is 2100.
2) Process: Raising awareness among political leaders and nations and an urge for action. Provide decision makers with messages that will aid them in developing policy and management strategies that are ambitious, forward looking and proactive.
3) Initiator / coordinator: Convention on Biological Diversity (CBD) and UNEP. This study was funded by the Department of the Environment, Food and Rural Affairs of the United Kingdom, the European Commission and UNEP.
4) Participants: Key partners: DIVERSITAS (an international program of biodiversity science), UNEP-WCMC (World Conservation Monitoring Centre) and over 40 scientists from academic and research institutes. Target group: world leaders, national policy and decision makers.
5) Activities: Review of national reports and scientific literature, collecting data on biodiversity indicators, scenario assessment, assessments of land cover changes, identification of tipping points, biodiversity and ecological modelling, experiments and extrapolation of observed trends.
6) Results: Final report, technical report, scenarios for the world's biomes, policy actions and recommendations at the local, regional, national and international level.
7) Further information: http://gbo3.cbd.int/ for the final report and http://www.cbd.int/doc/publications/cbd-ts-50-en.pdf for the technical report describing future biodiversity scenarios.

Several scientists and teams contribute to the outlook studies. E.g. the **GLOBIO** team contributed to the GBO 3 report. GLOBIO is a modelling tool for human impacts on biodiversity based on consortium of the *Netherlands Environmental Assessment Agency* (PBL), *UNEP GRID-Arendal* and *UNEP-World Conservation Monitoring Centre* (UNEP-WCMC). http://www.globio.info/

Millennium Ecosystem Assessment (2001-2005)

1) Scope: The objective was to assess the consequences of ecosystem change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being. The time horizon for some studies is 2100.
2) Process: To provide a state-of-the-art scientific appraisal of the condition and trends in the world's ecosystems and the services they provide (such as clean water, food, forest products, flood control, and natural resources) and the options to restore, conserve or enhance the sustainable use of ecosystems. The overall aims were to contribute to improved decision-making concerning ecosystem management and human well-being, and to build capacity for scientific assessments.
3) Initiator /coordinator: The work was initiated by UNEP, the World Bank, The United Nation Development Programme (UNDP) and the World Resources Institute (WRI). The work was co-ordinated by the MA-board with representatives from science, governments and NGO's. The work was funded by more than 100 countries, institutions and organisations
4) Participants: Key partners: More than 1360 experts worldwide. Key target group: Regional, national and global policy and decision makers.
5) Activities: Assessment of current knowledge, scientific literature and data.
6) Results: Full reports, synthesis reports, a framework for assessment.
7) Further information: http://www.maweb.org See e.g. the chapter on wood, fuelwood and non-wood forest-products http://www.maweb.org/documents/document.313.aspx.pdf and the chapter on four

scenarios looking at global economic and political developments and their biodiversity implications http://www.maweb.org/documents/document.332.aspx.pdf

OECD Environmental Outlook to 2030 (2008)

1) Scope: Provides analyses of economic and environmental trends to 2030, and simulations of policy actions to address the key challenges. For some specific areas the time horizon was extended to 2050.
2) Process: The outlook shows that the costs of policy inaction are high. But it also shows that tackling the key environmental problems we face today, including climate change, biodiversity loss, water scarcity and the health impacts of pollution, is both achievable and affordable. It highlights a mix of policies that can address these challenges in a cost-effective way. The focus of this Outlook is expanded to reflect developments in both OECD countries and Brazil, Russia, India, Indonesia, China, South Africa (BRIICS), and how they might better co-operate on global and local environmental problem-solving.
3) Initiator / coordinator: OECD
4) Participants: Key target group: government policy-makers
5) Activities: robust general equilibrium economic modelling framework, environmental modelling, simulation run for specific policies and policy packages.
6) Results: projections of environmental change to 2030, highlighting issues which need urgent policy action.
7) Further information: http://www.oecd.org/environment/outlookto2030

Intergovernmental Panel on Climate Change – IPCC 4th Assessment Report – Climate Change 2007

1) Scope: Provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.
2) Process: Provide rigorous and balanced scientific information to decision makers. The work of the IPCC is policy-relevant and policy-neutral, never policy-prescriptive.
3) Initiator / coordinator: The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO). The IPCC Secretariat coordinates all the IPCC work and liaises with Governments. It is supported by WMO and UNEP and hosted at WMO headquarters in Geneva.
4) Participants: Key partners: Over 3,500 experts coming from more than 130 countries contributed to the Fourth Assessment Report in 2007 (+450 Lead Authors, +800 Contributing Authors, and +2,500 expert reviewers provided over 90,000 review comments). Key target group: policymakers, in particular from governments, advisors to policymakers, and experts.
5) Activities: Review of the existing knowledge, data and literature, climate projections, building capacity in the use of data and scenarios for climate-related research. Currently, IPCC authors are working on the fifth assessment report.
6) Results: Global and regional climate projections, assessment reports, special reports and methodological reports, data sets, scenarios of climate change and other socio-economic and environmental conditions.
7) Further information: http://www.ipcc.ch

The SRES scenarios have also been elaborated for the forest sector in the **EFORWOOD project** www.eforwood.org "Reference futures and Scenarios for the European FWC" by *Alterra*, EFORWOOD Report D1.4.7, see http://87.192.2.62/Eforwood/Portals/0/documents/D1.4.7_update20081205_FINAL_AnRepYear3.pdf

6. European environment, land use, biodiversity – forward-looking information

European Environment Agency EEA Knowledge base for forward-looking information and assessment (FIA)

Cooperation with countries and other institutions

1. Scenario-building workshops in countries:
   - Slovenia, Turkey, Austria
   - Network of heads of EU EPAs

   Aims: Downscaling existing global scenarios to country level; Windtunelling existing strategies through scenarios; Building new scenarios
2. Cooperation with other institutions:
   - UNEP/GEO-4 (update of global, developing regional component)
   - ASEF (3 times, pre-conference mind opener)
   - ENVSEC (Eastern Europe, Central Asia forthcoming)
   - OSCE (6 scenario-buidling workshops forthcoming: EE, CA, WB, Med, Arctic, global)

   Aims: for awerness raising, capacity building, enhancing stakholders participation, regional recomendations, mind opener

Forward-looking assessments

1. **European scenarios**
   - EU Land use scenarios – PRELUDE Prospective Environmental analysis of Land Use Development in Europe (2005): Interactive web tool available on the EEA web site presents 5 scenarios for Europe http://www.eea.europa.eu/multimedia/interactive/prelude-scenarios/prelude
   - Pan European Environment: Glimpses into an uncertain future (2007)
   - Environmental trends and perspectives in the Western Balkans: future production and consumption patterns (2010)

   See also the **Information Portal for Environmental Scenarios** http://scenarios.ew.eea.europa.eu/

