

SYNERGY project "Building up the structures for commercialising renewable energy in China"

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Brussels, 19-20 May 2005





SYNERGY project China

中国可再生能源项目

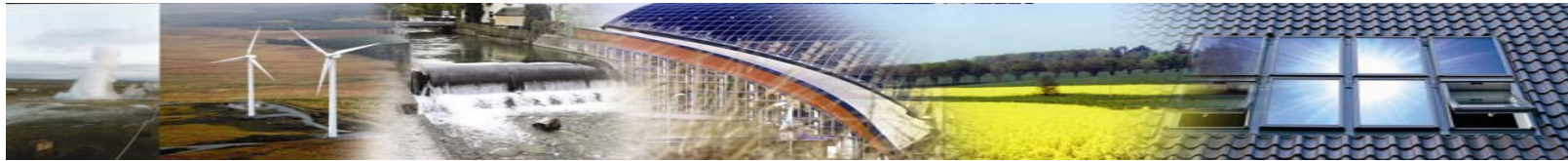
Project title: Building-up the structures for commercialising RE in China 建立中国可再生能源商业化结构

Planned activities: Policy advice 政策建议
计划活动: Capacity building (training) 能力建设 (培训)
Identification of RES projects RES项目鉴定
Identification of financing possibilities (e.g. CDM) 资金鉴定可能性 (如CDM项目)

Partners: Partners
合作方

EREC	European Renewable Energy Council
ESHA	European Small Hydropower Association
INSHP	Int. Network for SHP - Hangzhou
CREIA	Chinese Renewable Energy Industry Association



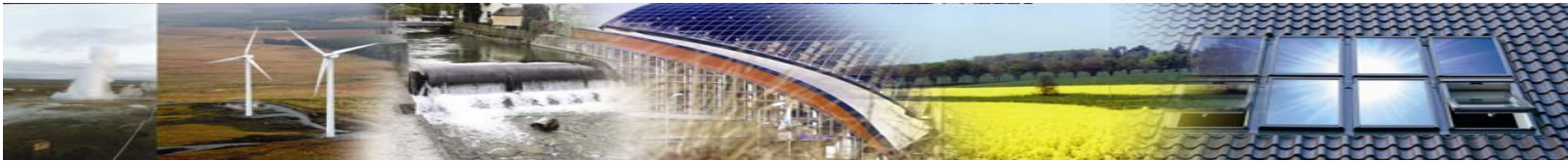


EREC - European Renewable Energy Council

Umbrella organisation representing all RES sectors:

下属可再生能源部门

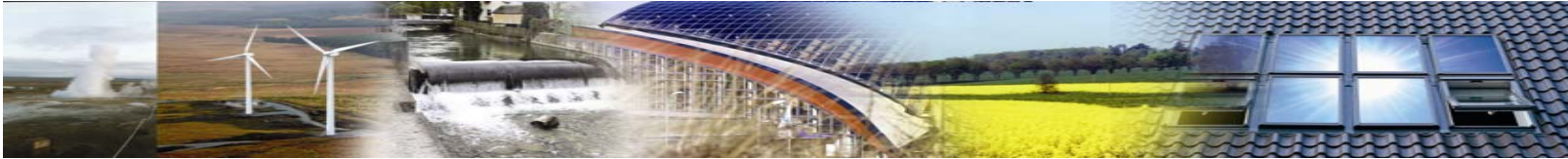
- ✓ **AEBIOM** European Biomass Association 欧洲生物能协会
- ✓ **EGEC** European Geothermal Energy Council 欧洲地热能协会
- ✓ **EPIA** European Photovoltaic Industry Association
欧洲光电工业协会
- ✓ **ESHA** European Small Hydropower Association 欧洲小水电协会
- ✓ **ESTIF** European Solar Thermal Industry Federation
欧洲太阳热能工业联盟
- ✓ **EUBIA** European Biomass Industry Association
欧洲生物能源工业协会
- ✓ **EWEA** European Wind Energy Association 欧洲风能协会
- ✓ **EUREC Agency** European Renewable Energy Research Centres
Agency 欧洲可再生能源研究中心 办事处



EREC - activities

EREC 从事活动

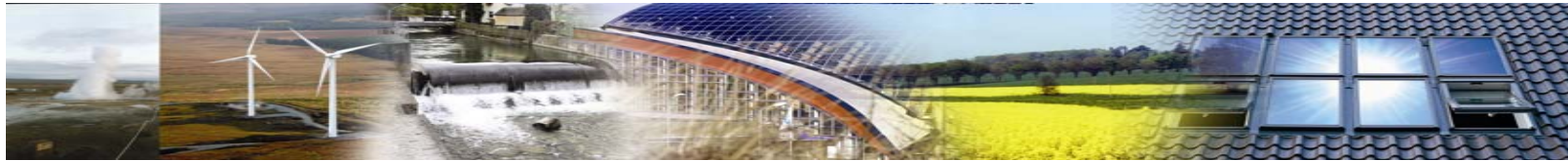
- To act as a forum for exchange of information and discussion on issues related to RES
为可再生能源（**RES**）相关的信息交流和探讨提供平台
- To provide information and consultancy on renewable energies for the political decision makers on local, regional, national and international level
为地方、地区、国家和国际政治决策者在可再生能源方面提供信息和咨询
- Information dissemination on RES issues (organisation of conferences, workshops, publications, etc.)
RES信息传播（组织会议、研讨会、发行出版物等）
- To promote European RES equipment, products and services on world markets
促进欧洲**RES**设备、产品和服务的市场建设



