



### ISES International Solar Energy Society

Wiesentalstr. 50 79115 Freiburg Germany

Phone: +49-761-45906-0 Fax: +49-761-45906-99

E-mail:

General: hq@ises.org
Membership: members@ises.org
Public Relations: public.relations@ises.org
Projects: projects@ises.org

Projects: projects@ises.org

Publications: shop@ises.org

Web: www.ises.org

## About Us UT US

The International Solar Energy Society (ISES) has been actively engaged in advancing the science, technology, policy and education needed for the efficient use of renewable energy and its practical applications since 1954. In spite of an historic focus on direct solar energy, ISES today is involved in all renewable energy fields.

ISES is the world's foremost non-profit membership organisation in the field of renewable energy. It has members in over 110 countries and more than 50 National Sections managing the local affairs of the Society all over the world. This global community which ISES embodies is of enormous importance in advancing research into and market acceptance of renewable energy systems.

Recent studies have clearly shown the effect of burning fossil fuels on global climate change. Dependence on conventional energy sources harbour many detrimental effects, whether socially, politically, environmentally or in terms of development and equitable access to resources.

ISES strives to find sustainable energy alternatives.

Climate change does not stop at borders and therefore the need for international communication and improved co-operation between all players is greater today than ever before. ISES membership and international activities are important steps in this direction; to achieve an environmentally friendly and responsible energy policy in all countries of the world.

The International Solar Energy Society – a global community with a mission:
Towards a sustainable world through renewable energy.

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### Aims of ISES

### ■ Towards a Sustainable World:

Encouraging the use of renewable energy everywhere, through appropriate technology, scientific excellence, effective policy, social responsibility, and global communication.

## Realising a Global Community:

Bringing together industries, individuals and institutions in support of renewable energy technologies – through communication, co-operation, support and exchange.

### Supporting evelopment:

Applying practical projects, technology transfer, education, training and support to the issue of sustainable global energy development.

### Supporting the Science of Solar Energy:

Stimulating and encouraging both fundamental and applied research in solar energy and the dissemination of research results globally.

#### Contributing to Growth:

Ensuring individual and community growth through support of private enterprise and empowerment in the area of renewable energy.

### Information and Communication:

Realising rapid access to information through tailor-made communication and exchange platforms utilising modern technology.

# Why Renewable Energy? Wable Energy?

Several factors recommend renewable energy sources. Foremost in the minds of many ISES members is the issue of **climate change**, and the need to find energy solutions today that will allow us to leave a healthy environment to the generations of tomorrow. Renewable energy sources are environmentally far less destructive than current fossil and nuclear technologies, and pose less of a health and social hazard than those conventional energy sources.

Another important issue is that of **independence and safety**. Renewable energy sources use local resources, avoiding the

need for dependence on expensive and environmentally harmful oil imports. Renewable energy generation facilities are geographically distributed, and so less vulnerable to sabotage and disaster.

Development issues also play an important role in driving the growth of renewable energy. Off-grid electrification using renewable energy sources in rural areas brings economic and social growth. Renewable energy supports health care and education through the electrification of clinics and schools all around the world. Independence from expensive energy imports frees up gross domestic product for development.

Your support of renewable energy helps make the world a better place – for us, and for our children. ISES works in more than 110 countries to support the development of the technologies, infrastructure, policies and education necessary to make renewable energy a reality. Your support of ISES is a direct contribution to implementing renewable energy everywhere.

# **Renewable Energy Sources**

Sustainable development requires safe, clean energy sources that can be renewed (or renew themselves). Such sources include wind, solar energy, small hydro, biomass, geothermal and energy from waves and tides.

#### Wind

Wind generators convert the energy of the wind into useful forms of energy, either mechanical (for pumping, for example) or electrical, for direct use or for feeding into the electricity grid.

#### Solar

The sun provides a wealth of energy that can be harnessed either as warmth (thermal energy) or as electricity (photovoltaics).

The energy made available can be used for heating water and buildings, various cooling applications, and drying agricultural products, as well as powering electrical equipment.

#### Small Hydro Power

The term "small hydro" refers to hydroelectric power plants of less than 10-megawatt generation capacity. Hydro power plants use the potential energy of falling water to turn a turbine, which powers an electrical generator.

