

Measuring Aid for Energy



Statistics presented in this note relate to official development assistance (ODA) for the energy generation and supply sector. The DAC statistical definition of aid to energy generation and supply is given in Annex 1.

Main findings

In 2007-08, total annual average aid commitments to energy amounted to almost **USD 7 billion**. Among DAC members, the largest donors in 2007-08 were Japan and the United States (on average USD 1.4 billion each), Germany (USD 844 million) and Spain (USD 261 million).

Since the mid-1980's and up to the early 2000s, aid to energy has fallen by half. It has risen again during the last decade, and is now close to its mid-1980's peak in real terms.

Over the period 2003-08, aid flows to energy primarily targeted Asia (61%), followed by Africa (26%). Lower middle income countries received the bulk of aid to energy (56%), and low income countries a further 38%.

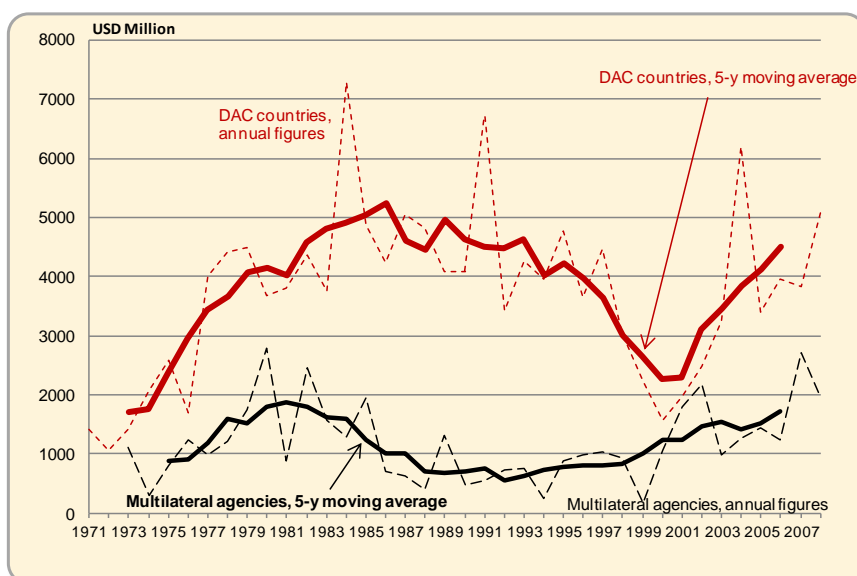
The trend in aid to energy (Chart 1) can be explained by two main factors:

- After a steady growth up to the mid 1980s, and as a consequence of the “Helsinki package” – measures restricting the use of tied aid – aid to energy has fallen until the early 2000s. With the new measures, DAC members reduced their interventions in the production side of the energy sector (large infrastructure projects), and focused more on capacity development aspects (e.g. support to development of energy policies) that involved smaller amounts of aid.
- Aid to energy started rising again in the early 2000s, with the adoption of the Kyoto protocol that led to increased support by donors in renewable sources of energy. Over the period 2003-08, bilateral aid to energy increased at an average annual rate of 16% (real terms).

In 2007-08, DAC countries' bilateral average aid commitments to energy amounted to **USD 4.6 billion**. Taking into account multilateral agencies, the total was **USD 6.9 billion**.

Chart 1. Trends in aid to Energy

Commitments, 1973-2008, 5-year moving averages and annual figures, constant 2007 prices



The trend in aid to the energy sector is set by a few large donors (see Table 1): in 2007-08, more than half of DAC countries' total bilateral aid commitments came from two donors: Japan (31%) and the United States (30%). These were also the largest donors on a disbursement basis.

On the multilateral side, IDA is the predominant agency, its flows accounting for 63% of total multilateral aid to energy in 2007-08, followed by EU institutions accounting for 24% (the EU is the only multilateral member of the DAC).

