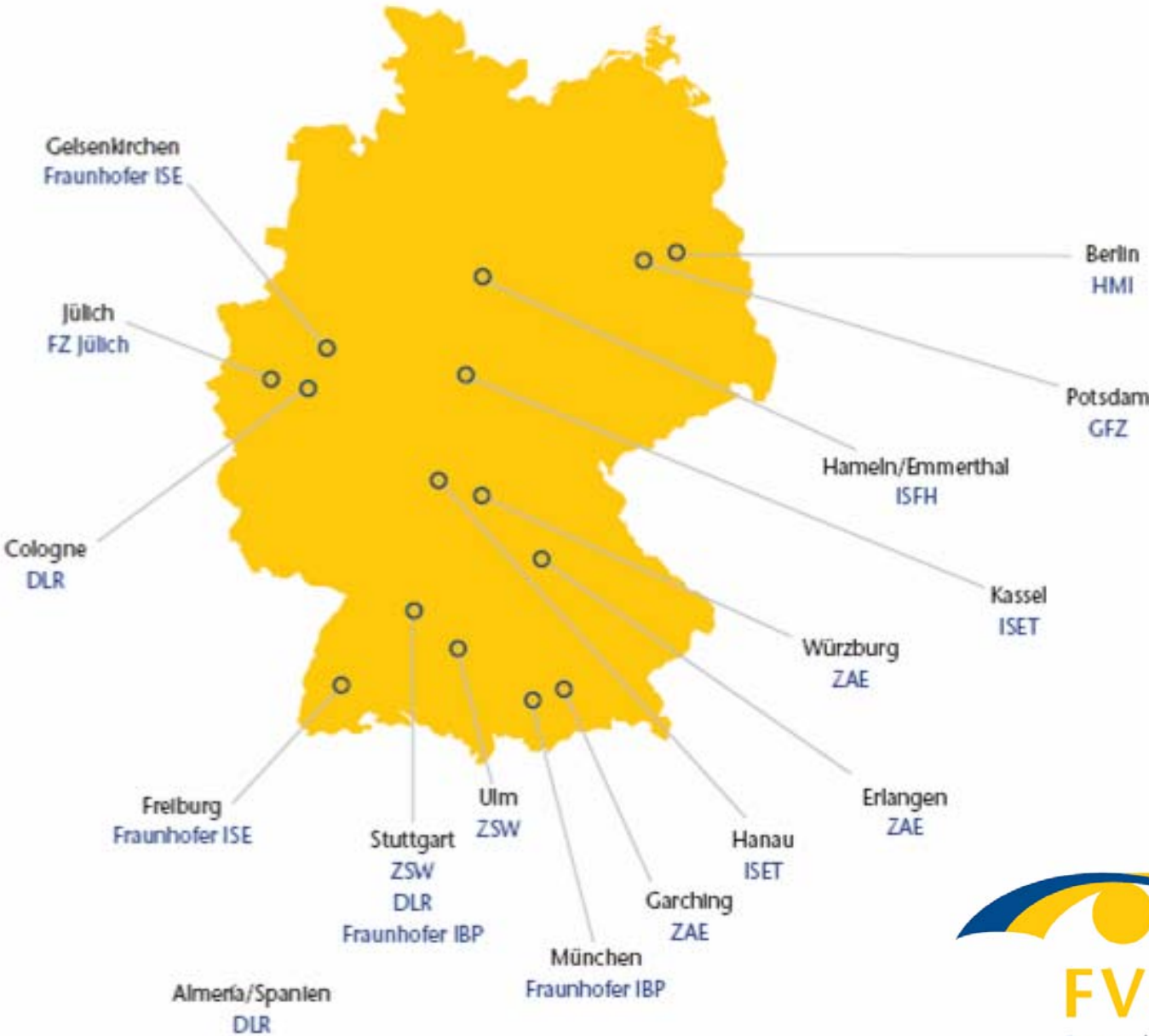




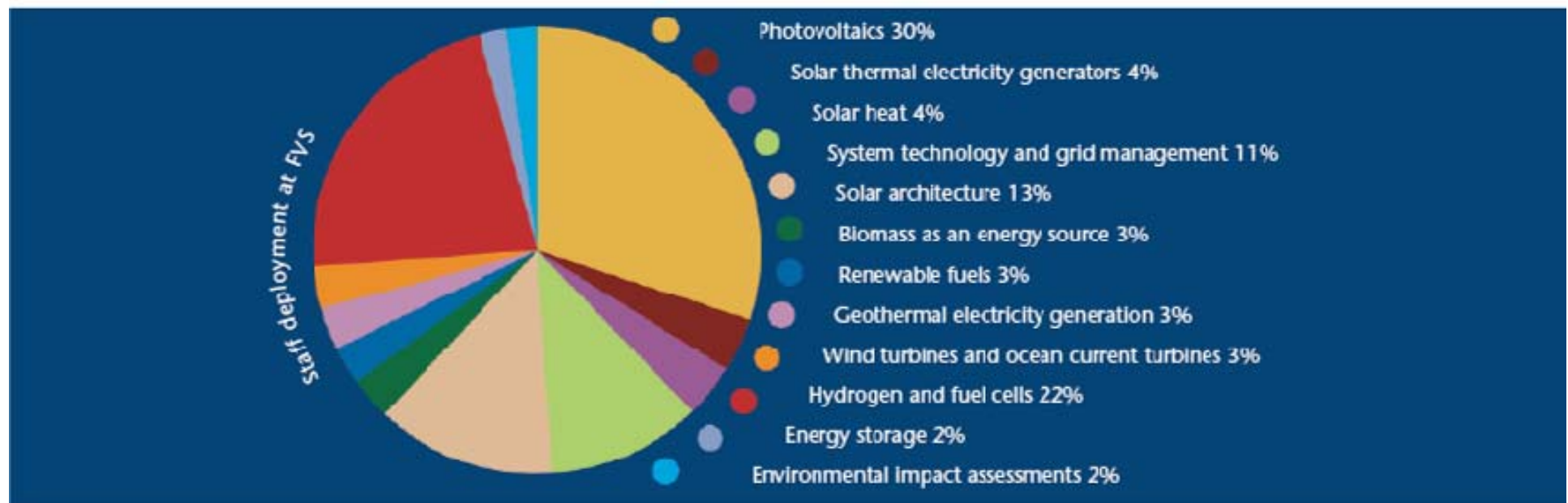
FVS ForschungsVerbund
Sonnenenergie
Renewable Energy Research Association

