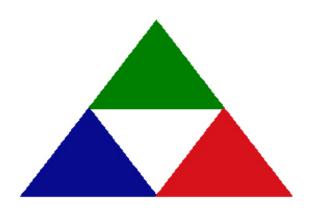
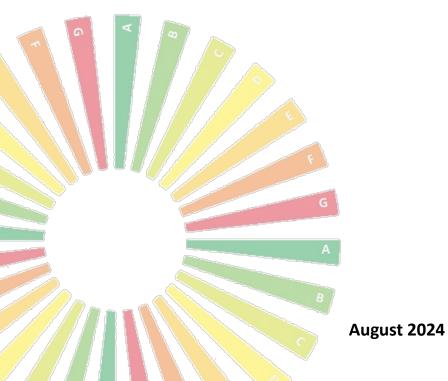
Adviesbureau voor Energiestrategie (AES) Energy Strategies for Sustainable Development



Supporting Sustainable Energy Development world-wide since 1991

General Profile





Adviesbureau voor Energiestrategie (AES)

Adviesbureau voor Energiestrategie (*AES***)** is an independent consulting and research office founded in 1991 by Dipl.-Ing. Wolfgang F. Lutz, an energy expert, who has been working in this field since 1980.

The main objective of **AES** is to contribute to sustainable energy development world-wide, with a specific focus on the implications of energy policies and systems on the environment and on human development. **AES** strives after applying an integral focus on energy and sustainable development.

AES specialises in strategic advice, know-how transfer and research in the energy field, covering areas like energy technology, economy, finance and policy.

Since its foundation in 1991, **AES** has acquired extensive experience in Europe, newly industrialised economies — in particular in Latin America and Asia, in centrally planned economies in transition and in developing countries. **AES** has realised projects on behalf of international organisations, government entities, universities and private companies.

Initiated by its founder and owner, who is also the managing director of **AES**, an international network of experts and professionals has emerged around the office. Collaborating experts and professionals are selected according to the high standards set by the office, which include: personal integrity, dedication, professionalism and intellectual independence. They represent a wide range of geographical and cultural backgrounds and of professional expertise, including various disciplines of engineering, energy economics, social sciences, public administration and management.

ESENERG

Following more than a decade of activities of **AES** in Latin America, a strategic decision was made to complement these activities by the creation of an independent organisation in the region. In May 2004, **ESENERG** was established in Asunción, Paraguay, as a professional partnership (*Sociedad Civil*) under Paraguayan civil law. **ESENERG** is an independent legal entity.

AES and **ESENERG** form an alliance of professional organisations under the motto:

Energy Strategies for Sustainable Development

'Energy Strategies' refers to our method of working, which addresses energy and energy-related social and environmental issues in a strategic way, focussing on the aim to achieve tangible results. **'Sustainable Development'** is the objective of the strategies, it is the major challenge of our time, which asks for unbiased, objective and purposeful professional work.



Guiding Principles

Independence

Professional and intellectual independence are the basic principles of **AES**. This independence is the only guarantee for unbiased advice. **AES** does not represent any commercial interests of third parties and carefully observes a critical distance to the particular objectives of the various players in the energy field and in international cooperation.

Professionalism

The complex energy problems of today, with all their technological, economic, environmental and social implications, deserve professional work, which is unbiased by ideological preferences. **AES** endeavours to respond to this challenge by providing high-level expertise and professional competence.

Active partnership

AES seeks to establish long-lasting relations with clients and co-operation partners. **AES** enters into a critical dialogue with the client or partner, proposes strategies to achieve the objectives of the project and assumes an active role in the implementation of the activities agreed upon. That way **AES** and the client or partner jointly work towards the solution of a specific problem.

Promotion of sustainable energy development

The main purpose of **AES** is to initiate, develop, conceptualise, support, promote and implement sustainable energy policies, programmes and projects. These activities are frequently carried out in co-operation with local organisations and experts. In pursue of these objectives, **AES** accepts assignments from government entities, international organisations, non-government organisations and private enterprises. These assignments have to be in line with the guiding principles of the office.

Synergy of theoretical know-how and practical experience

Besides a broad knowledge of energy issues, practical on-hand experience is required as a constant feedback. Know-how and knowledge obtained from practical fieldwork serve to critically assess the validity and specific relevance of generally accepted premises.

International co-operation

High levels of knowledge and expertise are available in many parts of the world. Recognising this, it is possible to move beyond the traditional relation of development co-operation and cooperate on an equal level with experts and organisations world-wide. *AES* endeavours to overcome cultural barriers as well as the antagonism between so-called developed and developing countries by open professional co-operation between experts at fair and transparent terms.



Fields of Activity

AES is a consulting and research office, focussing on four interrelated areas of activity:

- Energy policies and strategies
- Sustainable energy programmes and projects
- International energy policy dialogue and know-how transfer
- Research and Expertise

Consultancy and research projects are frequently realised in cooperation with members of the associated network of experts and — in particular in Latin America — in alliance with our sister organisation *ESENERG*.

