

MEXICO

1. CDM investment climate index: regional comparison

CDM investment climate index (CDM ICI), Latin America - July 2009 (excerpt)

Rank	Country	CDM ICI (max. 100 points)	Regional classification
1	Chile	93.4	Very good climate
2	Mexico	88.1	Good climate
3	Brazil	86.8	Good climate
4	Peru	83.6	Good climate
....	
33	St Kitts + Nevis	12.5	Unsatisfactory climate

*Source: DEG - Deutsche Investitions - und Entwicklungsgesellschaft mbH
(For calculation method, see www.kyoto-coaching-cologne.net)*

The CDM ICI measures the investment climate for CDM projects. It can range between 100 points (highest) and 0 points (lowest). Altogether, the climate is rated as 'good' in Mexico. Despite a higher number of registered CDM projects, Mexico is behind Chile in the ranking as it receives a worse assessment for its general private investment climate and in the Corruption Perceptions Index of Transparency International.

2. General climate for foreign investments

General economic statistics 2008	
Population:	106.3 million inhabitants
Nominal GDP:	US\$ 1,088 billion
Per capita GDP:	US\$ 10,235
GDP growth (real):	+1.3 % (IMF forecast for 2009: -7.3%)
Consumer prices:	+5.1%
Goods exports:	US\$ 291.3 billion
Goods imports:	US\$ 309.4 billion
Foreign direct investments:	US\$ 18.6 billion
Foreign debt (end of 2008):	US\$ 210.0 billion (gross)
Currency reserves (end of 2008):	US\$ 84.0 billion
Exchange rates (25.05.09):	US\$ 1 = MXN 13.21, EUR 1 = MXN 18.50
Country credit rating acc. to Institutional Investor (March 2009):	65.7 out of 100 points (Rank 45 of 177; -3.6 points on previous year)
Corruption Perceptions Index 2008 (Transparency International):	3.6 out of 10 points (Rank 72 of 180; 10 = free of perceived corruption)

Locational advantages:

Membership in NAFTA, OECD and WTO; political stability and legal certainty for foreign direct investments; Western system of values and liberal democratic order; developed infrastructure; large domestic market; young population; open foreign trade regime (12 free trade agreements with 44 states); favourable wage levels for manual labour

Locational disadvantages:

Government and private monopolies on the petroleum, electricity and telecommunications (fixed network) markets; restrictive and costly SME finance in the banking sector; rigid labour law; tax system in need of reform

3. Specific climate for CDM projects

3.1 Ongoing and planned CDM projects in the country

By mid-June 2009, more than 4,200 project applications to the CDM Executive Board (EB), which is responsible for the international approval of CDM projects, were in the pipeline from all over the world. Of these, 1,662 have already been registered by the EB, 114 or 7% from Mexico, which ranks fourth in the world in 2009. Due, however, to its comparatively high number of small projects, it only recorded a share of almost 3% in Certified Emission Reductions (CERs) for the registered measures, putting it in fifth place.

According to information on the UNFCCC website, the Mexican projects had been awarded a total of almost 5.9 million CERs by mid-June 2009, a clear increase on 2007, when the figure generated was only 1.5 million.

Projects in Mexico registered by the CDM Executive Board as at June 2009

Project category	Number of projects	Estimated annual emission reductions (1,000 t CO ₂ e)
Decomposition of HFC23	1	2,155
Biogas/Methane combustion	63	2,157
Electricity generation from biogas/methane gas	28	265
Landfill gas extraction and use	10	1,348
Power/Heat cogeneration from natural gas and biogas	1	4
Windpower	7	2,301
Hydropower	3	120
Energy efficiency (chemical industry)	1	261
Total	114	8,611

CO₂e = carbon dioxide equivalent

Source: UNFCCC, UNEP Risø Centre

At national level, 189 projects have so far received approval from the designated national authority (DNA). Although there is a broad gamut of possible project fields for CDM in the country, most of the measures initiated till now address emission reductions in mass livestock farming (extraction or use of methane in pig and cattle farms). AgCert, which belongs to the international power producer, AES, is the international market leader here. Also with a strong

position in this segment, EcoSecurities has developed numerous projects in the country in collaboration with the Swiss Cargill corporation and the Mexican pig breeder GCM.