2. Environmental integrated assessments – reports **Pan European report 2007 (Belgrade), State of environment and outlook report SOER 2010**
   - SOER 2010 Part A: explorative long-term (2050) analyses of global megatrends of importance to Europe (call for evidence), assessment of assessments approach; exploratory assessment; 50 years back and 50 years forward
   - Part B: thematic assessments (outlook 2020)
   - Part C: country profiles (include Forward-looking component)

   Analyses of impacts of global megatrends to European environment of global megatrends (forthcoming); Analyses of impacts to EU policy making (forthcoming)

An EEA Forestry project: The role of land use/cover in ecosystem services in a changing climate. The impact of climate change on mountains river discharge properties (Au, Fr, UK, Pt, S). EEA contact point: Josef Herkendell.
Further information about EEA: anita.pirc-velkavrh@eea.europa.eu

PRELUDE Land-Use Scenarios for Europe: Qualitative and Quantitative Analysis on a European Scale (2006-2007) / EEA

1) Scope: Land-use change and its consequences for the environment. The time horizon is 2035.
2) Process: Aimed at policy makers and interest groups concerned with agriculture, rural development, spatial planning and climate change. The project provides a context against which the impact of environmental policy initiatives can be judged. The project explores five possible futures for a Europe that is experiencing major changes in the way we use our land. In each scenario, factors, including demographic trends, spatial planning patterns, agricultural policy, climate change and other key driving forces, lead to changes in land use and land cover. This results in a range of impacts on biodiversity, water quality, flooding, greenhouse gas emissions, soil erosion, and landscape identity.
3) Initiator / coordinator: EEA- European Environment Agency
4) Participants: The stakeholder panel was composed of experts from environmental ministries, policy makers, research institutions, natural resource and nature management. The key partners were: CESR, Universität Kassel, Germany; Université Catholique de Louvain, Belgium; RIKS b.v. Maastricht, the Netherlands; PROSPEX bvba, Brussels, Belgium.
5) Activities: Prelude has used a Story-and-Simulation approach to scenario development, integrating qualitative and quantitative perspectives. A stake holder panel build scenarios based on in-depth discussion on key uncertainties and driving forces and how these might affect land use. The scenarios are captured in a set of stories that depict how the future might unfold. Analysis support groups then used simulation models to map corresponding land use changes and highlight possible impacts on the environment. The story and model results were revised several times so that the stakeholder panel, support groups and the project team were able to come up with a final set of scenarios.
6) Results: Interactive internet tool, workshops and reports
7) Further information: prelude@eea.europa.eu and http://scenarios.ew.eea.europa.eu/reports/fol077184 and http://www.eea.europa.eu/multimedia/interactive/prelude-scenarios/prelude

European Spatial Planning Observation Network (ESPON)

ESPON supports policy development and provides comparable information, analyses and scenarios on territorial structures and dynamics. Relevant for the forest-based sector are, for instance some scenario or forward looking studies on rural areas, energy, climate change and changes in land use patterns. For more information, see: http://www.espon.eu. An example of work carried out in ESPON:

Climate Change and Territorial Effects on Regions and Local Economies in Europe (2009-2011)

1) Scope: the project analyses how and to which degree climate change will impact on the competitiveness and cohesion of European regions and Europe as a whole. In addition, it investigates in which way policy can contribute to mitigate climate change, and to adapt to and manage those results of climate change that cannot be avoided.
2) Process: The study aims to assess the degree of vulnerability of different types of European regions to climate change, the adaptive capacities of these regions and their potentials for mitigation of climate change (in relation to e.g. renewable energy, carbon sinks, energy saving).
3) Initiator / coordinator: Lead partner: TU Dortmund University. Partly financed by the European Regional Development Fund
4) Participants: key partners: Universities and research institutes. Key target organisations: Policy makers at the EU, national and regional level.
5) Activities: Public meetings, stakeholder panels, impact assessment.
6) Expected results:
    - Data input to the EPSON database as well as indicators on the impact of climate change on different sectors of regional and local economies.
    - Typologies of European regions classifying the degree of vulnerability to climate change and their adaptation and mitigation capacities.
    - Case studies on the development opportunities and threats of the regions most vulnerable to climate change.
    - European maps on the degree of vulnerability of different types of European regions to climate change.
7) Further information: Stefan Greiving Stefan.greiving@tu-dortmund.de and http://www.espon.eu/main/Menu_Projects/Menu_ProjectOverview/

Urban futures

Also FP7 projects have been carried out on land use themes, e.g. on urban futures and forests. The study on **World and European Sustainable Cities – Insight from EU research** (2010) http://ec.europa.eu/research/social-sciences/pdf/sustainable-cities-report_en.pdf addresses the issues of urbanisation focusing on the concentration of needs and services, the migration and settlement patterns in Europe, the new forms of poverty and exclusion, urban welfare and social innovation, and green urban planning.

7. Energy

Royal Dutch Shell – Shell Energy Scenarios to 2050

1) Scope: Future projections and scenarios of energy use and technological development.
2) Process: The aim is to help making policy and technology choices as well as commitments from governments and industries.
3) Initiator: Royal Dutch Shell b.v.
4) Participants: Key partners: Shell experts and external experts. Key target organisations: Governments and industries. Committee of Managing Directors at Shell provided funding.
5) Activities: interviews with leaders within Shell and external leaders and three participatory workshops (orientation, building and affirmation).
6) Results: Report, scenarios, multimedia presentations, policy advice for governments and industries.
7) Further information: http://www.shell.com/home/content/aboutshell/our_strategy/shell_global_scenarios/

International Energy Agency (IEA) World Energy Outlook 2010

1) Scope: Provides updated projections of energy demand, production, trade and investment, for different kind of fuels and regions to 2035.
2) Process: The report includes a new scenario that anticipates future actions by governments to meet the commitments they have made to tackle climate change and growing energy insecurity. Promote sustainable energy policies.
3) Initiator: International Energy Agency. Funded by the IEA member countries.
4) Participants: Key partners: experts from the IEA divisions, consultation with member governments, international organisations and energy companies. Key target group: world leaders and governments, policy makers.
5) Activities: medium to long-term energy projections using a World Energy Model (WEM), a hybrid modelling framework combining expert judgement and integrated economic and energy models, dialog with policy makers.