#### **Biomass**

Biomass includes all natural (vegetable or animal) products that can be used for either energy production (fuels, heat, electricity) or industrial products. Examples for the use of biomass are wood chip heating, electricity co-generation through biomass, as in sugar plants with bagasse, and transport fuels such as biodiesel produced from rapeseed oil.

#### Geothermal

Geothermal energy uses the heat of the core of the earth to produce steam that powers a conventional steam turbine. This turbine turns a generator for the generation of electricity. It can be used in places where the earth's heat is sufficiently close to the surface to make accessible hot water or steam, such as in geyser regi-

#### **Waves & Tides**

Sea wave power plants use the energy contained in waves. The motion of waves is used to power a generator.

Tidal power plants use a basin with a sluice, which, as the sea level drops during low tide, drives conventional hydropower equipment for the generation of electric energy.



Geothermal





Solar





# The Global Community a Community

The Society consists of more than 50 National Sections and about 30,000 members in more than 110 countries. Our members are organised on a national, regional and international basis and represent a large international infrastructure in support of renewable energy.

The international Headquarters of ISES provides administrative services and co-ordinates international projects and initiatives.

Most activities and projects are only made possible by the idealism and efforts of Society members. This dedication, in combination with the international infrastructure of ISES, means that the Society represents a reservoir of technical and scientific expertise that spans the globe.

Recent surveys show that a broader membership base is developing within the Society. Members representing commercial and political interests as well as individuals and

#### The ISES network:

#### Headquarters

1 Freiburg, Germany

#### Regional Offices

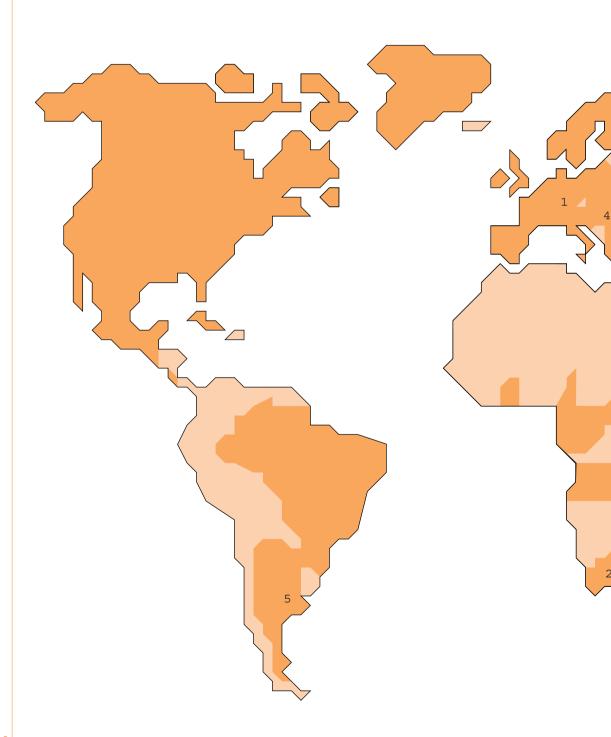
- 2 ISES Africa
- 3 ISES Asia/Pacific
- 4 ISES Europe
- 5 ISES Latin America

National Sections

National Sections

Members

current as at 12.2002



communities support the ideals of the Society, and work diligently to realise those goals.

All parts of the international ISES network - the National Sections, the Regional Offices, the Headquarters and the Board of Directors - are constantly engaged in a unified attempt to advance the ideals of the Society.

ISES is open to all persons and groups interested in supporting and expanding the use of renewable energy across all frontiers.

If your country is not in the list (at right) and you are interested in founding a National Section, please visit the ISES website at:

www.ises.org/newsection or contact ISES Headquarters: hq@ises.org

#### **National Sections**

Arab Section

Argentina

Austria

Australia &

New Zealand

Bangladesh

Belgium

Brazil

Bulgaria

Canada

Central Africa

China

Costa Rica

Croatia

Cuba

Cyprus

Czech Republic

Denmark

Egypt

Finland

France

Georgia

Germany

Ghana

Greece

Hungary

India

Ireland

Israel

Italy

Japan

Kenya

Korea

Malaysia

Mexico

Nepal

Netherlands Norway

Pacific Islands

Pakistan

Philippines

Poland

Portugal

Romania

Russia

Slovenia South Africa

Spain

Sweden

Switzerland

Turkey

Ukraine

United Kingdom

**United States** 

Zimbabwe

For addresses see: www.ises.org/contacts

# Membership bership

Be a part of the global community

Our flexible membership structure enables members to assemble service packages to fit their specific requirements. The Core Service is the basis of an international membership and is a prerequisite to acquiring any of the Additional Services. The Core Service includes the following:

#### **Core Service:**

#### Membership Card

A non-transferable Membership Card allows you to benefit from ISES services, such as reduced fees at selected ISES national and international conferences, seminars, events and publications.