CDM projects in Mexico with a national letter of approval (carta de aprobación) as at June 2009

Project category	Number of projects	Estimated annual emission reductions (1,000 t CO ₂ e)
Decomposition of HFC23	1	2,155
Emission reduction, methane gas extraction and use in intensive livestock farming	143	3,490
Landfill gas extraction and use	14	1,968
Power/Heat cogeneration and energy efficiency	11	696
Windpower	8	2,264
Hydropower	5	191
Other	7	828
Total	189	11,592

Source: Ministry of the Environment SEMARNAT (see the ministry website cited in the Service section for more project information)

Since 2007, the number of projects approved by the Mexican Designated National Authority (DNA) has only risen by twelve. One reason for this is that the few investors engaged in methane gas extraction on livestock farms, who had initiated very many projects in previous years, have recently been reticent to expand their portfolio.

So far, CDM has been slow to develop in other promising fields in Mexico. Extensive prospects for CDM projects are still seen in the electricity, oil and gas sector, in solid waste management (reduction of landfill gas emissions) and in energy-intensive industrial segments (e.g. in cement production or in the steel industry). There is also multiple scope in renewable energies, which has hardly been harnessed till now, but CDM activities are likely to step up here in future (see Section 3.6).

The programmatic approach (Programme of Activities - PoA), where many small measures are bundled together, also affords new project opportunities. A project for replacing conventional light bulbs with more energy-efficient illuminants is already in the approval phase at the EB.

To advance CDM in the country, the foreign trade development bank, Bancomext, and the development bank, Nafin, both state-run, along with the non-governmental organization, Centro Mario Molina and the Ministry of the Environment, SEMARNAT, founded the fiduciary Mexican Carbon Fund (Fondo Mexicano de Carbono - FOMECAR, www.fomecar.com.mx) in November 2006. The remit of the fund includes supporting national enterprises and public institutions in identifying and defining project ideas and providing technical and financial assistance in drafting Project Idea Notes (PINs) and Project Design Documents (PDDs). Bancomext also offers advice on selling CERs.

The funds provided by Bancomext and the Mexican Government for FOMECAR have been supplemented by German and Italian contributions to enlarge the fund's financial scope. The Kreditanstalt für Wiederaufbau (KfW) has made commitments here, for example. Additional funds have come from the European Investment Bank (EIB), the World Bank and the Inter-American Development Bank (IBD).

So far, there has been little specific information on Emission Reduction Purchase Agreements (ERPAs) from Mexico. In the assessment of market experts, many projects are developed bilaterally with the early involvement of a CER buyer. The Danish Carbon Fund is known to have acquired 1 million CERs from landfill gas use in Monterrey. The Spanish Carbon Fund in turn has concluded ERPAs for the La Venta II windpark belonging to the national power supplier CFE in the federal state of Oaxaca and for a transport project in Mexico City (Metrobus). Besides the relevant carbon funds, numerous private buyers of emission certificates are also engaged on the market, including the Deutsche Bank and the KfW Carbon Fund.

3.2 Mode of operation of the Designated National Authority (DNA)

The Inter-Ministerial Commission for Climate Change (CICC - Comisión Intersecretarial de Cambio Climático) acts as the DNA in Mexico. The Commission convenes twice a year and is made up of senior representatives of the environment, energy, agriculture, transport, economics, social and foreign affairs ministries. The lead agency in the CICC is the Ministry of the Environment, where the Director General for Climate Change Projects acts as central coordinator.

A Consultative Council for Climatic Change is answerable to CICC, grouping representatives of various social sectors, prominent private individuals as well as academics and researchers, each appointed for a four-year term. The Council prepares expert studies for CICC and frames proposals for strategies and plans of action.