6) Results: future scenarios, vision towards an energy roadmap, press release, press conference, final report, policy recommendations, an urge for policy action and to fully implement recent commitments.
7) Further information: http://www.worldenergyoutlook.org/

The IEA report on technology developments takes a bit longer future horizon: **Energy Technology Perspectives 2010: Scenarios and Strategies to 2050** http://www.iea.org/techno/etp/index.asp

World Wildlife Fund (WWF): The Energy Report – 100% Renewable Energy by 2050 (2008-2011)

1) Scope: The report is a provocative vision of a world run entirely on renewable energy by 2050.
2) Process: The aim is to generate discussion around the scenarios presented in the report.
3) Initiator / coordinator: WWF. The report was made possible with financial support from ENECO.
4) Participants: Key partners: WWF, ECOFYS and OMA-AMO. Key target group: Policy and business leaders, media and civil society.
5) Activities: Review of literature, data and existing knowledge, combination of a scenario building exercise and modeling of energy flows.
6) Results: Scenarios for the future, final report, insight how sustainable energy use can be achieved.
7) Further information: http://wwf.panda.org/what_we_do/footprint/climate_carbon_energy/energy_solutions/renewable_energy/sustainable_energy_report/

Greenpeace: Solar Generation 6 – Solar Voltaic Electricity Empowering the World (2011)

1) Scope: the report aims to provide a description of the current status of developing photovoltaic power generation worldwide and of its potentials and growth prospects in the coming years. The time horizon is 2050.
2) Process: Identify the benefits and stimulate the use of solar power with the aim of shifting to a green economy.
3) Initiator / coordinator: Greenpeace, and the European Photovoltaic Industry Association (EPIA). The project was financed by the "Your Sun Your Energy Campaign".
4) Participants: Key partners: Greenpeace and EPIA. Key target group: Policy and business leaders, small- and medium business entrepreneurs.
5) Activities: reference market studies, analysis of economic and social benefits such as employment and CO_2 reductions.
6) Results: identification of policy and market drivers of solar power development. scenarios for solar power development and electricity demand, final report
7) Further information: http://www.epia.org/solargeneration and http://www.greenpeace.org/international/en/publications/reports/Solar-Generation-2010/

Towards a low carbon society – analysis, roadmaps and scenario building

- The **Roadmap 2050** for low carbon economy in Europe exercise commissioned by the *ECF European Climate Foundation*. For example, see the narratives http://www.roadmap2050.eu/attachments/files/Volume3_FullBook.pdf and www.roadmap2050.eu/
- **Getting into the right lane for 2050** is a back casting exercise for identifying specific strategic actions for the EU in the coming five to ten years by the *Netherlands Environmental Assessment Agency*. http://www.pbl.nl/en/publications/2009/Getting-into-the-Right-Lane-for-2050.html
- **The Futures of Low Carbon Society: Climate Change and Strategy for Economies in APEC Beyond 205**0 http://www.lcs2050.com by the APEC Centre for Technology Foresight. Research on the Futures of Low-carbon Society: Climate Change and Strategies for Economies in APEC Beyond 2050, is a region-wide foresight research on the future society where low carbon economy and lifestyle becomes the principal driver governing trade and development. Two reports are available: The Delphi report (2008) from the online Delphi survey and the scenarios report (2009) from the final conference.

8. Economy

Organisation for Economic Co-operation and Development (OECD) International Futures Programme

The OECD International Futures Programme provides the Organisation with an early warning of emerging issues, pinpoints major developments, and analyses key long-term concerns to help governments map strategy. The Programme uses a variety of tools including multiyear projects, high-level conferences, expert workshops, and consultations; a futures-oriented online information system, and a network of contacts from government, industry, academia and civil society. Further information: www.oecd.org/futures

Activities include: Horizon Scanning and Scoping; Infrastructures to 2030; Risk Management Reviews; The Space Economy; The Bioeconomy to 2030; The Future of International Migration to OECD Countries; The Family in 2030; The OECD Review of Italy's National Civil Protection System; Future Global Shocks; Transcontinental Infrastructure Needs.

OECD The Bio-economy to 2030: designing a policy agenda (2009)

1) Scope: The role of biotechnology in addressing the most serious challenges to world economies and societies over the next decades.
2) Process: Designing a policy agenda
3) Initiator / coordinator: an OECD secretariat team in the International Futures Programme (IFP). The project was funded by voluntary contributions from governments, government agencies, academia, and corporations.
4) Participants: Key partners: project's Steering Group, which consists of senior officials from a wide range of government departments and experts from a number of corporations active in biotechnology. Key target organisations: Governments, policy makers
5) Activities: Review of literature and statistics, scenario development by expert panels, scenario analysis.
6) Results: Development of a policy agenda, policy conclusions, final report
7) Further information: http://www.oecd.org/futures/bioeconomy/2030, for example see the background report on "*Industrial Biotechnology to 2030*" http://www.oecd.org/dataoecd/12/9/40922929.pdf

World Economic Forum (WEF) on region scenarios and e.g. financial markets

World Economic Forum (WEF) has produced both regional scenarios (e.g. for China, India, Russia, the Gulf Co-operation Council Countries, 2005-2006 http://www.weforum.org/en/initiatives/Scenarios/index.htm) and scenarios for the future of global financial system (2009) http://www.weforum.org/pdf/scenarios/TheFutureoftheGlobalFinancialSystem.pdf

9. Cross-sectoral approach for foresight: COST strategic workshop series

COST Foresight 2030 (2008-2010)

1) Scope: to explore a broadly-shared vision for a future world beyond 2030 permeated and shaped by the digital revolution
2) Process: Interdisciplinary Strategic Initiative envisaging futures in the fields of e.g. Life Enhancement, Energy, Food Security and Natural Resources Management which play roles in human life and which are envisaged to be highly influenced by CCST-enabling technologies (Computer and Communication Sciences and Technologies)
3) Initiator / coordinator: COST European Cooperation in Science and Technology
4) Participants: Target groups: researchers, policymakers, industry, consultants, and strategy managers.
5) Activities: three strategic workshops, dissemination event, proceedings and Policy Recommendations.
6) Results: workshop reports, policy recommendations
7) Further information: http://www.cost.esf.org/events/COST-Foresight-2030-4-Parallel-Workshops-on-Life-Enhancement-Energy-Food-Security-and-Natural-Resources-Management (workshop no.2, see the Natural Resources management report)

COST Strategic Workshop Series "Foresight on Future Demand for Forest-based Products and Services" (2010-2011)

1) Scope: wide-angle foresighton Future Demand for Forest-based Products and Services, time horizon towards 2050
2) Process: research priorities in and for forest sector
3) Initiator/ coordinator: EFI and COST Domain FPS
4) Participants: several partners, e.g. IUFRO, FTP, EFSOS/UNECE, IEA, EC/SCAR, Future Forests (SE), Scion (NZ), CIC, as well as wider networks of the participating organisations
5) Activities: workshops (explorative setting the scene WS1 and scenario building WS2; final conference and information event), internet-based surveys (assessing and adding to the WS1 and WS2 results)
6) Results: report and informative material (research priorities, policy insights); capacity building on foresight methods and tools; networking and new foresight exercises
7) Further information: www.ef.int / www.cost.esf.org Contact person: paivi.pelli@efi.int / sjur.baardsen@umb.no For further information about the COST strategic workshop series, see:
http://www.cost.eu/events/Forestry-Foresight-Setting-the-Scene
http://www.cost.eu/events/Forestry-Foresight-Scenario-Building
http://www.edelphi.fi/en/groups/costforesight/