Joint Research for the Energy of the Future

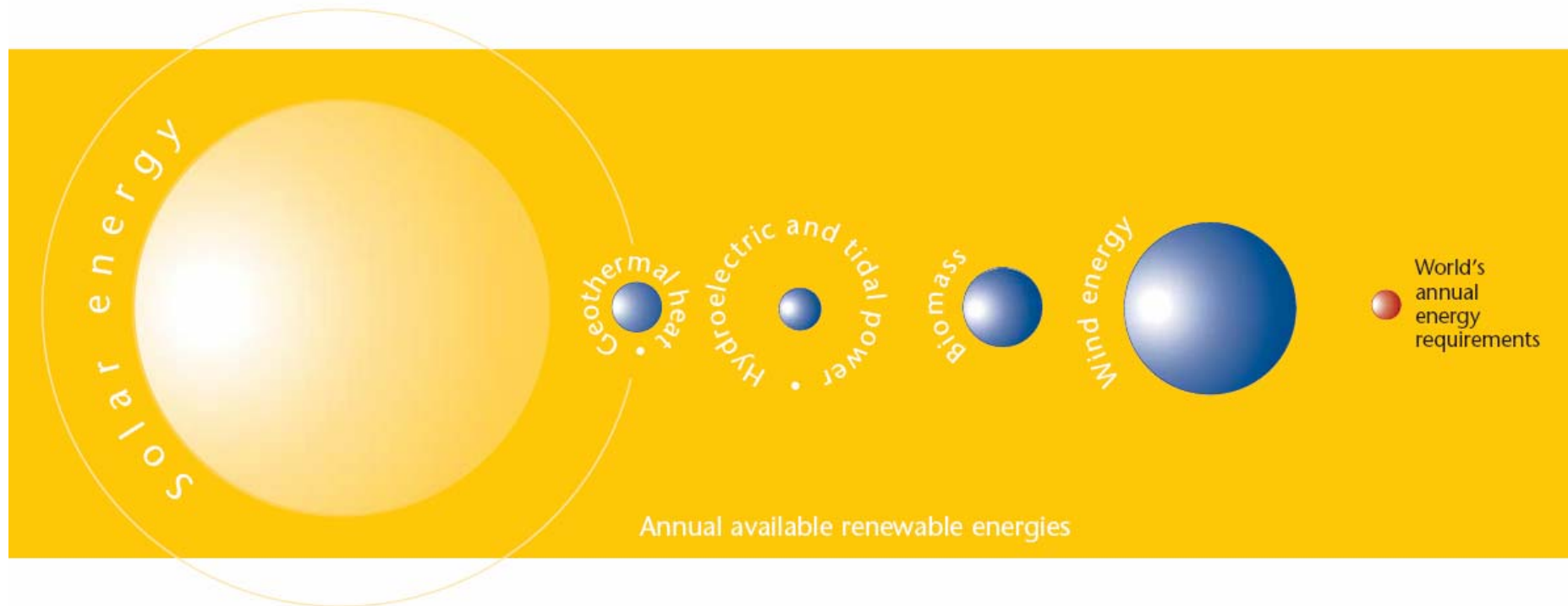
Member Institutes



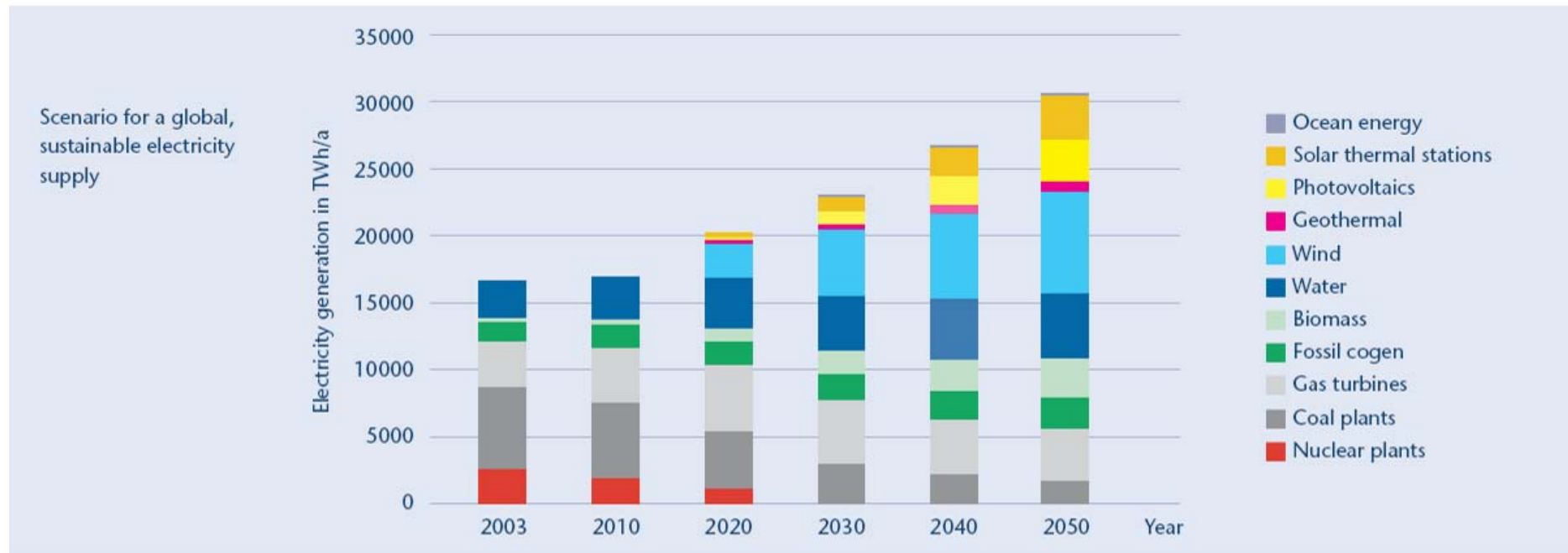
Research and development fields



Sun – the energy of the 21st century



Development of Renewable Energies until 2050



Goals of the German government and the EU

by 2050

Germany

- 80 % reduction of carbon emissions relative to the level of 1990
- Renewals make up 49 % of primary energy consumption
- Renewals cover 80 % of electricity generation
- Increase share of biofuels to 42 %
- Increase the share of renewables in heating supply to 48 %

European Union

- 60-80 % reduction of CO₂ emissions
- Renewables make up some 50 % of total energy supply

Why do we need solar energy research?