The Mexican DNA is esteemed for efficient and speedy operations. Working meetings of the responsible committee, COMEGEI, a working group of CICC, take place each month. After submission of the requisite documents, a decision can be expected within 30 days. The committee appraises the documents and projects and submits them to the President of CICC with a recommendation.

Of prime importance is that the projects contribute to a sustainable reduction in greenhouse gas emissions and fit in with the national strategy for climate change. Details on procedure up to the issuance of the national letter of approval (carta de aprobación) are available in Spanish at the website of the Mexican Ministry of the Environment and Natural Resources – SEMARNAT-(www.semarnat.gob.mx/queessemarnat/cambioclimatico).

Cooperation with the ministries involved (particularly the Ministry of the Environment, SEMARNAT, and the Ministry of Energy, SENER) is rated as good, also when it comes to support for project developers and prospective investors.

3.3 Local consultants, validators and verifiers

Amongst the Designated Operational Entities (DOEs) operating in the country, DNV and TÜV Süd hold a particularly strong position. While TÜV Süd has largely validated projects by AgCert till now, Ecorescurities has cooperated in particular with Norway's DNV. The four windparks registered to date were all validated by the Spanish AENOR. TÜV Rheinland also provides DOE services in Mexico.

Various consultants offer support in preparing the requisite project documents (PDDs and PINs) in Mexico. The World Bank's Prototype Carbon Fund has also participated in developing Mexican CDM projects.

At present, DEG is preparing to recruit a German CIM expert at its office in Mexico City to handle CDM projects, with the focus on renewable energy.

3.4 Local legal requirements for CDM projects and taxation aspects

The Mexican senate ratified the Kyoto Protocol on 29 April 2000. There is no special legislation for CDM projects. CICC has, however, adopted a National Strategy for Climate Change for 2007, which is binding for the ministries involved. It is also intended as a contribution to attaining the overriding environmental goals of the National Development Plan 2007 - 2012.

The requirements for project approval by CICC were officially adopted in 2005 (Acuerdo por el cual se expiden los procedimientos para la emisión de cartas de aprobación de proyectos de reducción o captura de emisiones de gases de efecto invernadero) and published in the official gazette, Diario Oficial de la Federación of 27 October 2005 (available at www.semarnat.gob.mx/leyesynormas/Acuerdos/ACUERDO_GAS_INVER_27_OCT_2005.pdf).

There are no tax incentives or supplementary or exemption provisions under fiscal law for CDM projects. Original efforts by CICC to gain income tax exemption for CER revenue failed due to opposition from the Ministry of Finance.

3.5 CDM partnership agreements

Mexico has completed partnership agreements with various governments and institutions to facilitate cooperation in climate protection projects. There are agreements of this type with Canada, the Japan Bank for International Cooperation (JBIC) and some European countries, for example. Mexico signed a memorandum of understanding with Germany on 8 December 2005 on cooperation in CDM projects and climate policy issues. This binds both sides to cooperation and mutual support as well as to exchanging relevant information.

3.6 Opportunities for CDM projects in the energy sector

Because of the high carbon intensity of its energy supply, Mexico is predestined for CDM projects in the energy sector. There is still considerable scope for reducing greenhouse gas emissions in the operating segments of the state-run petroleum and gas monopolist PEMEX and the national power supplier CFE. Almost 100 larger-scale projects have been identified here, most of which are still awaiting implementation. There are extensive prospects for reducing emissions, for example, in power and heat cogeneration or in using the gas that occurs during the petroleum production.

The public energy sector is, however, subject to rigid legal provisions. This is why the implementation of CDM projects at PEMEX and CFE takes a very long time. Both companies are prohibited from entering into alliances with private enterprises and most of the profits earned must be paid to the inland revenue. Both are also short of investment capital.

In the electricity sector, industrial consumers can install and operate power generation plants to meet their own needs or contract third parties for this. Permission must be sought from the Regulatory Energy Commission, CRE (www.cre.gob.mx). This is attractive for many enterprises, since industrial power prices in Mexico number among the highest in the OECD and supply bottlenecks are common. CDM certificates make a welcome contribution to project finance here.