The driving forces for a renewable energy policy

可再生能源政策推动力

- Security of supply - independence from energy imports
供应保障---摆脱能源进口
- Protection of environment - including the necessity to reduce
greenhouse gas emissions
环境保护---包括减少暖室气体排放
- Regional and local development
地方及区域发展
- Industrial development
工业发展
- Employment
就业



RES policy framework RES 政策构架

RES White Paper (1997) 1997年RES白皮书

↳ To double the share of renewable energy from 6% to 12% of gross energy consumption in Europe (EU-15) by 2010

↳ 到2010年欧洲可再生能源消费占总能源消费从6%上升到12%

Green Paper on Security of Energy Supply (2000) 2002 保证能源供应绿皮书

RES Electricity Directive (2001) 2001RES电力指导

↳ To establish a framework to increase the share of renewables electricity from 14% to 22% of gross electricity consumption by 2010

↳ 确立一个框架，到2010年使可再生电力占总能源消费从14%上升到22%

Directive on the energy performance of buildings (2002) 民用能源效能指导

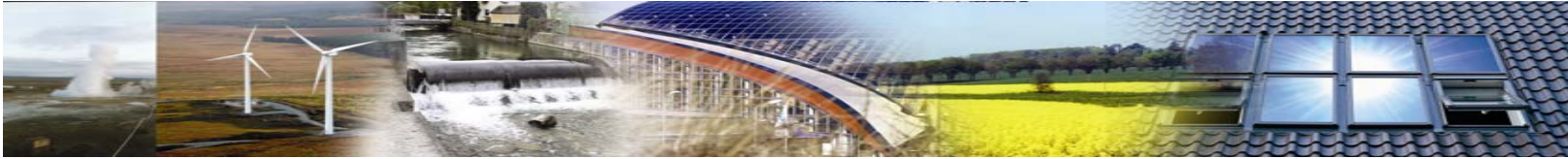
↳ To realise a savings potential of around 22% by 2010 for energy used in heating, air-conditioning, hot water and lighting

↳ 到2010年在供暖、空调、热水和电灯方面节省能源22%

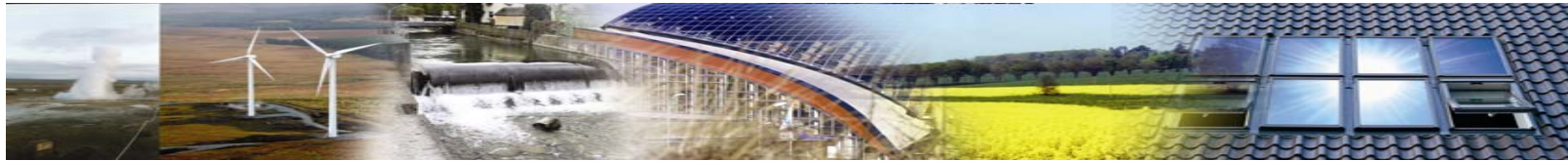
Directive on liquid biofuels (2003) 2003年液体生物能源指导

↳ To achieve a share of 5.75 % of biofuels for transport in the total amount of fuels in Europe by 2010

到2010年，使液体生物能源占欧洲总交通能源的5.75%



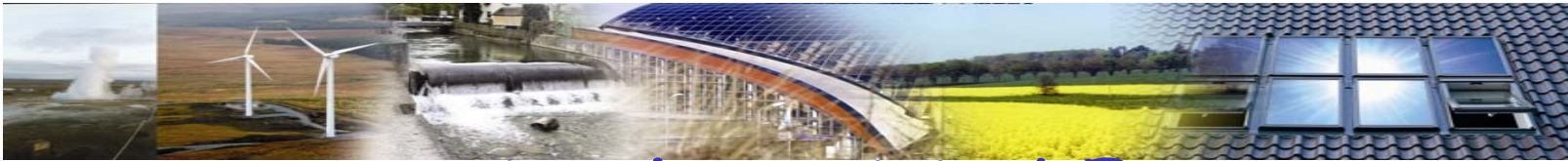
The Market of Renewables (1990 - 2004) 可再生能源市场