10. Supporting the European Vision

Projects, vision building exercises on challenges and prospects of Europe

- An independent *Reflection Group* was established under the Conclusions of the European Council, with the objective of assisting the European Union more effectively anticipate and meet challenges in the longer term horizon of 2020 to 2030. The report to the European Council (May 2010) "**Project Europe 2030 – Challenges and Opportunities**" is available http://www.reflectiongroup.eu/wp-content/uploads/2010/05/reflection_en_web.pdf
- Several studies have also been financed in the *EU FP7: Forward looking activities in the field of "Socio-economic Sciences and Humanities (SSH).* See http://ec.europa.eu/research/social-sciences/forward-looking_en.html and the list of projects in the end of this review. Here some examples:
  - A recent study on Europe in a changing world is the "**The World in 2025 – Rising Asia and socio-ecological transition**" (2009) by the European Commission (DG RTD / Socio-economic Sciences and Humanities). The study identifies the main trends, tensions and transitions for the world by 2025. This forward-looking exercise has produced two publications: one collecting the expert individual contributions http://ec.europa.eu/research/social-sciences/pdf/report-the-world-in-2025_en.pdf (390 p.); and the synthetic report which highlights the conclusions, called "The World in 2025 – Rising Asia and socio-ecological transition" http://ec.europa.eu/research/social-sciences/pdf/the-world-in-2025-report_en.pdf (synthetic report 32 p.)
  - **MEDPRO – Mediterranean Prospects**, is a three-year project coordinated by *Centre for European Policy Studies* (Brussels), and the prospective analysis for the Mediterranean region will cover seven study areas that are highly relevant for the socio-economic development of the region: Geopolitics and Governance; Demography and ageing; Management of environment and natural resources; Energy and climate change mitigation; Economic integration, trade, investment and sectoral analyses; Financial services and capital markets; Human capital, social protection, inequality and migration. For further information, see http://www.medpro-foresight.eu/

AUGUR – Challenges for Europe in the World of 2030 (2009-2013)

1) Scope: The aim is to capture, within a set of scenarios, the characteristics and implications of a variety of patterns that may occur in 2025/2030 in all domains, be it political, economic, social, environmental or technological in Europe and in the world.
2) Process: The project want to identify long term trends in demography, environmental changes as well as changes in technology and behaviour, but it also want to take into account the important institutional transformations that may results from the world economical crises. The foresight exercise may be useful for the elaboration of long term visions and forecasting for impact assessment of policies.
3) Initiator: European Commission, Directorate General for Research, Socio-economic Sciences and Humanities. The project is supported by the Seventh Research Framework Programme (FP7) and coordinated by the Centre National de la Recherche Scientifique, Paris.
4) Participants: University of Cambridge; University of London, School of Oriental and African Studies; Ismeri Europa, Instituto de Ricerba Interdisciplinare, Rome; Akademia Leona Kozminskiego, Warsaw; Wiener Institut für Internationale Wirtschaftsvergleiche; Société de Mathematiques Appliquées et de Sciences Humaines, Paris.
5) Activities: Three types of approaches were combined: Macro models, institutional perspectives to identify interests at stake and foresight studies. Furthermore, work shops were organised involving, foresight experts, policy advisors for European Commission and members of the EU parliament.
6) Expected results: Development of scenarios which may help in creating a long-term vision for Europe.
7) Further information: Pascal Petit pascal.petit@ens.fr and http://www.augurproject.eu

11. Foresight networks – from technology foresight to innovation support, and development of ERA

Joint Research Centre Institute for Prospective Technological Studies (JRC-IPTS)

European Commission's **Joint Research Centre Institute for Prospective Technological Studies (JRC-IPTS)** carries out so called "techno-economic" research and covers the fields of research policy and techno-economic foresight, sustainable development, industrial and clean technologies, energy, transport, agriculture and rural development, and the information society. The work of the **European Foresight team** of the Knowledge for Growth (KfG) Unit of JRC-IPTS centres on the provision of forward looking intelligence to support decision making and enhancing the use of Foresight as an instrument for policy making in Europe. See http://forera.jrc.ec.europa.eu/ The focus of the team's activity is increasingly on more policy-relevant foresight application and methodology development, particularly by developing approaches to the early identification of emerging issues that will have an impact on European policies. See for example the study:

"Facing the future – time for the EU to meet global challenges" What is the state of the world in 2025 and what are the policy implications for the EU? (2010)

1) Scope: The aim is to provide a comprehensive picture of the main trends ahead and possible future disruptive global challenges, and to examine how the EU could position itself to take an active role in shaping a response to them. The time horizon is 2025.
2) Process: To identify global challenges which require action at the EU level. The main challenges were:
   - The need to change current ways in which natural resources are used due to unsustainable overexploitation of natural resources. The most well-known effects are: climate change, loss of biodiversity, increasing demands for food, poverty, energy and water scarcity leading to competition and conflicts, mass migration and threats in the form of radicalisation and terrorism.
   - The need to anticipate and adapt to societal changes – including political, cultural, demographic and economic transformations in order for the EU to develop into a knowledge society.
   - The need for more effective and transparent governance for the EU and the world in order to anticipate and adapt to the future and to spread democracy and transparency on a global level.
3) Initiator: Bureau of European Policy Advisors (BEPA) of the European Commission. Coordinator: Joint Research Centre, Institute of Prospective Technological Studies (JRC-IPTS).
4) Participants: JRC-IPTS and substantial inputs were also provided to the background documents of the report by experts working at technological universities and technological research institutes. The working group who participated in the workshop consisted of experts from universities, research institutes, NGO's (WHO) and members from the European Commission staff.
5) Activities: The methodology used combined an extensive analytical review of recent future oriented studies, followed by a wide online consultation of the identified issues, and use of multi-criteria quantitative analysis (Robust Portfolio Modelling) to prioritise the resulting issues. Key issues were then presented and discussed in a workshop with selected experts and policy makers.
6) Results: The report presents policy messages for the EU in order to transform present and future challenges into opportunities and helps policy makers in shaping the vision for the EU in 2020.
7) Further information: http://foresight.jrc.ec.europa.eu/bepa.html and the report at http://ftp.jrc.es/EURdoc/JRC55981.pdf

The biannual **International Seville Conference on Future-Oriented Technology Analysis (FTA)** gathers representatives of technology foresight, research and businesses from Europe and beyond to discuss themes important for development of science and technology and its embedding into society. http://foresight.jrc.ec.europa.eu/fta_2011/intro.html

European Foresight Platform EFP

JRC-IPTS is also active in the **European Foresight Platform (EFP)** which is a FP7-funded Coordination and Support Action aiming at consolidating the information and knowledge base on foresight in Europe and internationally. http://www.foresight-platform.eu/ The consortium for EFP (e.g. *Austrian Institute of Technology AIT*, *University of Manchester* and *TNO* in the Netherlands) are active players in several foresight projects, as well as in development of tools and guidelines, policy and strategy papers. The platform has its background in the FP6-funded projects the **European Foresight Monitoring Network (EFMN)** http://www.efmn.info/ and **ForLearn**, an online guide to foresight http://forlearn.jrc.ec.europa.eu/guide/0_home/index.htm