- green house effect: renewable energy does not produce carbon dioxide
- coal, oil and natural gas are exhaustible resources: solar energy is inexhaustible
- oil and natural gas have to be imported while renewables can independently supply the energy demand in Europe
- creation of a value added chain in Germany
- provision of new sustainable jobs in Germany
- Electrification of the developing countries and equalisation of living standards
- German solar industry can profit from this fact



Why joint Research ?

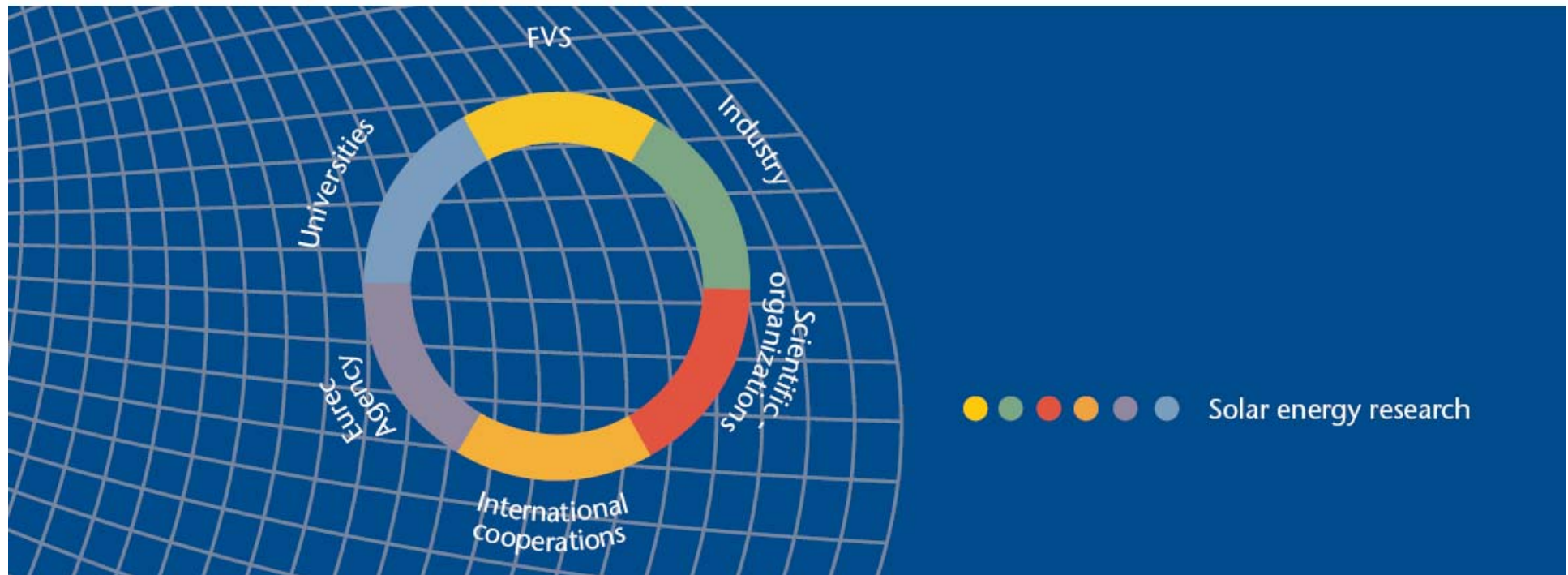
- balance of research topics
- efficient use of taxes
- research networks with universities
- co-operation with industry
- foundation of new companies
- location policy for industries from abroad
- development of aims and visions
- presentation of scientific results in the public

Co-operation fundamentals

- Division of labour for efficient research
- Co-operation, to generate synergy
- Competition, to stimulate creativity
- Networks with institutions outside the Associations
(e.g. universities) to build up critical masses



Networking research and development



INTERNET:

<http://www.FV-Sonnenenergie.de>

or

<http://www.renewable-energy-research-association.org/>