Renewable Energy benefits

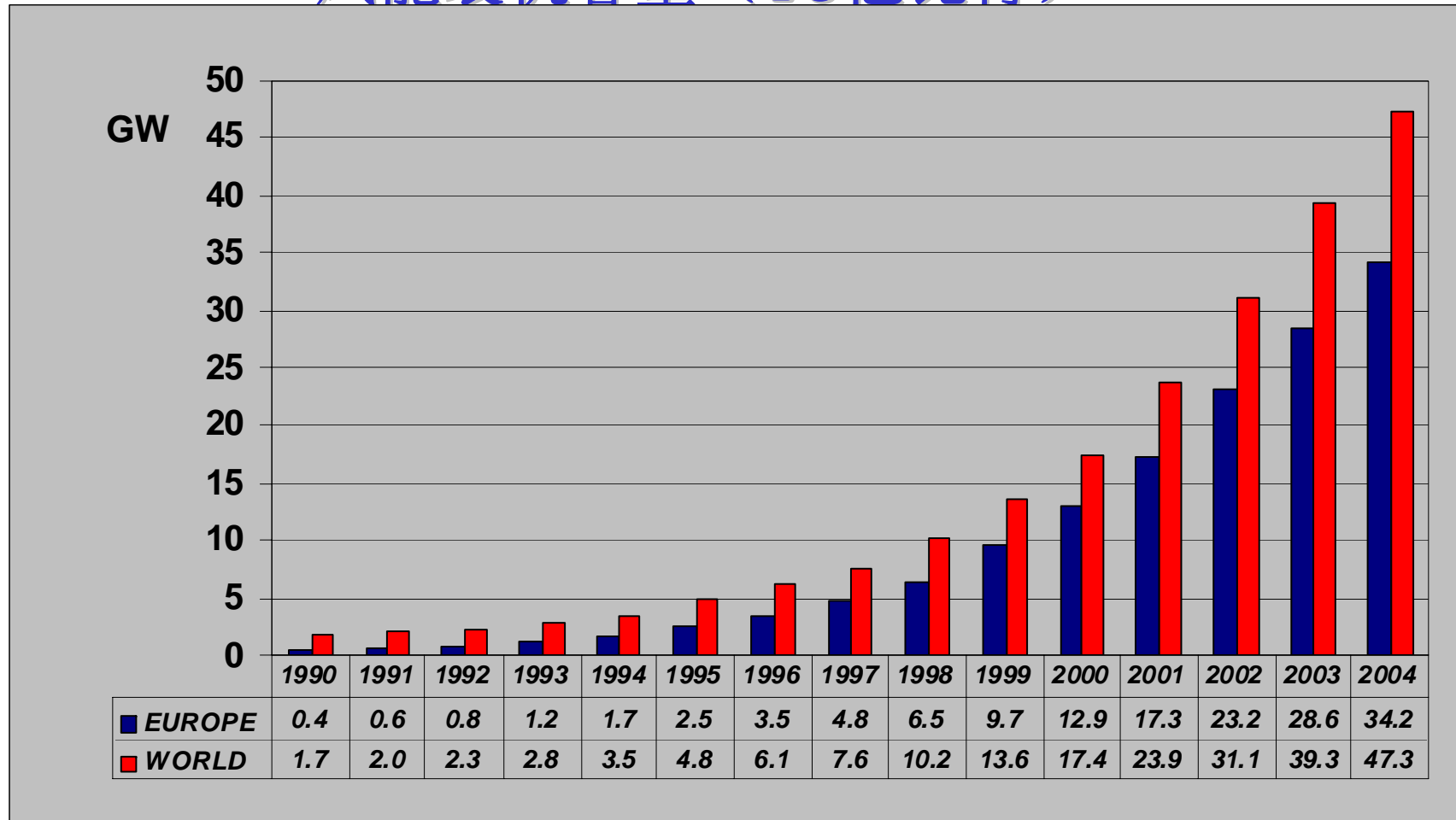
可再生能源效益

- ✓ **Europe is global leader in RES development**
欧洲在世界可再生能源开发方面处于领先地位
- ✓ **200.000 jobs in Europe already now**
目前提供了20万个工作岗位
- ✓ **Annual turnover of 15 billion € already now**
每年150亿欧元营业额
- ✓ **Innovative Business Sector**
是一个创新的商业部门
- ✓ **Economic growth and regional development**
促进了经济增长和区域发展

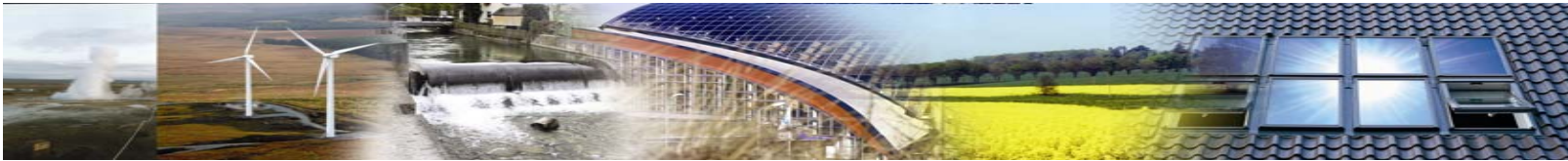


Cumulative Wind Energy Installed Capacity (GW)

风能装机容量 (10亿瓦特)