The EFMN project collected information on foresight exercises, and the latest report "*Mapping Foresight – Revealing how Europe and other world regions navigate into the future – 2009 – European Foresight Monitoring Network*" is available at http://ec.europa.eu/research/social-sciences/pdf/efmn-mapping-foresight_en.pdf

Other examples of present FP7 (SSH) projects is the **iKnow Project** (interconnecting knowledge) which collects information on wild cards and weak signals, see http://wiwe.iknowfutures.eu/

12. Futurists – Futures Research

The Millennium Project – Global Futures Studies and Research (1996 -)

The Millennium Project was founded in 1996 after a three-year feasibility study with the United Nations University, Smithsonian Institution, Futures Group International, and the American Council for the UNU. It is now an independent non-profit global participatory futures research think tank of futurists, scholars, business planners, and policy makers who work for international organizations, governments, corporations, NGOs, and universities. The Millennium Project manages a coherent and cumulative process that collects and assesses judgments from over 2,500 people since the beginning of the project selected by its 40 Nodes around the world.

Nodes identify participants, translate questionnaires and reports, and conduct interviews, special research, workshops, symposiums, and advanced training. The work is distilled in its annual "State of the Future", "Futures Research Methodology" series, and special studies. The most recent forecast is the “2010 State of the future”. Some other recent ongoing activities include among others the “Latin America 2030 scenario study” and the “UN world water scenarios”. More information: http://www.millennium-project.org/

The European Futurists Conference Lucerne

The European Futurists Conference Lucerne EFCL aims to be the foremost annual gathering of futurists, analysts and decision makers with long-term perspectives working with scientific methods for futures studies in Europe. It is dedicated to the professional needs of futurists and long-term decision makers in Europe. Specifically, the European Futurists Conference's goal will be:

- advance the quality of futures studies in Europe
- promote sharing of future-oriented knowledge among futurists, analysts and decision makers in Europe
- contribute to the understanding of various possible futures and their global impact on European business, politics and society, to encourage the public dialogue about possible futures
- support European businesses, politics and societies in creating their preferred future.

The key partners are: *Berne University of Applied Sciences* (http://www.ti.bfh.ch/weiterbildung); *FutureManagement Group AG, Germany* (http://www.futuremanagementgroup.com); *Stiftung für Zukunftsfragen, Germany* (http://www.stiftungfuerzukunftsfragen.de); *Finland Futures Research Centre, Finland* (http://ffrc.utu.fi/); *ROOS, Office for Cultural Innovation, Switzerland* (http://www.kultinno.ch); *Z Punkt The Foresight Company, Germany* (http://www.z-punkt.de); *Institute for Futures Studies, Sweden* (http://www.framtidsstudier.se); *Shaping Tomorrow, UK* (http://www.shapingtomorrow.com/); *Infinite Futures, UK* (http://www.infinitefutures.com)
More information: http://www.european-futurists.org

Examples of studies carried out by the futurist, see for example the **Future Expectations for Europe** (2008) report by the *Stiftung für Zukunftsfragen* which concludes results of a public opinion surveys carried out in 8(+1) countries http://www.wfs.org/April-May2010/Update/future%20expectations%20for%20europe_final.pdf
The futures horizon is 2030.

List of foresight projects funded from EU Framework programmes 6 and 7 funding, COST and other international sources

Funding programme: FP7
Examples of foresight or forward looking projects funded under the 7th EU Framework Programme

1. Exploiting research infrastructures potential for boosting research and innovation in Africa (ERINA4AFRICA)
    - Coordinator: Brunel University
    - Duration: 14 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=2&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=93253
2. Dynamic Roadmapping with application for EduCation and Training (DIRECT)
    - Coordinator: Brunel University
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=5&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=96053
3. Do Forecasts matter? early warnings and the prevention of armed conflict (FORESIGHT)
    - Coordinator: King's College London
    - Duration: 36 months
    - http://www.kcl.ac.uk/schools/sspp/ws/people/academic/lecturers/meyer/foresight.html
4. Probabilistic long-term assessment of new energy technology scenarios (PLANETS)
    - Coordinator: Fondazione Eni Enrico Mattei, Milano
    - Duration: 30 months
    - Further information: http://www.feem-project.net/planets/
5. Energy foresight network (EFONET)
    - Coordinator: ISTITUTO DI STUDI PER L'INTEGRAZIONE DEI SISTEMI (ISIS)
    - Duration: 30 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=9&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=85763
6. Changing multilateralism: The EU as a global-regional actor in security and peace (EU-GRASP)
    - Coordinator: UNITED NATIONS UNIVERSITY - COMPARATIVE REGIONAL INTEGRATION STUDIES
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=10&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=90152
7. Global Re-ordering: Evolution through European Networks (GREEN)
    - Coordinator: THE UNIVERSITY OF WARWICK
    - Duration: 48 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=11&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=97213
8. Mapping of European Research Infrastructure Landscape (MERIL)
    - Coordinator: FONDATION EUROPEENNE DE LA SCIENCE
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=12&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=96986
9. Citizen visions on science, technology and innovation (CIVISTI)
    - Coordinator: TEKNOLOGIRADET-THE DANISH BOARD OF TECHNOLOGY
    - Duration: 30 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=14&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=90363
10. Research infrastructures: Foresight and impact (RIFI)
    - Coordinator: UNITATEA EXECUTIVA PENTRU FINANTAREA INVATAMANTULUI SUPERIOR SI A CERCETARII STIINTIFICE UNIVERSITARE, ROMANIA
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=15&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=91271
11. Innovation futures in Europe: A foresight exercise on emerging patterns of innovation. visions, scenarios and implications for policy and practice (INFU)
    - Coordinator: AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH, WIEN
    - Duration: 32 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=16&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=91168
12. Prospective Analysis for the Mediterranean Region (MEDPRO)
    - Coordinator: CENTRE FOR EUROPEAN POLICY STUDIES
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=17&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=96292
13. European eInfrastructures Observatory (ENVENTORY)
    - Coordinator: SANCHEZ & VOGIATZIS CO OE, GREECE
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=18&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=95675
14. Foresight of evolving security threats posed by emerging technologies (FESTOS)

- Coordinator: INTERDISCIPLINARY CENTER FOR TECHNOLOGICAL ANALYSIS AND FORECASTING, TEL AVIV UNIVERSITY
- Duration: 30 months
- http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=19&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=89978