Services

Energy policies and strategies

AES performs studies on a variety of energy-related subjects, which serve policy makers, legislators and international bodies in developing sustainable energy policies and programmes. Subjects addressed include: energy efficiency policies, strategies and regulation in Latin America; the role of legislation and regulation in the energy efficiency policies of the European Union and the Member States; energy sector reforms in Latin America; energy market integration in the European Union and in the MERCOSUR; strategies for the national energy efficiency programmes of Argentina, Chile, Panama, Paraguay, Peru and Thailand, and for demonstration and dissemination of innovative energy technologies in Europe, Latin America and Asia. AES acted as advisor to the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Lawrence Berkeley National Laboratory (LBNL) USA, and to the Energy Charter Secretariat in its in-depth reviews of energy efficiency policies and programmes of signatory states (Poland, Hungary, Bulgaria, Romania and Croatia), as well as a study on energy efficiency in the residential sector of the 51 signatory states of the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA). AES contributed to the First Working Cycle on Energy Efficiency and Renewable Energy in Chile and cooperated in the elaboration of the Energy Efficiency Action Plan of Chile, the Sustainable Energy Action Plan of Antigua & Barbuda and of the National Energy Agendas of Belize and Grenada, for the Latin American Energy Organisation OLADE. Furthermore, AES participated in policy reviews and market studies in the field of renewable energies and electric vehicles in Latin America, and serves as expert adviser to the ReSEMBID (Resilience, Sustainable Energy, Marine Biodiversity) Programme in the Caribbean Overseas Countries and Territories (OCT) of the European Union.

Sustainable energy programmes and projects

AES initiates, facilitates and implements sustainable energy programmes and projects, focussing on feasibility studies, the mobilisation and coordination of actors, the identification of financing sources and the elaboration of business plans. Examples of



activities include the promotion and implementation of energy efficiency standards and labelling in Algeria, the Andean Community, Argentina, Chile, El Salvador, Mexico, Panama, Paraguay, Peru, the Russian Federation and Ukraine; the promotion of energy services of local initiative in Ecuador and of decentralised energy services in the Chaco Region of South America. AES advised the National Energy Secretariat of Argentina, as well as the Algerian National Agency for the Promotion and Rationalisation of Energy Use (APRUE) and the Ministry of Energy of Algeria on the development and implementation of their energy efficiency standards and labelling programmes, the Mexican National Commission for Efficient Use of Energy on minimum energy performance standards for household appliances and environmental standards for household lamps, and the State Agency on Energy Efficiency and Energy Saving of Ukraine on the transposition of the EU directives and regulations for energy labelling and ecodesign. In Central America, AES has elaborated, on behalf of the World Bank, implementation guides for the national energy efficiency standards and labelling programmes of Panama and El Salvador, and is advising on standards for the global warming potential (GWP) of refrigerants and the design of a programme to accelerate the transition to energy efficient and low-GWP refrigeration and air conditioning equipment in Panama, as well as on energy efficiency and renewable energy in public buildings in Honduras. For the Sustainable Energy Programme of CONUEE Mexico and GIZ, AES cooperated in the development of a benchmarking system for federal public buildings and a certification and energy labelling system for non residential buildings, as well as in a study on air conditioning in social housing in Mexico. In the field of industrial energy efficiency, AES advised enterprises in Germany, the Netherlands and Romania, and analysed the technical, economic and market potential of cogeneration and of national gas technologies in Chile.

International energy policy dialogue and know-how transfer

AES has fostered the energy policy dialogue between Europe and Latin America in the framework of the project 'Promotion of Legal and Institutional Frameworks for Energy Efficiency in Latin America', a project jointly implemented by UN-ECLAC and the European Commission. Participants in this dialogue were parliamentarians, policy makers, regulators and experts from both regions. AES also participated in the Rio Energy Forum, organised by the ALURE Programme of the European Commission, and served as advisor to the Associated OPET Mercosur, which had been established by UN-ECLAC in the framework of the OPET Network of the European Commission. On behalf of the Vice-Minister of Mines and Energy of the Republic of Paraguay, AES organised a study tour on energy sector regulation in Europe. AES has been involved in regional training courses on energy efficiency standards and labelling — in cooperation with the Latin American Energy Organisation (OLADE) and the Collaborative Labeling and Appliance Standards Program (CLASP) — as well as training courses, training needs assessments and the elaboration of training programmes in the fields of energy efficiency and energy management in Argentina, Chile, the Netherlands and Thailand. Furthermore, AES contributed to national, regional and international seminars and workshops on energy efficiency, energy services and energy efficiency standards and labelling in Algeria, Argentina, Colombia, Costa Rica, Chile, Mexico, Panama, Peru, Uruguay and Venezuela. AES advised the Ministry of Regional Development, Building and Housing and the State Agency on Energy Efficiency and Energy Saving of Ukraine with regard to the transposition of the relevant parts of the EU Energy Efficiency Directive for energy audits and energy management systems in Ukraine. In the framework of the INOGATE Technical



Secretariat (ITS) Programme of the European Commission, *AES* provided technical assistance and supported activities in energy efficiency and renewable energies in the Eastern Partnership countries Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine, focusing on energy efficiency and renewable energy policy related activities. In cooperation with *ESENERG*, *AES* co-organised the International Seminar on Green Hydrogen for public and private entities in Paraguay and Uruguay.