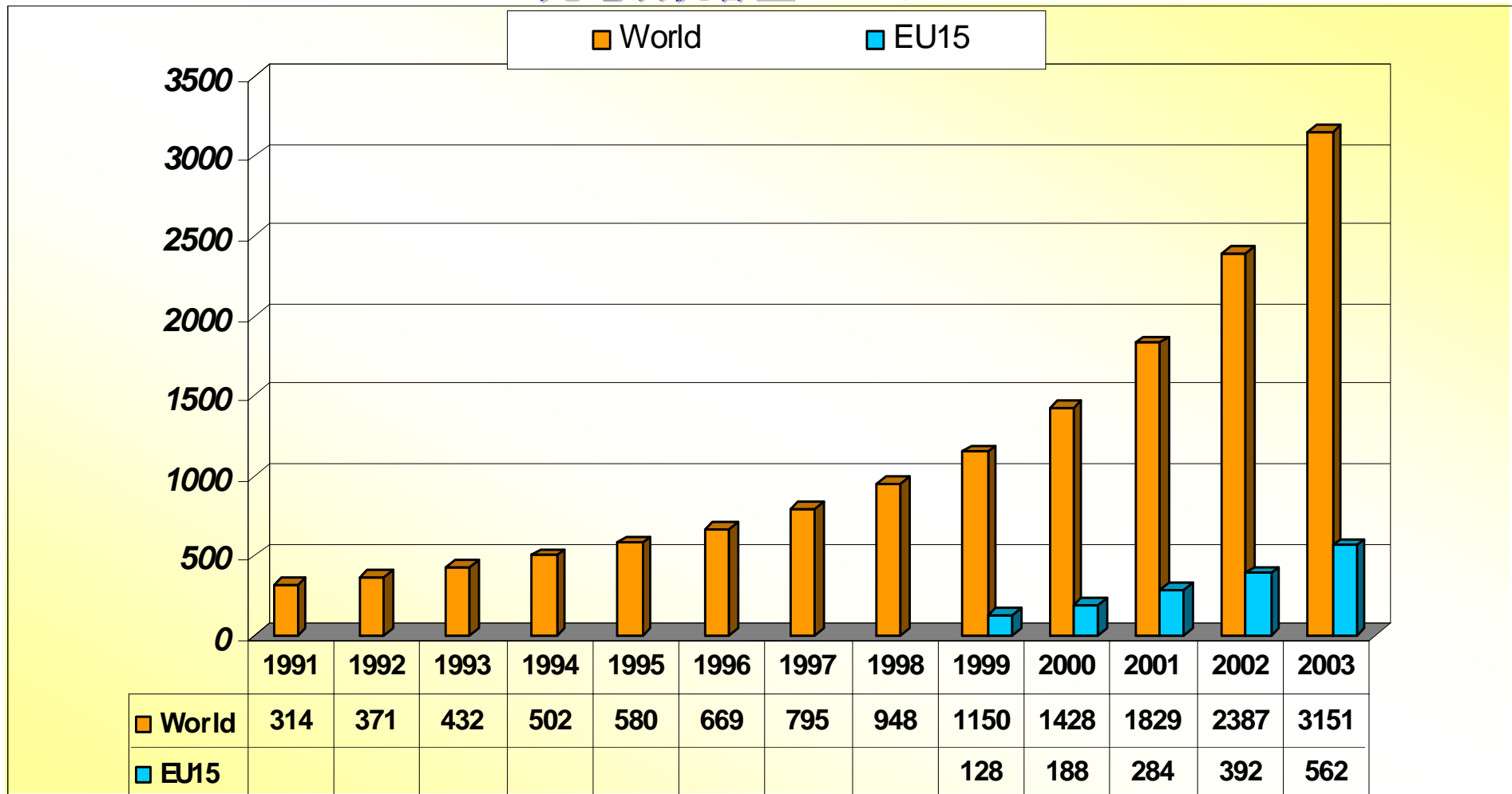


Source: EWEA

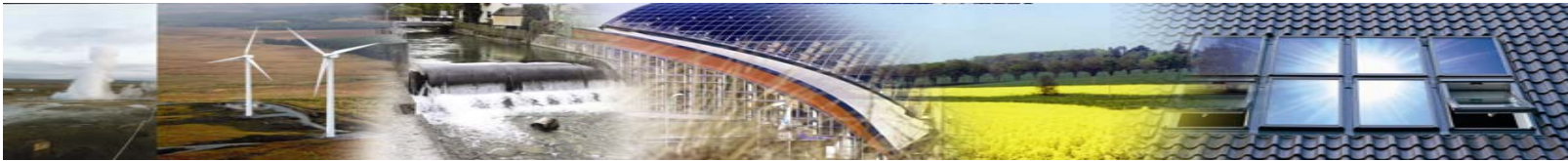


Cumulative Photovoltaic Installed Capacity (MWp)

光电装机容量 (MWp)