15. Impact Measurement and Performance Analysis of CSR (IMPACT)
    - Coordinator: OEKO-INSTITUT E.V. - INSTITUT FUER ANGEWANDTE OEKOLOGIE, FREIBURG, GERMANY
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=20&CAT=PROJ&QUERY=012e0e548fcc:7b19:32583197&RCN=95940
16. Use of foresight to align research with longer term policy needs in Europe (FARHORIZON)
    - Coordinator: THE UNIVERSITY OF MANCHESTER
    - Duration: 30 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=21&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=89953
17. Linking R&D Strategies, Foresight and Stimulation of EU-Russia Cooperation in Nanoelectronics Technology (EU-RU.NET)
    - Coordinator: EUROPEAN CENTRE FOR KNOWLEDGE AND TECHNOLOGY TRANSFER ADMINISTRATION, BRUSSELES
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=23&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=95045
18. Scoping China's Environmental Research Excellence and major Infrastructure: Foresight, Potentials, and Roadmaps (SPRING)
    - Coordinator: UNIVERSITY OF SURREY, UK
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=25&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=94660
19. Challenges for Europe in the world of 2025 (AUGUR)
    - Coordinator: CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, PARIS
    - Duration:36months
    - Further information: http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=27&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=93674
20. European Foresight Platform - supporting forward looking decision making (EFP)
    - Coordinator: AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH
    - Duration: 36 months
    - Further information: http://www.foresight-platform.eu/
21. Europe's evolving security: drivers, trends and scenarios (FORESEC)
    - Coordinator: CRISIS MANAGEMENT INITIATIVE, HELSINKI, FINLAND
    - Duration: 22 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=29&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=88096
22. Policies for Research and Innovation in Small Member States to advance the European Research Area (ERA-PRISM)
    - Coordinator: MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY
    - Duration: 28 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=30&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=94049
23. A multistakeholder dialogue providing inputs to implement the European Code of Conduct for Nanosciences & Nanotechnologies (N&N) research (NANOCODE)
    - Coordinator: ASSOCIAZIONE ITALIANA PER LA RICERCA INDUSTRIALE – AIRI, ROME, ITALY
    - Duration: 23 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=32&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=92804
24. interconnecting knowledge for the early identification of issues, events and developments (e.g. wild cards and associated weak signals) shaping and shaking the future of STI in the ERA (IKNOW)
    - Coordinator: THE UNIVERSITY OF MANCHESTER
    - Duration: 30 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=37&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=90924
25. Assessment of environmental accidents from a security perspective (SECURENV)
    - Coordinator: GEONARDO ENVIRONMENTAL TECHNOLOGIES LTD, BUDAPEST, HUNGARY
    - Duration: 24 MONTHS
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=38&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=90478
26. Scanning for emerging science and technology issues (SESTI)
    - Coordinator: NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK – TNO, DELFT, THE NETHERLANDS
    - Duration: 30 MONTHS
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=39&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=90364
27. Sustaining technology enhanced learning large-scale multidisciplinary research (STELLAR)
    - Coordinator: THE OPEN UNIVERSITY, UK
    - Duration: 40 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=40&CAT=PROJ&QUERY=012e0f011302:e735:4e029fac&RCN=89455
28. Market requirements, barriers and cost-benefit aspects of assistive technologies (MARE)
    - Coordinator: EBA - EUROPEAN BUSINESS ASSOCIATES SRL, ROME, ITALY

- Duration: 18 months
- http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=41&CAT=PROJ&QUERY=012e0f59c276:2044:5a16721a&RCN=87755

29. Individuals in Context: Supportive Environments for Sustainable Living (INCONTEXT)
    - Coordinator: ECOLOGIC INSTITUT GEMEINNÜTZIGE GMBH, BERLIN, GERMANY
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=3&CAT=PROJ&QUERY=012e14190769:5a00:04f4dc46&RCN=96935
30. POLicy for NAtural RESouces (POLINARES)
    - Coordinator: UNIVERSITY OF DUNDEE, UK
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=4&CAT=PROJ&QUERY=012e142e2011:f568:7202b26a&RCN=94268
31. Damage risk assessment, economic impact and mitigation strategies for sustainable preservation of cultural heritage in the times of climate change (CLIMATE FOR CULTURE)
    - Coordinator: FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V, MÜNCHEN, GERMANY
    - Duration: 60 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=5&CAT=PROJ&QUERY=012e142e2011:f568:7202b26a&RCN=92906
32. Sustainable European Community Biofuel Industries and Systems (SECURE)
    - Coordinator: JRC -JOINT RESEARCH CENTRE- EUROPEAN COMMISSION
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=5&CAT=PROJ&QUERY=012e1440397d:aecc:7be23e07&RCN=95992
33. Forest fires under climate, social and economic changes in Europe, the Mediterranean and other fire-affected areas of the world (FUME)
    - Coordinator: UNIVERSIDAD DE CASTILLA, LA MANCHA, SPAIN
    - Duration: 48 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=9&CAT=PROJ&QUERY=012e1440397d:aecc:7be23e07&RCN=94659
34. PAradigm SHifts Modelling and INnovative Approaches (PASHMINA)
    - Coordinator: ISTITUTO DI STUDI PER L'INTEGRAZIONE DEI SISTEMI (ISIS), ROME, ITALY
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=12&CAT=PROJ&QUERY=012e1440397d:aecc:7be23e07&RCN=93685
35. Pathways for carbon transitions (PACT)
    - Coordinator: ENERDATA SA, GIERES, FRANCE
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=16&CAT=PROJ&QUERY=012e1440397d:aecc:7be23e07&RCN=89952
36. Common agricultural policy regionalised impact - the rural development dimension (CAPRI-RD)
    - Coordinator: RHEINISCHE FRIEDRICH-WILHELMS-UNIVERSITAET BONN
    - Duration: 48 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=17&CAT=PROJ&QUERY=012e1440397d:aecc:7be23e07&RCN=89478
37. European responses to climate change: deep emissions reductions and mainstreaming of mitigation and adaptation (RESPONSES)
    - Coordinator: VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG, AMSTERDAM, THE NETHERLANDS
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=12&CAT=PROJ&QUERY=012e14ac9e18:a488:746b8ae0&RCN=94119
38. Sustainable livelihoods and biodiversity in riparian areas in developing countries (LIVEDIVERSE)
    - Coordinator: LINKOPINGS UNIVERSITET, SWEDEN
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=19&CAT=PROJ&QUERY=012e14ac9e18:a488:746b8ae0&RCN=89355
39. Governance and agents in institutional architecture on climate and energy (GAIA)
    - Coordinator: FONDATION NATIONALE DES SCIENCES POLITIQUES, PARIS, FRANCE
    - Duration: 12 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=8&CAT=PROJ&QUERY=012e14c836c6:3d1f:0a19f40b&RCN=92765
40. One planet economy network: Europe (OPEN: EU)
    - Coordinator: WWF-UK
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=15&CAT=PROJ&QUERY=012e14c836c6:3d1f:0a19f40b&RCN=91316
41. Innovative networks of SMEs for complex products manufacturing (NET-CHALLENGE)
    - Coordinator: INESC PORTO - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES DO PORTO, PORTO, PORTUGAL
    - Duration: 30 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=10&CAT=PROJ&QUERY=012e14e076fd:19f9:33d9ba81&RCN=91287
42. Evolved Internet future for European leadership (EIFFEL)
    - Coordinator: RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN, DEPARTMENT OF WIRELESS NETWORKS, AACHEN, GERMANY