Table 1. Aid to energy by donor in 2002-2008

Annual average commitments and disbursements, shares in total sector-allocable aid, constant 2007 prices

	Commitments, USD million			% of Donor Total			Disbursements, USD million	
	2003-04	2005-06	2007-08	2003-04	2005-06	2007-08	2005-06	2007-08
Australia	0	8	21	0	1	1	5	13
Austria	1	7	9	1	3	2	5	9
Belgium	11	5	30	1	1	3	3	5
Canada	16	15	10	1	1	0	13	9
Denmark	45	50	45	4	4	5	43	49
Finland	17	37	6	5	8	1	4	9
France	103	106	108	2	2	2	94	126
Germany	313	564	844	7	10	12	242	465
Greece	0	0	1	0	0	0	0	1
Ireland	0	0	0	0	0	0	0	0
Italy	50	194	27	8	24	3	100	76
Japan	1829	1092	1428	26	13	13	756	1108
Luxembourg	0	1	2	0	0	1	1	2
Netherlands	70	66	139	3	2	4	43	80
New Zealand	1	2	1	1	1	0	1	1
Norway	68	74	177	5	4	8	115	219
Portugal	1	1	0	1	0	0	1	0
Spain	80	42	261	6	3	9	52	73
Sweden	56	45	59	4	2	4	46	51
Switzerland	22	19	19	3	3	2	21	14
United Kingdom	181	137	45	5	3	1	76	50
United States	1598	1212	1413	10	7	7	1555	1060
Total DAC countries	4463	3676	4642	9	6	6	3175	3420
AfDF	71	55	198	5	4	14	41	40
AsDF	92	38	75	5	3	5	..	..
EC	165	507	567	2	5	5	152	321
IDA	791	715	1448	7	8	12	473	879
IDB Sp.Fund	..	19	23	..	4	8	..	..
UNECE*	..	..	1	..	..	14	..	1
UNDP	0.4	1	1	0	0	0	1	1
GEF*	..	..	16	..	..	12	..	..
Total Multilateral	1119	1335	2328	5	6	9	..	..
Total	5582	5011	6971	8	6	7	..	..

Notes:

* 2007-08 data refers only to 2008 data.

General budget support, once integrated in developing countries' domestic budgets, will contribute to the development of the energy sector, but this contribution is not specified and not taken into account in the above figures.

Sector-allocable aid: in order to better reflect the sectoral focus of donors' programmes, when calculating the share of aid to energy in total bilateral aid (column "% of Donor Total"), contributions not susceptible to allocation by sector (general budget support, actions relating to debt, humanitarian aid, administrative costs and other internal transactions in the donor country) are excluded from the denominator.

Korea became a DAC member with effect from 1 January 2010. It is not included in the figures for this brochure, but will be integrated as from the next edition. Aid to energy by Korea amounted to **USD 142 million in 2007-08**, which represented 11% of its total bilateral sector allocable aid.

A number of individual donors extend relatively high proportions of their aid to energy projects: Japan (13%), Germany (12%), Spain (9%), Norway (8%), and the United States (7%) are above the 6% DAC average for the years 2007-08.

Table 2 shows that for DAC members (including EU institutions), six of the top ten recipients are in Asia, thanks to large grants from the United States to Iraq and Afghanistan, and to large Japanese loans to Iraq, India, Indonesia and Vietnam. Recent examples of large projects in the energy sector include wind energy parks by Spain in Tunisia (a USD 287 million loan), hydro-power plant by Germany in India (a USD 115 million loan), and support to the implementation of Ukraine's energy policy by the EU institutions (USD 120 million grant).

Table 2. Main recipients and donors of DAC members' bilateral aid to the energy sector

2007-08 average commitments in millions of USD, constant 2007 prices

	Japan	United States	Germany	EU Institutions	Spain	Other DAC members	Total DAC members	% of aid to energy to all recipients
Iraq	361	599	0	0	0	0	961	18
India	307	14	93	0	0	26	440	8
Afghanistan	0	254	18	0	0	1	274	5
Pakistan	51	84	67	17	0	0	219	4
Indonesia	201	1	0	0	0	18	220	4
Viet Nam	177	1	1	0	0	9	187	4
Ukraine	0	25	2	150	0	8	185	4
Tunisia	0	0	0	40	132	15	187	4
Egypt	87	11	38	1	0	28	165	3
Tanzania	8	103	0	0	0	70	181	3
Other recipients	236	318	626	359	129	522	2189	42
Total amount	1428	1413	844	567	261	697	5209	100
<i>% of aid to energy from all DAC members</i>	27	27	16	11	5	13	100	

Loans and grants

Over the period 2007-08, DAC members' bilateral ODA to energy was extended in the form of grants (52%), loans (46%) and equities (2%). The shares vary among the top five donors with Germany, Japan and Spain allocating their aid to energy mainly in the form of loans (69%, 95% and 96% respectively), while the United States only used grants, and the EU institutions also used mainly grants (78%).

