



FÉDÉRATION EUROPÉENNE DES GÉOLOGUES
EUROPEAN FEDERATION OF GEOLOGISTS
FEDERACIÓN EUROPEA DE GEÓLOGOS

ONLY ONE EARTH, DON'T WASTE IT!

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The European Federation of Geologists in collaboration with International Year of Planet Earth and EuroGeoSurveys participated in the European Commission's Green Week 2008 (June 3-6) exhibition: "Changing our behaviour"-



Stand's picture with some member of the three collaborator associations

This year the theme of the annual event was "Only one Earth, don't waste it!", focused on the sustainable use of natural resources, especially waste management and sustainable consumption and production.

Green Week brought together some 3,000-4,000 representatives from different levels of government, international institutions, business, non-governmental organisations and the scientific and academic communities. The ultimate objective was to find the most effective ways to protect and improve Europe's environment, now and for the future.

Debates, presentations and stands reviewed actions in environmental topics. The EFG stand was focus on Sustainability Use of Natural resources. The objective was to present the geology role for the management of natural resources: use and storage Energy, Water and Mineral.



Poster's logo made by EFG

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We distributed information about the EFG: EFG leaflet, EFG Members, EFG Manifestos and European Geologist Magazine. We also distributed a document and a leaflet from the French Union of Geologists which supported us during the exhibition.

- Les Géosciences au service de l'Humanité. Géologue: acteur-clef de la planète.
- Les Géosciences au service de l'Humanité. Année Internationale de la Planète terre 2007-2008-2009.

As conclusion of the EFG's performance in the Green Week 2008, a leaflet presenting the use of these resources, their pollution and waste management was prepared, as well as a Power Point presentation, which showed in more detail these three subjects.

ENERGY

According to current forecasts, a doubling or even tripling of energy consumption in the world is anticipated by 2050. Today, energy consumption is dominated by fossil fuels; oil, gas and coal. The role of geology in the nuclear energy context is in the evaluation of the uranium resources.

In relation to sustainable development, the share of renewables is expected to reach a third of the consumption by 2050. Geologists have a particular relevance to the development of geothermal energy in Europe. Geothermal energy is energy stored in the form of heat below the earth's surface. The applications of geothermal energy are: electricity generation and heating and cooling.

Water

During past decades, worldwide temperatures have risen, causing climate change. This global warming is believed to be have been accelerated and partially caused by anthropogenic emissions of CO₂ and other greenhouse gases. One of the possibilities to halt or reverse anthropogenic warming is CO₂ capture and storage in underground reservoirs. Nuclear energy use produces waste that must be stored. Geology is highly relevant to the management and safety of nuclear waste storage.

Mineral Ressource

Overall demand for minerals continues to grow on the planet, and has accelerated in recent years with the expansion of emerging economies. The price of metals in response to demand has been multiplied by 2 to 5 in recent years. This depleted total identified exploitable reserves, and resources already identified but so far un-developed require further investigation to become exploitable. Geologists have a particular relevance for the exploration, exploitation and the sustainable use of new deposits.

Water

Changing demographics, the impact of climate change and political issues complicates a diversified water management in relation to sustainable development. These complex development and environmental issues are major concerns for the planet in the twenty-first century. Mapping and monitoring of available resources is an essential first step for the sustainable use of water resources.

MINERAL RESOURCES

Water

Energy

Green week Leaflet made by EFG

EFG in collaboration with the International Year of Planet Earth and EurGeoSurveys organized a Session and a debate: "European geology in the International Year of Planet Earth" which took place on 5th of June, 2008, between 9:30 and 11:00 in the Red Room, Charlemagne building.



Stravos Dimas (Environment's Commissioner), Isabel Fernandez (EFG Office director) and Patrice Christmann (EuroGeoSurveys' Secretary General)

The objective of this session was to present the main objective of the IYPE. To achieve the objective, Dr. Werner Janoschek, the Goodwill Ambassador of International Year of Planet Earth, gave a presentation under the title "*The International Year of Planet Earth, a contribution to Sustainable Resource Management*". Dr Janoschek presented the two main objectives of IYPE: to demonstrate the great potential of the Earth sciences in the building of a safer, healthier and wealthier Society, and to encourage Society to apply this potential more effectively. The presentation gave a global vision of how the IYPE is being taken into account, relevant events, global organization, etc. The presentation described the sciences themes for the IYPE: groundwater, hazards, earth & health, climate, resources, megacities, deep earth, oceans, soils, Earth & Life. Finally, Dr Janoschek focused on Resources Management, Mineral Resources, Industrial Minerals, Construction Material, Energy Resources and Groundwater, with quantitative information on worldwide-level. The problem in the Mineral Resources Management was presented with some examples in Austria.

Dr. Pierre Andrieux, Vice President UFG, Professor emeritus University Pierre & Marie Curie gave another presentation under the title "*Geology at the service of the citizens*" which was based on the report "*Les Géosciences au service de l'Humanité. Géologue: acteur-clef de la planète*", UFG report for the IYPE. Dr. Pierre Andrieux presented a lot of reasons for young people to be interested on the geologist's profession. The presentation was focused on Energy, Mineral Resources, Water, Environment and Development.

For concluding the session, Dr. Patrice Christmann, EuroGeoSurveys Secretary General gave a presentation named "*Natural resources challenges for the XXIst century: the mineral resources example*". With this presentation, Dr. Christmann explained to the European Institutions some reason about why we should use the third dimension below the soil's surface. The relation between Economy and Well-being are complemented with minerals, water, energy and soils resources. Finally, the presentation focused on minerals, explaining the general use of mineral resources and the European dependency from foreign countries. The real situation of the mining exploitation in Europe was presented, including the problems of resources accessibility and the environmental impact assessment during the transport of minerals around the world. The last part of the presentation dealt with the research on new technologies for exploitations.

Dr Christmann recommended the development of an European mineral resources policy based on five pillars:

- 1) Increase the supply of raw materials from European sources on a sustainable basis.
- 2) Ensure sustainable and a more transparent supply from third countries.
- 3) Encourage capacity building in developing countries.
- 4) Encourage greater efficiency in the use of resources.
- 5) Establish an adequate EU knowledge base on raw materials.