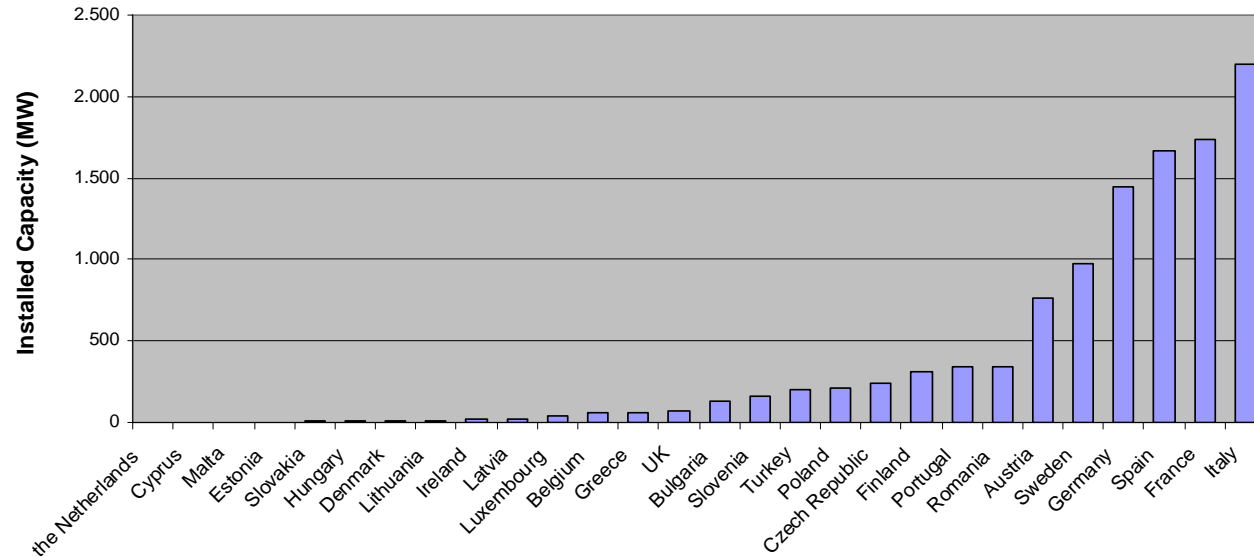


Source: Eurec Agency, EPIA, Observ'ER (2004)

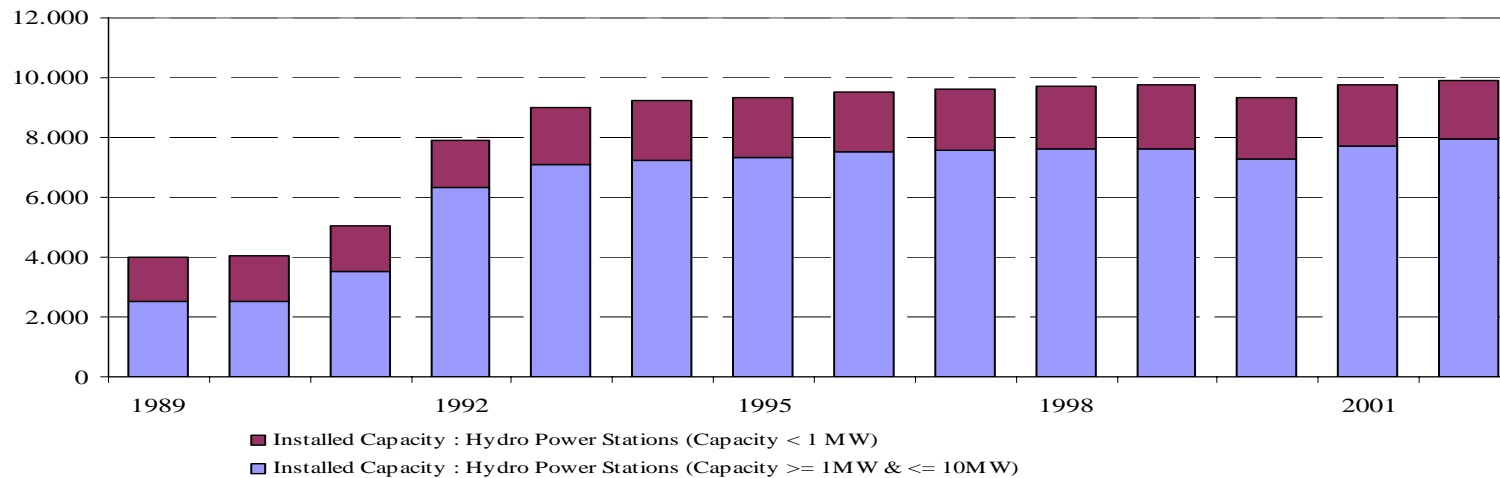


Small Hydropower (SHP) installed capacity (MW)

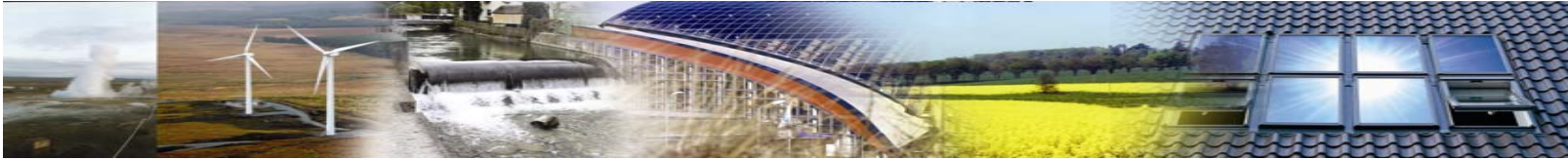
EU Member States SHP installed capacity (MW)