Research and Expertise

AES is carrying out research in energy efficiency related topics and provides a range of expertise-related services directed at government entities, international organisations and private enterprises. These include strategic advice; evaluations of energy policies, programmes and projects; expert opinions, and contributions to international and national fora. Organisations which have benefited from these services include: industrial enterprises in various countries, R,D&D and international co-operation programmes of the European Commission (including: the 5th and 6th RTD Framework Programme, THERMIE, ENERGIE, INNOVATION, EC-ASEAN COGEN, ALURE, COOPENER, SAVE), the OPET Network of the European Commission, the European Parliament, the Energy Charter Secretariat, the Climate Technology Initiative of the International Energy Agency, GIZ, the National Energy Commission of Chile and the National Energy Secretariat of Panama. AES carried out and published research on energy efficiency standards and labelling in Latin America, the Andean Community and Algeria, and contributed to the Encyclopedia of Energy published by Elsevier. The director of AES is associated editor of 'Energy for Sustainable Development' and ad hoc reviewer of other scientific journals. He also served as member of the advisory board of the ALURE Programme of the European Commission.



Clients and Beneficiaries

Bakela Corporation, Republic of Korea Celulosa Arauco y Constitución S.A., Chile Climate Technology Initiative (CTI) of the International Energy Agency (IEA) Comisión Nacional para el Uso Eficiente de la Energía (CONUEE), Mexico Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)¹ **Energy Charter Secretariat**

European Bank for Reconstruction and Development (EBRD)

European Commission, Directorate General for Energy (DG ENER)² – Programmes: JOULE-THERMIE, ENERGIE, OPET Network, SYNERGY, COOPENER, SAVE

European Commission, Directorate General for External Relations (DG RELEX)3 -Programmes: PAIE, PHARE-TACIS, EC-ASEAN COGEN, ALURE

European Commission, Directorate General for Neighbourhood and Enlargement Negotiations (DG NEAR) - Twinning EU - Ukraine, INOGATE Programme

European Commission, Directorate General for Research and Innovation⁴ – 5th and 6th Framework Programme for Research and Technological Development

European Commission, EuropeAid Co-operation Office - Programmes: MEDA, ALIS

European External Action Service (EEAS) – ReSEMBID Programme European Parliament, Directorate General for Research

Expertise France

International Institute for Energy Conservation (IIEC), U.S.A. Junta del Acuerdo de Cartagena (Andean Pact)⁵ Latin American Energy Organisation (OLADE) Lawrence Berkeley National Laboratory (LBNL), U.S.A.

Ministry of Energy, Algeria

Ministry of Energy and Mines Peru – Proyecto para Ahorro de Energía (PAE)

Ministry of Public Works and Communications Paraguay - Cabinet of the Vice-Minister of Mines and Energy

National Agency for the Promotion and Rationalisation of Energy Use (APRUE), Algeria National Energy Commission (CNE), Chile National Energy Policy Office (NEPO), Thailand National Energy Secretariat, Argentina

¹ Until 2011: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

² Until 2010: DG TREN, formerly DG XVII - Energy

³ Until 2010, formerly DG I – External Relations

⁴ Formerly DG Research

⁵ Since 1997: Comisión de la Comunidad Andina



National Energy Secretariat, Honduras National Energy Secretariat, Panama

Physikalisch-Technische Bundesanstalt (PTB), Germany

State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE)

Steengroeve Winterswijk, the Netherlands

United Nations Development Programme (UNDP)

United Nations Economic Commission for Latin America and the Caribbean (ECLAC)

University of Twente – Technology and Development Group (TDG), the Netherlands

VOSSLOH Metal Works, Germany

The World Bank

Cooperation Partners

 $\hbox{B.\&S.U. Be ratungs- und Service-Ge sells chaft Umwelt, Germany}\\$

BEPTE Consultores, Spain

Collaborative Labeling and Appliance Standards Program (CLASP), U.S.A.

E2BIZ, Chile

Energomanagement Pro, Ukraine

EXCENCI Conseil International en Énergies Durables, France

EXPLICIT Expertise Énergies Climat, France

Grupo de Investigación en Sistemas Energéticos (GISE), Universidad Nacional de Asunción, Paraguay

GOPA Worldwide Consultants, Germany

IBF International Consultants, Belgium

ICF International, United Kingdom

INTEGRATION environment & energy, Germany

IT Power, United Kingdom

NIFES Consulting Group, United Kingdom

Programa de Estudios e Investigaciones en Energía (PRIEN) – Universidad de Chile

REVELLE Group, Belgium

SINAE Energía y Medio Ambiente, Spain

Waide Strategic Efficiency, United Kingdom

Experts in various European and Latin American countries and the U.S.A.



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Adviesbureau voor Energiestrategie (AES) is a private company established in 1991, registered at the Chamber of Commerce of Leiden, the Netherlands, N $^\circ$ 28059671

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