#### ■ Refocus Magazine

The international magazine "Refocus" (Renewable Energy Focus) provides news updates as well as in-depth feature articles on various aspects of business and research in all fields of renewable energy. Special attention is given to the technology transfer and the application of new developments in the field. The coverage on these and other topics is independent, objective and from an international perspective.



### ■ Electronic ISES Newsletter (6 issues per year)

The ISES newsletter gives an internal view of Society matters and is distributed to all members who supply an e-mail address.

### Access to restricted WIRE Modules

Society membership provides preferred extended access to modules and information areas in the Word-wide Information System for Renewable Energy (WIRE).

wire.ises.org



### ■ Electronic WIRE Newsletter

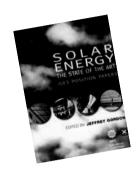
(25 issues per year)
This newsletter informs our clients of recent additions to the WIRE online information system. Members receive company updates, reports on new useful websites, energy research reports and whitepapers, news stories, and notification of new developments in WIRE.

#### ■ Members E-mail

ISES members receive a free generic e-mail address in the form *name@members.ises.org*. Mail sent to this address is automatically forwarded to your current e-mail account as registered with the Society. One address that never changes!

## ■ Reduced prices at the ISES Online Shop

All publications presented in the ISES Online Shop accessible via ISES website are offered with at least 10% reduction on the normal book price. shop.ises.org



#### ■ Members Directory

The global Members Directory is a voluntary directory accessible only to international members. The directory will help to strengthen communication between members, expand the global network of ISES in a concrete way, and help members to act on a regional and global scale. directory, ises. org

#### Reduced Conference Fees

As an international member of ISES, you will enjoy reduced fees at selected national, regional and international congresses, both those organised by the Society and those of partner organisations. Attendance at one such conference per year means savings well in excess of ISES membership fees.

#### **Additional Services:**

#### Solar Energy Journal

(12 issues per year)
The Journal is the premier peer-review journal for the broad field of solar energy. It provides an excellent tool for keeping up-to-date with the latest scientific developments in the field, and offers a widely read and highly authoritative platform for publishing your own scientific papers. It is available in both printed and electronic form. The price for members is a fraction of the market cost of the Journal.



#### International Consultants Network (ICN)

The ICN is a treasure trove of information, allowing you easy, online access to a large collection of experts and consultants in the field of renewable energy. It is a platform where ISES members interested in acquiring consulting or project work may list themselves. The ICN is actively marketed to a wide range of development, government, industry and UN institutions.

icn.ises.org



New, innovative Additional Services are being developed on an ongoing basis.

#### **Conferences:**

The Society organises regular conferences on a national, regional and international level.

The biennial ISES Solar World Congress is the premier international conference of ISES. Held in a different city every two years, the conference brings together R&D, industry, the public and educational sectors to address the burning issues of renewable energy technology. Members get together to plan, exchange, discuss and learn.

In addition, a large number of national and regional conferences mean that something is always happening somewhere that you could be involved in.

### International Congresses

1970

Melbourne, Australia

1971

Greenbelt, USA

1973

Paris, France

1975

Los Angeles, USA

1977

New Delhi, India

1979

Atlanta, USA

1981

Brighton, United Kingdom

1983

Perth, Australia

1985

Montreal, Canada

1987

Hamburg, Germany

1989

Kobe, Japan

1991

Denver, USA

1993

Budapest, Hungary

1995

Harare, Zimbabwe

1997

Taejon, Korea

1999

Jerusalem, Israel

2001

Adelaide, Australia

2003

Göteborg, Sweden

2005

Orlando, USA

## International Activities Onal Activities

The Society structures its work for the advancement of renewable energy into a number of coherent programmes. Within each of these, initiatives and projects are undertaken that support the work of ISES internationally:

#### **Programmes**

## Science & Technology Programme (ST)

The ST Programme represents the core scientific platform of the Society. All initiatives, activities and projects focusing on the science of renewable energy are integrated here. The programme offers support for the global scientific process, generating high-level material for use within the international renewable energy community.