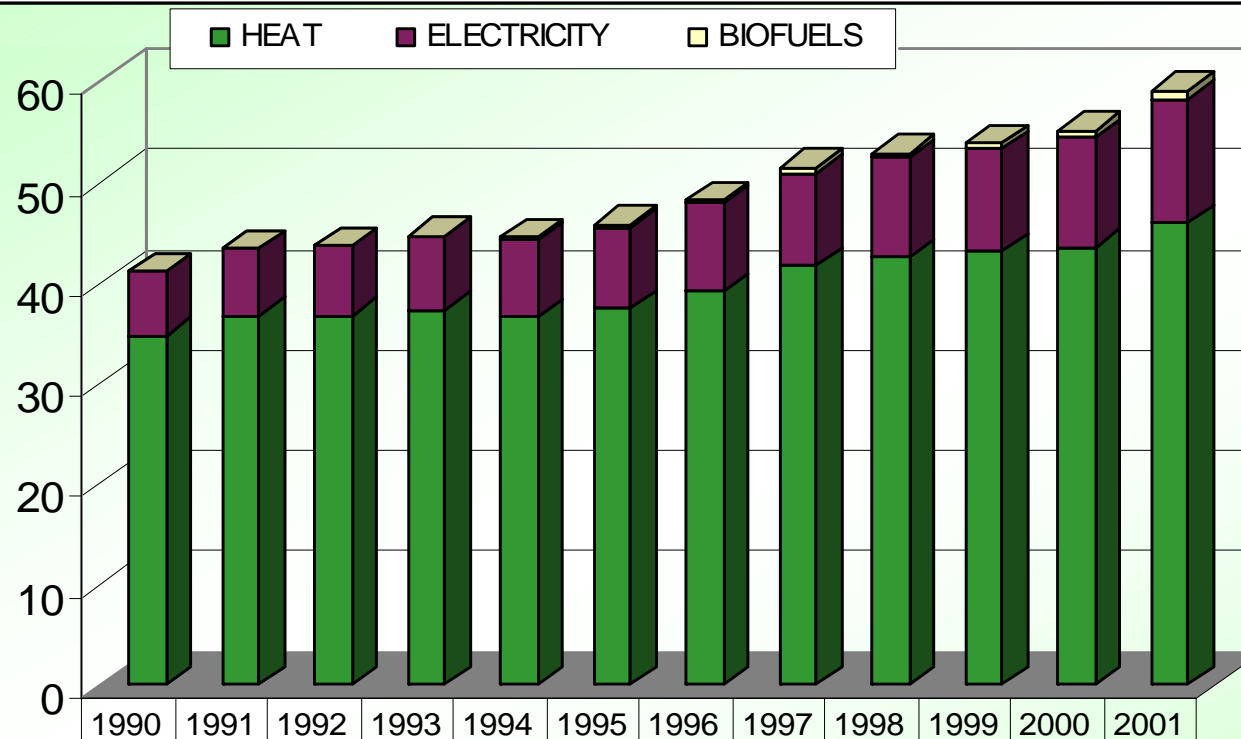
Cumulative SHP installed capacity in EU-15 (MW)



Source: ESHA (2004)

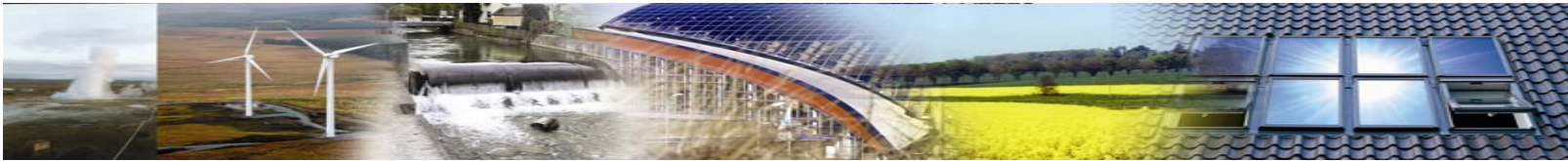


Cumulative Biomass Utilisation in (Mtoe) 生物能源 (百万吨)