Among multilateral agencies, the major loan providers were IDA (USD 1.5 billion on average in 2007-08) and the African (USD 198 million) and Asian Development Funds (USD 75 million).

Including non-concessional flows

The figures presented above deal only with aid, i.e. grants and soft loans. But developing countries also receive unsubsidised loans from major bilateral and multilateral lenders. The major providers of these loans in 2008 to the energy sector were IBRD (USD 2.4 billion), and the Asian (USD 1.5 billion) and African Development Banks (USD 535 million).

Regional breakdown of aid to energy

Chart 2 shows that in the period 2003-08, aid flows to energy primarily targeted Asia (61%), approximately one third to each sub-regions (South and Central Asia, Middle East, and far East Asia). Lower middle income countries received the bulk of aid to the energy sector (56% of total aid to energy - excluding regional/multi-country aid that cannot be allocated to income groups). Low income countries received a further 38%.

Chart 2. Regional breakdown of aid to energy

Commitments in 2003-08, constant 2007 prices

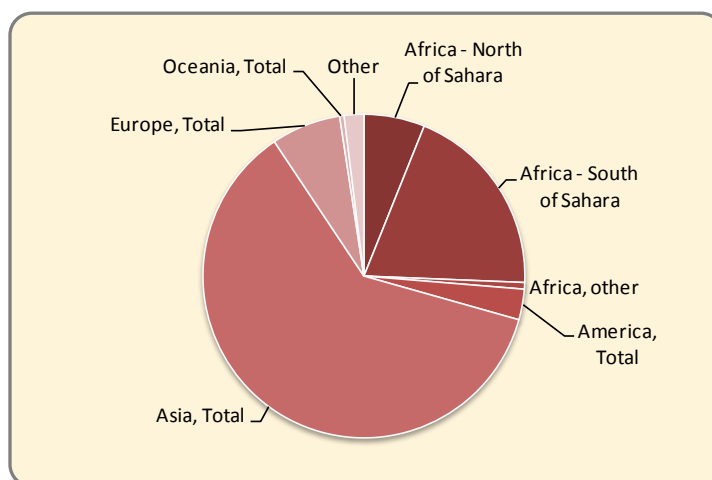


Chart 3. Sub-sectoral breakdown of aid to energy

Commitments in 2000-01 and 2007-08, constant 2007 prices

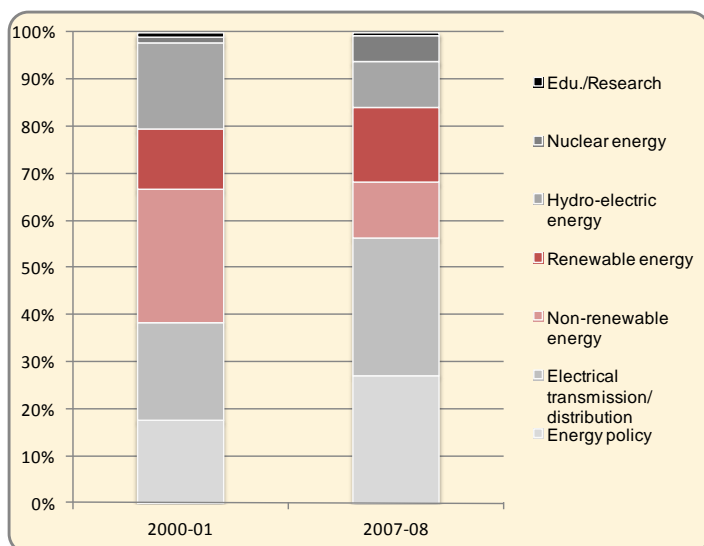


Chart 3 highlights that the electrical transmission/distribution and the energy policy sub-sectors both account for more than half of the resources allocated by donors in 2007-08.

During the last decade, donors shifted their resources from non-renewable to renewable sources of energy.

Box. Support to mineral resources and mining

In addition to supporting energy generation and supply in developing countries, donors also provide aid for the purpose of prospection and extraction of the raw materials involved in energy generation, such as coal, gas and oil. In 2008, donors allocated approximately **USD 721 million** to this purpose (see selection of sub-sectors in Annex 2). The trend of aid is also on the rise in this field, with an 8% annual growth rate observed since 1995.