- Duration: 34 months
- http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=18&CAT=PROJ&QUERY=012e14e076fd:19f9:33d9ba81&RCN=85318

43. Innovation benefits Europe (INNOFIT)
    - Coordinator: STICHTING CETIM - CENTER FOR TECHNOLOGY AND INNOVATION MANAGEMENT, LEIDEN, THE NETHERLANDS
    - Duration: 30 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=49&CAT=PROJ&QUERY=012e14e076fd:19f9:33d9ba81&RCN=86438
44. The bio-economy technology platforms join forces to address synergies and gaps between their strategic research agendas (BECOTEPS)
    - Coordinator: EUROPESE ORGANISATIE VOOR WETENSCHAPPELIJK PLANTENONDERZOEK E.P.S.O. IVZW, BRUSSELES, BELGIUM
    - Duration: 24 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=4&CAT=PROJ&QUERY=012e14fece99:a923:3905726f&RCN=90971
45. Networking and integration of national programmes in the area of wood material science and engineering in the forest-based value chains (WOODWISDOM-NET 2)
    - Coordinator: Tekes – the Finnish Funding Agency for Technology and Innovation
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=1&CAT=PROJ&QUERY=012e143a48b0:5d5c:1ac696ba&RCN=92036
46. Models for adaptive forest management (MOTIVE)
    - Coordinator: FORSTLICHE VERSUCHS- UND FORSCHUNGSANSTALT BADEN-WUERTTEMBERG, FREIBURG, GERMANY
    - Duration: 48months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=14&CAT=PROJ&QUERY=012e1440397d:aecc:7be23e07&RCN=91252
47. Sustainable forest management providing renewable energy, sustainable construction and bio-based products (ROK-FOR)
    - Coordinator: NORTH KARELIA REGIONAL ENVIRONMENT CENTRE, JOENSUU, FINLAND
    - Duration: 36 months
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=2&CAT=PROJ&QUERY=012e14fece99:a923:3905726f&RCN=93250
48. Low Carbon at Work: Modelling agents and organisations to achieve transition to a low carbon Europe (LOCAW).
    - Coordinator: UNIVERSIDADE DA CORUNA
    - Duration: 36 months (1.1.2011-31-12-2013)
    - http://cordis.europa.eu/fetch?CALLER=FP7_PROJ_EN&ACTION=D&DOC=1&CAT=PROJ&QUERY=012e0af32acc:d113:5add9d54&RCN=97147

Funding programme: FP6

Examples of foresight or forward looking projects funded under the 6th EU Framework Programme

1. Foresight analysis for rural areas of EU (FARO EU)
    a. Coordinator: STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK, LEI, ALTERRA, THE NETHERLANDS
    b. Duration: 36 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=6&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=84138
2. Foresight analysis for world agricultural markets (2020) and Europe (AG 2020)
    a. Coordinator: DANMARKS TEKNISKE UNIVERSITET (TECHNICAL UNIVERSITY OF DENMARK), BIOSYSTEMS DEPARTMENT
    b. Duration: 39 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=7&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=84095
3. Regional innovation strategy for the Lodz region (LORIS PLUS)
    a. Coordinator: UNIVERSITY OF LODZ, CENTRE OF EXCELLENCE IN KNOWLEDGE-BASED ECONOMY, POLAND
    b. Duration: 32 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=8&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=75866
4. Foresight action for knowledge based multifunctional materials technology (SMART)
    a. Coordinator: FORSCHUNGSZENTRUM JUELICH GMBH, PROJECT MANAGMENT ORGANISATION JUELICH (PTJ), GERMANY
    b. Duration: 24 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=9&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=75861
5. Manufacturing Visions - Integrating Diverse Perspectives into Pan-European Foresight
    a. Coordinator: FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., GERMANY
    b. Duration: 26months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=10&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=74424
6. Integrating Foresight in Research Infrastructure Policy Formulation (FOREINTEGRA-RI)
    a. Coordinator: APPLIED RESEARCH AND COMMUNICATIONS FUND TECHNOLOGY TRANSFER AND INNOVATION DIVISION, ARC FUND, BULGARIA
    b. Duration: 12 months

    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=11&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=79869
7. Regional Economic RTD Policy through Foresight and Mentoring (REFORM)
    a. Coordinator: COVENTRY UNIVERSITY ENTERPRISES LTD, UK
    b. Duration: 24 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=12&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=81594
8. The foresight laboratory of Europe (FORESIGHT LAB)
    a. Coordinator: INNO AG, GERMANY
    b. Duration: 26 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=13&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=81668
9. Mapping and foresight of agricultural and food research capacity in the new member states and in the candidate countries (EU-AGRI MAPPING)
    a. Coordinator: EUROQUALITY, FRANCE
    b. Duration: 24 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=14&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=93680
10. Future oriented Reconversion: The Use of Foresight as a driver for industrial diversification (FUTURE FOR MD)
    a. Coordinator: ZENTRUM FÜR INNOVATION UND TECHNIK IN NORDRHEIN-WESTFALEN, GERMANY
    b. Duration: 24 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=15&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=78487
11. Regional innovation strategy for the South West region of Bulgaria: bridging the innovation disparities between the capital Sofia and the rest of the region (RIS BRIDGE SW BG)
    a. Coordinator: APPLIED RESEARCH AND COMMUNICATIONS FUND TECHNOLOGY TRANSFER AND INNOVATION DIVISION, ARC FUND, BULGARIA
    b. Duration: 32 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=16&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=75864
12. Frequent observation-driven realistic evaluation and simulation of interaction of geophysical hazard triggers (FORESIGHT)
    a. Coordinator: ACRI-ST S.A.S., FRANCE
    b. Duration: 24 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=17&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=74309
13. Nanologue: facilitating the dialogue between research, business and the civil society to improve the quality of life, create wealth and reduce impacts to society (NONOLOGUE)
    a. Coordinator: WUPPERTAL INSTITUTE FOR CLIMATE, ENERGY AND THE ENVIRONMENT GMBH, GERMANY
    b. Duration: 21 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=20&CAT=PROJ&QUERY=012e0f5f701f:f846:5accada3&RCN=74431
14. Foresight and Society ERA – NET (FORSOCIETY)
    a. Coordinator: GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY, PLANNING AND PROGRAMMING DIRECTORATE, GSRT, GREECE
    b. Duration: 42 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=23&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=72855
15. A new trans-regional foresight model for the regional innovation strategies (RIS)(FORTRANRIS)
    a. Coordinator: GOBIERNO DE NAVARRA, SPAIN
    b. Duration: 27 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=24&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=85148
16. The future of European fisheries and aquaculture research (FEUFAR)
    a. Coordinator: WAGENINGEN IMARES B.V., THE NETHERLANDS
    b. Duration: 20 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=25&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=84064
17. Networking and Integration of National Programmes in the Area of Wood Material Science and Engineering (WOODWISDOM-NET)
    a. Coordinator: TEKES, THE FINNISH FUNDING AGENCY FOR TECHNOLOGY AND INNOVATION, FINLAND
    b. Duration: 60 months
    c. Further information: http://www.woodwisdom.fi/
18. Laying the Foundations for an ERA-NET on Foresight and Society (FORSOCIETY)
    a. Coordinator: GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY,DIRECTORATE OF PLANNING AND PROGRAMMING, DEPT. OF EVALUATION AND COORDINATION, GREECE
    b. Duration: 5 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=28&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=72868
19. Benchmarking and foresight for regions of Europe (BEFORE)
    a. Coordinator: FUNDACIÓN ADEUROPA, SPAIN
    b. Duration: 24 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=30&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=84868
20. Foresight and Assessment for Environmental Technologies (FORASSET)
    a. Coordinator: CHAMBRE DE COMMERCE ET D'INDUSTRIE DE PARIS, CENTRE D'OBSERVATION ECONOMIQUE
    b. Duration: 35 months