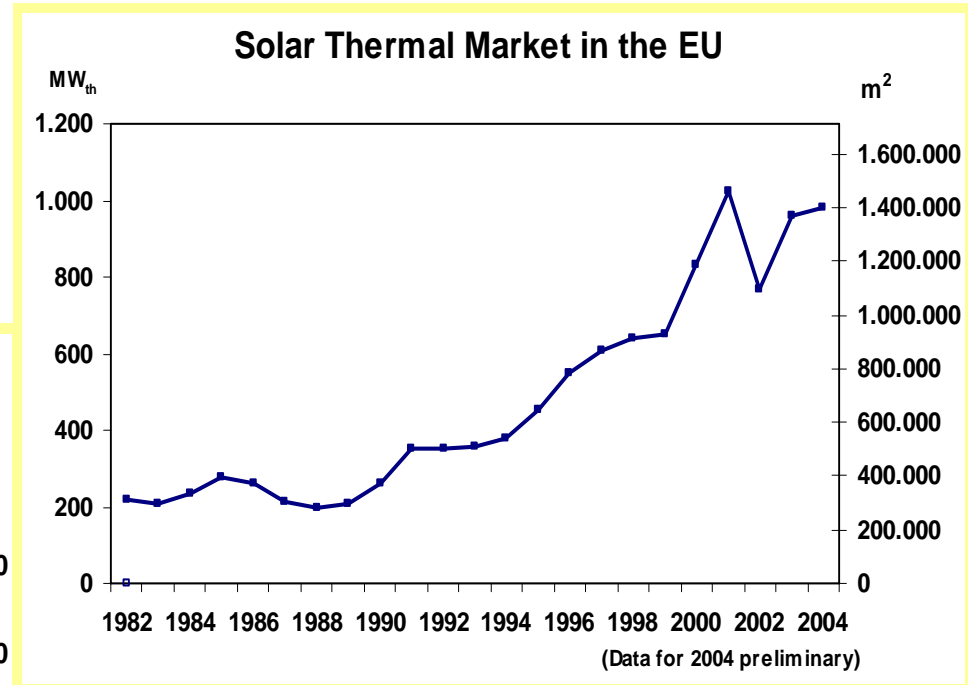
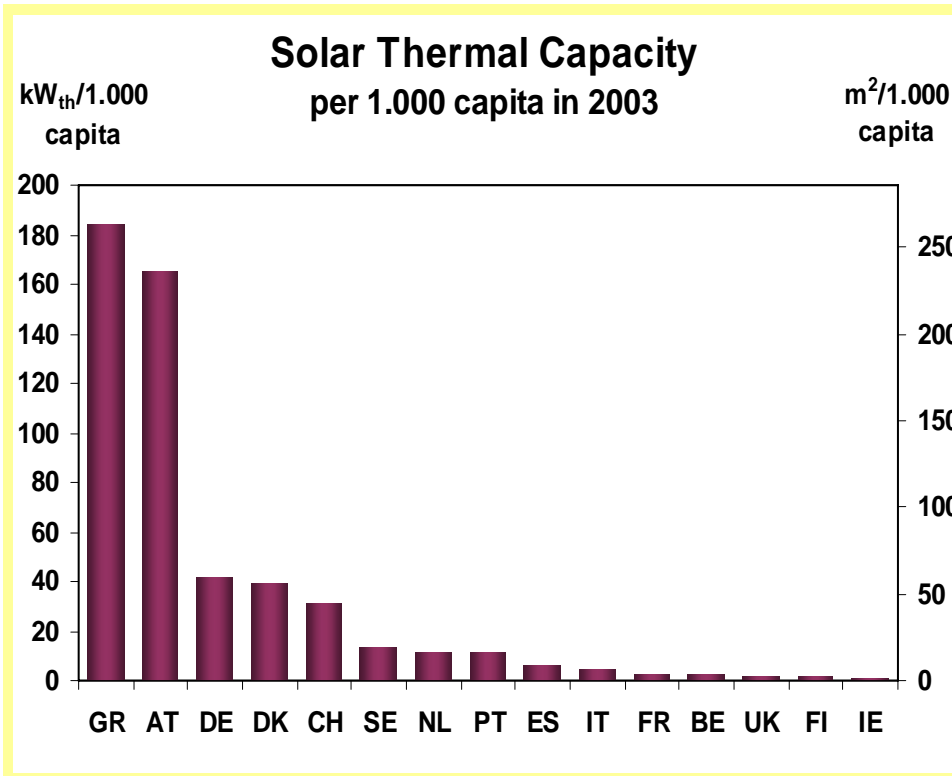
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
■ BIOFUELS	8E-04	0,011	0,015	0,039	0,242	0,268	0,348	0,469	0,445	0,497	0,663	0,84
■ ELECTRICITY	6,4	6,6	6,9	7,3	7,7	8,2	8,7	9,3	9,9	10,3	10,8	12,3
■ HEAT	34,7	36,7	36,6	37,3	36,6	37,3	39,1	41,6	42,5	43,0	43,5	45,9

1990-2001: Eurostat

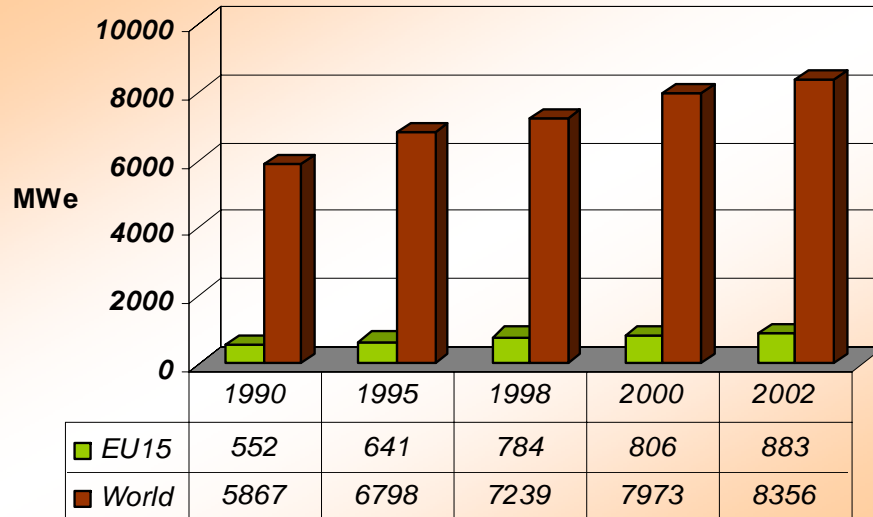
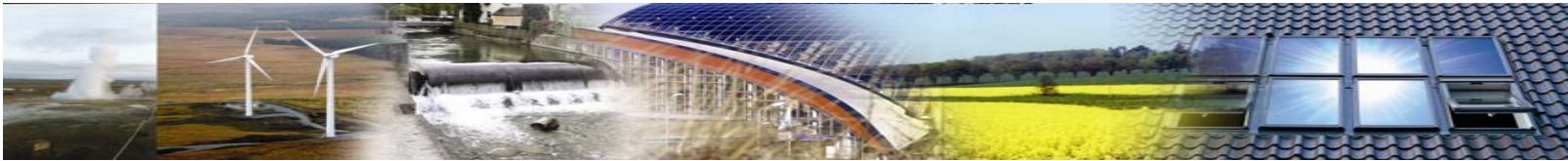