Energy and environmental data

	Mexico	Latin America	OECD
Primary energy supply (Mtoe 2006)	177.4		
of which from renewable energy sources	approx. 9%		
Electricity consumption (TWh 2006)	208.77		
of which from renewable energy sources	approx. 15%*)		
CO ₂ emissions from fuel combustion (Mt, 2006)	416.26		
Electricity consumption/capita (kWh/capita, 2006)	1,993	1,777	8,381
CO ₂ /primary energy supply (t of CO ₂ /toe, 2006)	2.35	1.83	2.32
CO ₂ per capita (t of CO ₂ per capita, 2006)	3.97	2.14	10.93
CO ₂ /GDP (kg of CO ₂ /US\$, purchase power parity 2000; 2006)	0.40	0.28	0.41

*) Of this almost three-quarters hydropower and a fifth geothermal energy

Sources: IEA, EurObserv'ER

Mexico is particularly well endowed with natural resources for renewable energies in all technology sectors. Following the announcement of an ambitious climate protection programme in 2007, a law for the promotion of renewable energies was enacted at the end of 2008. Till now, the government has, however, been slow to set annual subtargets and implement the programme. Private operators may generate alternative power and sell it to CFE with CRE consent, but remuneration is presently so small that these projects are unprofitable in the estimation of experts.

Seven Mexican windpower projects have been registered by EB to date, most dating from 2007 or earlier, however. According to the state locational marketing agency, ProMéxico, Spanish investors, such as Unión Fenosa, Eoliatec and Gamesa, are looking to commit US\$ 4.5 billion to expand windpower in the next five years.

3.7 Finance facilities for CDM projects

The Deutsche Investitions - und Entwicklungsgesellschaft mbH (DEG), for example, provides facilities for project finance on commercial terms, including long-term loans, mezzanine finance, equity contributions and guarantees. Besides finance for commercially viable CDM projects, DEG can also draw on know-how for assessing earnings prospects from climate protection certificates and supports its clients in the certification process via its partner network.

Furthermore, DEG is an implementing organisation for the Public-Private Partnership (PPP) Programme of the German Ministry for Economic Cooperation and Development (BMZ). Under this programme, environmental projects in Mexico can be assisted with up to EUR 200,000, not exceeding 50% of the total costs of the measure.

4. Recap

There is no doubt that, next to Chile and Brazil, Mexico is among the most promising locations in Latin America for CDM projects. While the potential for CO₂ reductions amounts to as much as 100 million t/year, as estimated by FOMECAR, less than a mere 7 million t/year has been forthcoming from measures registered by the UN to date.

Apart from projects in livestock farming, Mexico has made little use of its CDM potential till now. This, however, is not due to the operations of the Mexican DNA, which is generally assessed favourably. The main reason is the sluggish implementation of reforms in the energy sector.

Parallel to reforming the petroleum industry, a new policy is to be implemented in renewable energies. The government intends to use a part of the returns from the oil industry to promote renewable energy and energy efficiency. The prime goal is to reduce dependence on fossil fuels, which currently account for 90% of Mexican energy supply.

5. Advice/Service

DNA/Interministerial Commission for Climate Change (CICC - Comisión Intersecretarial de Cambio Climático);

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KfW Carbon Fund;

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DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH (advice/project finance);

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Imprint

Published by:

Germany Trade and Invest

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Headquarters: Friedrichstraße 60, 10117 Berlin

Chief Executives: Dr Jürgen Friedrich, Michael Pfeiffer

Chairman of the Supervisory Board: Dr Bernd Pfaffenbach, State Secretary at the Federal Ministry of Economics and Technology

Registered at Local District Court: Charlottenburg · Registration Number: HRB 107541 B

Germany Trade & Invest is supported by the Federal Ministry of Economics and Technology and by the Federal Ministry of Transport, Building and Urban Affairs in accordance with a German Parliament resolution.