An unusually broad range of activities resort under the ST, from support for primary research projects to publications to initiatives focused on scientific exchange. Technology transfer is also addressed here. The programme encourages very high scientific standards, the development of sound scientific practice in all parts of the world, open and frank exchange of experience and scientific data, and high moral and ethical values amongst practitioners.

# Policy, ImplementationDevelopment SupportProgramme (PIDS)

The PIDS Programme is aimed at creating the initiatives, tools and infrastructure required to apply renewable energy technology to the related issues of sustainable development, environmental protection and poverty eradication. The Society brings together science, technology, industry, financial institutions, governments and non-

governmental organisations to explore ways in which renewable energy and energy efficiency technology may address such challenges as rural energy provision, energy dependency, quality of life, clean water provision, healthcare, education, the environment, safety and stability and related issues.

### Awareness, Education & Capacity Building Programme (AEC)

The AEC Programme is focussed on realising the necessary skills and expertise to optimally integrate renewable energy technology into a wide variety of application areas.

Scientists, engineers, technicians and architects are amongst the professional groups to benefit from the international training and education activities of the Society. From workshops and colloquia to major global conferences, the Society addresses education and training issues at all levels. An area of special interest within this programme is instilling an awareness of the potential of renewable energy technology, especially in young people.

## ■ Business Development Programme (BD)

The BD Programme focuses on ensuring that the required business intelligence for wide scale production and implementation of renewable energy technologies in all parts of the world is available and widely disseminated. This includes studies on potential, modalities, barriers and opportunities, as well as business-oriented seminars, publications and services.

Through the wide scale dissemination of information on business best practices, opportunities and development potential, the programme

ensures the continued development of a healthy business sector in the renewable energy arena.

#### **Initiatives**

#### Solar Academies

The ISES Solar Academies are aimed at providing professional training in the application of renewable energy technologies in buildings, with particular emphasis on solar architecture. The target groups are professionals and post-graduate students – people interested in learning about the integrated design of sustainable buildings, as well as related issues such as energy efficiency and reducing CO<sub>2</sub> emissions through using renewable energy technologies.

### Sustainable Energy for Africa

This initiative is aimed at promoting the wider use of renewable energy technologies in Africa to address issues of sustainable development. ISES, together with its partners, have undertaken to contribute to the energy dialogue through organising conferences in different regions to bring together the main role players in the area of energy regulation, production and the private industry.

#### **Projects**

#### ■ SADC Renewable Energy Market Study



The project has been undertaken by the Development Bank of Southern Africa and ISES as its European partner. The overall aim of the project was to facilitate the widespread introduction and application of innovative and appropriate renewable energy technologies needed to achieve transition to a sustainable development system. This has been done by assessing the integrated regional potential for the introduction and application of these technologies juxtaposed to the present emphasis on individual markets in the Southern African **Development Community** (SADC) member countries.

#### SEPCo

The project aims at the development of tools for designing sustainable implementation processes and integrating environmental and efficiency issues into all levels of energy policy and planning. It is intended to help strengthen the capacity of key stakeholders and to promote sustainable advocacy activities within the countries. The project design follows a process-oriented approach that involved stakeholders and decision makers from within the countries through a set of workshops.



sustainable energy policy concepts

#### Solar Cities

The main objective of the project is to promote large-scale environmental actions and the growing implementation of renewable energy technologies in cities, with the aim of reducing CO<sub>2</sub> emissions. It aims to co-ordinate and support existing efforts by cities, through collecting and consolidating



available information on European initiatives, developing a central information system accessible via the Internet, where results and best practices will be disseminated. Due to the nature of the funding provided the initial project is limited to European cities, but can be expanded at a later stage to provide a global overview of relevant cities.

#### RESuM



The survey on 'Rural Energy Supply Models - RESuM' is intended to bridge remaining knowledge gaps on suitable models for market based energy supply in rural areas. The result is a guide for governments, business, and financing organisations to providing energy to rural areas using renewables. The central question is: "How to get the product to the end user?", with special consideration of the business level, i.e. the level of interaction between the system or service provider and the customer.

#### Solar Schools

This project is aimed at improving children's knowledge of renewable energy and energy efficiency, using them as multipliers for awareness-raising also among their parents. The initiative has three focal points: The dissemination of good practice on implementation of energy efficiency and renewable technologies in schools, the generation of educational materials on energy issues, and the promotion of contacts between schools and pupils world-wide through competitions.