    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=33&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=74961
21. Strategic policy intelligence tools for better science and technology investment strategies in Europe's regions (REGSTRAT)
    a. Coordinator: STEINBEIS-EUROPA-ZENTRUM DER STEINBEIS-STIFTUNG FÜR WIRTSCHAFTSFÖRDERUNG, GERMANY
    b. Duration: 27 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=34&CAT=PROJ&QUERY=012e0f8c0610:d552:5b136963&RCN=81598
22. User-Centred Innovation for manufacturing: Roadmaps for Development (UCIM)
    a. Coordinator: NAGUELES LTD., CENTRE FOR KNOWLEDGE EXCHANGE, IRELAND
    b. Duration: 15 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=42&CAT=PROJ&QUERY=012e0fd167ae:9a9e:567ac770&RCN=80018
23. High quality research network on nanosciences, material and energy research in Lithuania (NENNET)
    a. Coordinator: MOKSLININKU SAJUNGOS INSTITUTAS, MSI - MOKSLININKU SAJUNGOS INSTITUTAS, LITHUANIA
    b. Duration: 36 months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=44&CAT=PROJ&QUERY=012e0fd167ae:9a9e:567ac770&RCN=75663
24. Siberia, Information Technologies and Europe (SITE)
    a. Coordinator: SINGLEIMAGE LIMITED, UK
    b. Duration: 30months
    c. http://cordis.europa.eu/fetch?CALLER=FP6_PROJ&ACTION=D&DOC=47&CAT=PROJ&QUERY=012e0fd167ae:9a9e:567ac770&RCN=71011

COST European Cooperation in Science and Technology

Examples of resent COST Actions

1. BM0605 Consciousness: A Transdisciplinary, Integrated Approach
    a. Coordinator: Université Libre de Bruxelles
    b. End date: September 2011
    c. Further information: http://www.coma.ulg.ac.be/CATIA/index.html
2. Action A22 Foresight Methodologies - Exploring New Ways to Explore the Future
    a. Coordinator: Faculty of Business & Law, Lincoln University, Uk
    b. End date: December 2007
    c. http://www.cost.esf.org/domains_actions/isch/Actions/Foresight_Methodologies
3. Cost Stategic Workshop Series: Foresight on Future Demand for Forest-based Products and Services
    a. Coordinator: European Forest Institute, Cost Domain Forests, their Products and services
    b. Duration: 2010-2011
    c. Further information: http://www.cost.esf.org/events/Forestry-Foresight-Scenario-Building
4. Cost Foresight 2030
    a. Coordinator: Cost Office
    b. Duration: 2008-2010
    c. Further information: http://www.cost.esf.org/events/foresight_2030_advisory_group
5. FET09 - Science Beyond Fiction
    a. Coordinator: Cost Office, Belgium
    b. Duration: 2009
    c. Further information: http://www.cost.esf.org/events/fet09
6. Cost event: The Futures of the City: Towards Sustainable Urban Environment and Mobility
    a. Coordinator: Cost Office, Belgium
    b. Duration: 2010
    c. Further information: http://www.cost.esf.org/events/Futures-of-the-City

Other funding sources for international exercises: INTERREG (in 2007-2013: ERDF Objective 3)

INTERREG IVC
although not directly foresight exercises, e.g. the following a relevant forest sector projects:

- FUTUREforest - Woodlands for Climate Change (2008-2011)
  Coordinator: Ministry for Infrastructure and Agriculture (DE)
  Further information: www.futureforest.eu

- Apply participatory forest planning for sustainability: Robinwood Plus (2010-2013)
  Coordinator: Liguria Region - Environment Department (IT)
  (based on INTERREG IIIC projects and partnerships such as Robinwood and RURAL Innova)

Examples of INTERREG IVB (regional cooperation) projects
The North Sea Region Programme:

- IFP Innovative Foresight Planning for Business Development (2008-2011)
  Coordinator: Greater Stavanger Economic Development, Norway
  Further information: http://www.northsearegion.eu/ivb/projects/details/&tid=75 // www.foresightplanning.eu
- "Northern Maritime University" NMU (2008-2012)
  (although in different field, the project uses Delphi and foresight exercises for establishing transnational network of universities) see http://www.nm-uni.eu/

The Baltic Sea Programme

- TransBaltic - Towards an integrated transport system in the Baltic Sea Region (2009-2012)
  (although in different sector, the project initiates pan-Baltic foresight process in the transport development area) see www.transbaltic.eu

Alpine Space Programme:

- Manfred: Management strategies to adapt Alpine Space forests to climate change risks (2009-2012)
  Coordinator: Forest Research Institute of Baden-Wuerttemberg
  http://www.manfredproject.eu/

Other funding sources for international exercises: ESPON and URBACT

The ESPON 2013 Programme, the European Observation Network for Territorial Development and Cohesion, supports policy development related to EU Cohesion Policy (foresight topics relevant to forests and forest sector projects in spatial planning field could be e.g. land use, risk prevention, natural hazards...) http://www.espon.eu/

The URBACT is a European exchange and learning programme promoting sustainable urban development. Also projects financed within the framework of URBACT programme could have relevance to forest-related issues (e.g. urban futures, green infrastructure, built and natural environments...) http://urbact.eu/

Urbact

- Land Use Management for Sustainable European Cities LUMASEC (2008-2010)
  Coordinator: Karlsruhe Institute of Technology (KIT)
  http://urbact.eu/en/projects/metropolitan-governance/lumasec/homepage/