Solar thermal installations

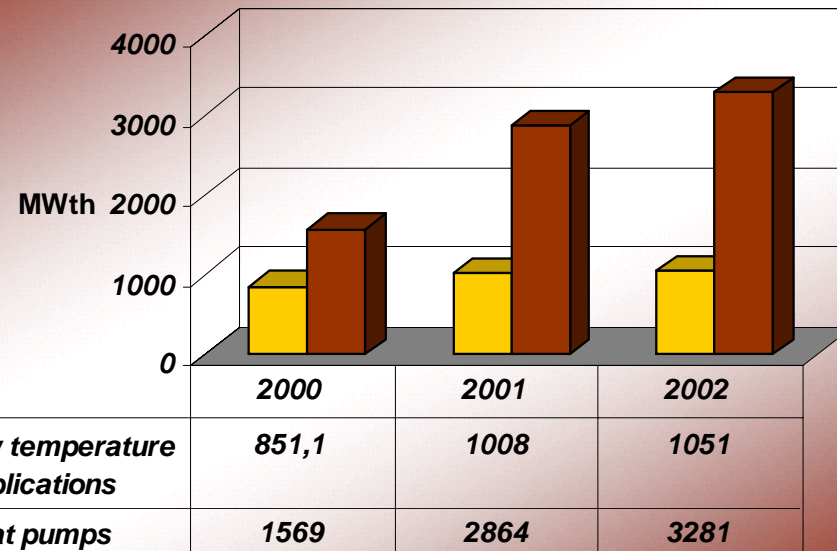
太阳能热能装机容量

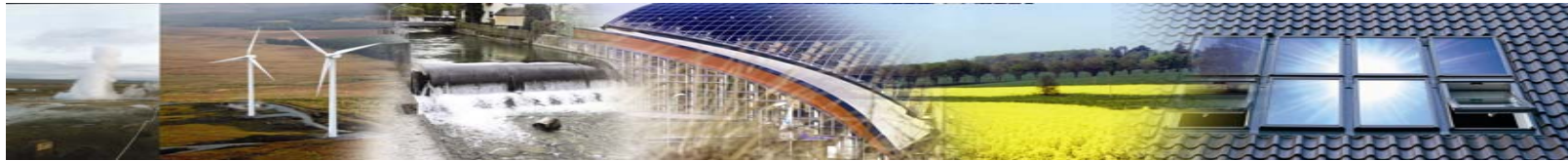


Source: ESTIF (2004)



Geothermal energy

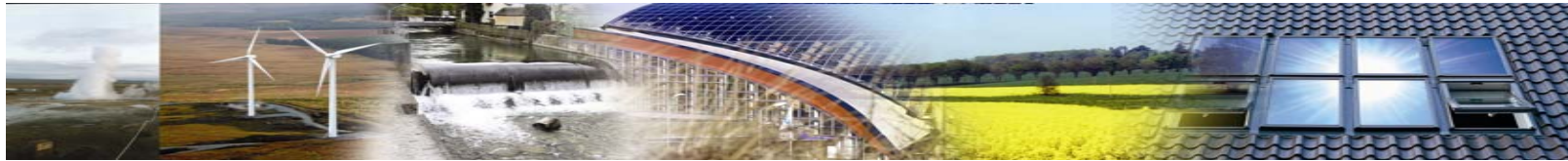




Market Development-Policy Link

市场开发—政策

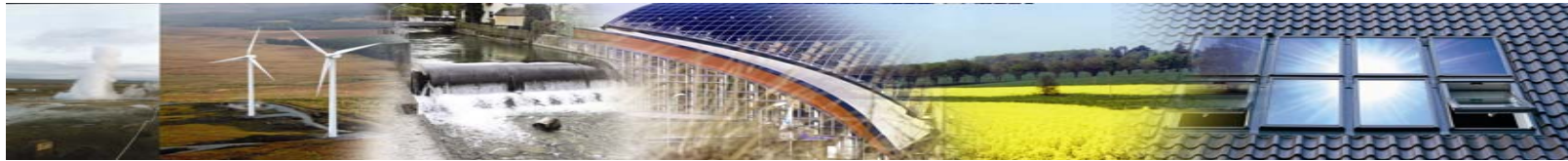
- **RE has the technological potential to play a major role in the future energy mix as mainstream energy source.**
可再生能源技术潜力巨大，将来可能成为能源主流来源
- **RE is integral part of the energy supply in many countries today.**
目前很多国家的可再生能源已成为能源供应主要方面
- **RE has tangible economic, ecological and social benefit.**
可再生能源有切实的经济、生态和社会效益。
- **BUT: RE market development depends on a coherent, predictable, supportive political & legal framework.**
但是：RE发展依赖于先见的，连贯一致的政策和法律支持
- **International collaboration is a MUST!**
必须开展国际合作



Work packages

工作内容

1. Policy advice in RE issues to Chinese government and administration 向中国政府提供RE相关政策建议
2. Identification of RES projects in China which are interesting for private local ownership structures - training (18 - 23 April 2005, Hangzhou)
中国RES项目鉴定（杭州 2005，4月18-23培训）
3. Organisation of a roundtable in Brussels on RES opportunities (19-20 May 2005, Brussels)
组织布鲁塞尔融资圆桌会议（2005，5月19-20）
4. Developing feasibility studies, business and financing plan for 20 renewable energy projects in China
开展中国20个可再生能源项目的可行性研究、商贸和融资计划



For more information

更多信息请点击

www.erec-renewables.org

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