For more information and upto-date reports on the projects presented here, please take a look at our projects web-page at: projects.ises.org

### The History of ISES

- ISES has its origin in Phoenix / Arizona, USA. A group of industrial, financial and agricultural leaders establishes the "Association for Applied Solar Energy" (AFASE) as a non-profit organisation.
- The first two important meetings are held in Tucson and Phoenix, USA which attract more than 1000 scientists, engineers and government officials from 36 different countries.
- The association establishes its first scientific publication "the sun at work".



The first issue of "The journal of Solar Energy, Science and Engineering" is published.

Dedicated solar scientists decide that radical changes are required for the operation and goals of the Society. Through the reorganisation within the framework of its original concept the name is changed to "The Solar Energy Society".

Accreditation of the Society at the United Nations Economic & Social Council (ECOSOC).

The name of the journal is changed to "Solar Energy – The Journal of Solar Energy Science and Technology".



Prof. Farrington Daniels is elected President and in his honour the 'Farrington Daniels Award' is established in 1975.



The award dignifies outstanding intellectual leadership in the field of Renewable Energy.

- Relocation of the international Headquarters
  office to Melbourne,
  Australia.
  First international conference outside the USA
  is held in Melbourne,
  Australia
- 71 The name of the Society is changed to 
  "International Solar 
  Energy Society".
- The first issue of the ISES magazine "SunWorld" is published.



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ISES celebrates its Silver Jubilee at the Solar World Congress in Atlanta, USA.



The 'Achievement through Action Award' in memory of Christopher A. Weeks is set up. A substantial cash prize honours contributions for practical use or new concepts.

ISES introduces the "Section Sponsorship Programme" in which individuals and sections have the opportunity to sponsor sections from developing countries. Accepted by the United Nations as a non-governmental organisation (NGO) in consultative status, ISES actively participates in the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, Brazil.

ISES co-ordinates the second meeting of the United Nations Commission on Sustainable Development (CSD) in New York to discuss issues of sustainable development and the interlinkages to renewable energy technologies.

The Headquarters office moves from Melbourne, Australia to Freiburg, Germany. The Headquarters becomes a focal point for international projects.



Launch of new official ISES magazine "Refocus" (Renewable Energy Focus).



The first woman elected as President. Prof. Anne Grete Hestnes takes over office on 01.01.2002.

ISES participates in the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa.

24 December 1954 the Society celebrates its Golden Jubilee at the Solar World Congress in Orlando/Florida, USA in August 2005.

# Join ISES!

## We invite you to join ISES today.

#### Join:

#### For Yourself

The Society will strive to keep you up-to-date, in touch, at the frontiers of development. Strong publications such as Refocus and the Solar Energy Journal, communication tools, conferences and professional services, all aimed at helping you do the best job you can — for renewable energy.

#### For the World

Help us influence the global development of renewable energy. Together, we can make our voices heard when global energy policy is shaped.

Whether at the United Nations, the World Bank, regional or national governmental level – your support ensures that the voice of reason – of renewable energy – is heard.

#### For the Future

Help us accelerate development in less developed regions, make possible education and healthcare where none existed, and shape the direction that will guide governments and industry towards a sustainable tomorrow.

Be a part of something global, positive and future oriented. Be a part of ISES.

#### Think Global – Act Local.

Membership of ISES is structured in such a way that you can live out your membership in your local national environment, amongst your immediate peers, and yet support and be involved in the global work of the Society.

# National Membership allows you to receive support from local ISES Sections on the ground – aware of local requi-

ground – aware of local requirements, co-ordinating local activities, in your local language.

### International Membership

brings with it the additional benefits described in this brochure, and makes you part of a growing global alliance for the advancement of renewable energy everywhere.

To join ISES at both national and international levels, contact: International Headquarters www.ises.org

or your National Section www.ises.org/sections today.

In doing so, you give meaning to the ISES motto of acting locally while thinking globally.



### ISES

### International Solar Energy Society

since 1954

Be an active part of the international renewable energy network!

Join ISES!





### **Membership Checklist**

- National Section Membership
- **International Membership**
- Additional Services

### **Join ISES**

by filling in the attached membership application form or register online at: www.ises.org/join

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**Phone:** +49-761-45906-0 **Fax:** +49-761-45906-99

**E-mail:** hq@ises.org **Web:** www.ises.org

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