Annex 1

Energy generation and supply: List of sub-sectors, and groupings used in Chart 2

CRS CODE	DESCRIPTION	Clarifications / Additional notes on coverage
Energy generation and supply		
<i>Grouping 1</i>		
23010	Energy policy and administrative management	Energy sector policy, planning and programmes; aid to energy ministries; institution capacity building and advice; unspecified energy activities including energy conservation.
<i>Grouping 2 : Non-renewable energy</i>		
23020	Power generation/non-renewable sources	Thermal power plants including when heat source cannot be determined; combined gas-coal power plants.
23050	Gas distribution	Delivery for use by ultimate consumer.
23061	Oil-fired power plants	Including diesel power plants.
23062	Gas-fired power plants	
23063	Coal-fired power plants	
<i>Grouping 3: Renewable energy</i>		
23030	Power generation/renewable sources	Including policy, planning, development programmes, surveys and incentives. Fuelwood/charcoal production should be included under forestry (31261).
23067	Solar energy	Including photo-voltaic cells, solar thermal applications and solar heating.
23068	Wind power	Wind energy for water lifting and electric power generation.
23069	Ocean power	Including ocean thermal energy conversion, tidal and wave power.
23070	Biomass	Densification technologies and use of biomass for direct power generation including biogas, gas obtained from sugar cane and other plant residues, anaerobic digesters.
<i>Grouping 4</i>		
23040	Electrical transmission/distribution	Distribution from power source to end user; transmission lines.
<i>Grouping 5</i>		
23064	Nuclear power plants	Including nuclear safety.
<i>Grouping 6</i>		
23065	Hydro-electric power plants	Including power-generation river barges.
23066	Geothermal energy	
<i>Grouping 7: Educ./research</i>		
23081	Energy education/training	Applies to all energy sub-sectors; all levels of training.
23082	Energy research	Including general inventories, surveys.

Annex 2

Mineral resources and mining: List of sub-sectors related to raw materials used for producing energy

<i>CRS CODE</i>	<i>DESCRIPTION</i>	<i>Clarifications / Additional notes on coverage</i>
Mineral resources and mining		
32210	Mineral/mining policy and administrative management	Mineral and mining sector policy, planning and programmes; mining legislation, mining cadastre, mineral resources inventory, information systems, institution capacity building and advice; unspecified mineral resources exploitation.
32020	Mineral prospection and exploration	Geology geophysics, geochemistry excluding hydrology (14010) and environmental geology (41010), mineral extraction and processing, infrastructure, technology, economics, safety and environment management.
32261	Coal	Including lignite and peat.
32262	Oil and gas	Petroleum, natural gas, condensates, liquefied petroleum gas (LPG), liquefied natural gas (LNG); including drilling and production.

Annex 3 - Technical note
Monitoring aid flows to the energy sector
DAC statistics - CRS Aid Activity database

DAC and CRS data are the unique source for official, standard and comparable statistics on ODA

The OECD Development Assistance Committee (DAC) collects aid flows at activity level through the Creditor Reporting System (CRS) and expanded CRS (CRS++), and in the form of aggregates through the annual DAC Questionnaire. The data collection is based on a standard methodology and agreed definitions. Data can be used to analyse trends and compare the efforts of donors.

Aid to energy is sub-divided in 17 sub-sectors

The full definition of each sector and sub-sector is given in Annex 1. The definition of aid to energy excludes aid to other sectors which may have a direct or indirect effect on energy generation and supply, as exploration and exportation of raw materials as an input of energy generation/supply.

Example of data collection at activity level

For most types of financial flows, the CRS database records the face value of the activity at the date a grant or loan agreement is signed with the recipient ("commitments"). Data on the amounts disbursed each year are available at the activity level also ("disbursements"). Aid flows are measured on a calendar year basis.

Example: the European Commission through the European Investment Bank supports a project in Bujagali, Uganda, consisting in the construction of a dam and a hydropower plant on the Nile, Lake Victoria. It was committed in 2007 with a first disbursement in 2008 (current thousand Euros).

Original commitment

Year	Donor	Agency	Project number	Recipient	Sector code	Amount	Flow type	Currency
2007	EU institutions	EIB	24282	Uganda	23065	98 500	Loan	Euro

Subsequent disbursements

Year	Annual disbursement	Cumulative disbursement	Remains to be disbursed
2008	23 432	23 432	75 068