

Study

MARKET INFO CHILE – PHOTOVOLTAICS

dena-Market Information System

www.export-erneuerbare.de or <http://exportinitiative.dena.de>

Supported by:



on the basis of a decision
by the German Bundestag

IMPRINT

Publisher

Deutsche Energie-Agentur GmbH (dena) – German Energy Agency

Renewable Energies

Chausseestraße 128 a

10115 Berlin

Phone: + 49 (0)30 72 61 65-600

Fax: + 49 (0)30 72 61 65-699

Email: info@dena.de

Internet: www.dena.de

Creation/Editing

Thomas Wenzel, Johannes Asen

November 2014

All rights reserved. Use of this document shall be subject to the consent of dena.

All content has been compiled with all possible care and to the best of the compiler's knowledge.

dena does not guarantee the topicality, correctness and completeness of the information provided.

dena shall not be liable for any material or immaterial damage caused directly or indirectly by the use or non-use of the information presented, so long as dena cannot be charged with any demonstrably intentional or grossly negligent fault.

Official websites

Homepage: www.export-erneuerbare.de

Online shop: <http://exportinitiative.dena.de>

Supported by:



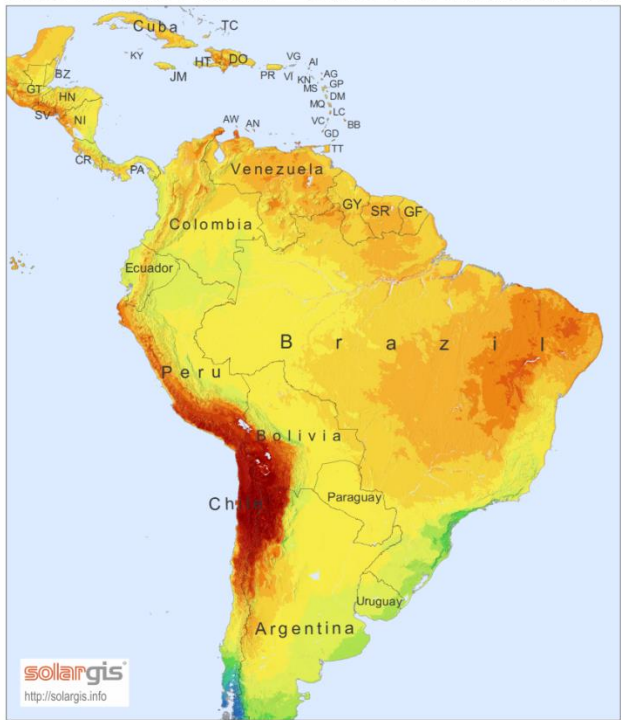
Federal Ministry
for Economic Affairs
and Energy

on the basis of a decision
by the German Bundestag

SOLAR IRRADIATION & POPULATION DENSITY

Annual global solar irradiation

Global Horizontal Irradiation Latin America and the Caribbean



Average annual sum, period 1999-2011
<1300 1500 1700 1900 2100 2300 2500 2700 > kWh/m² SolarGIS © 2013 GeoModel Solar

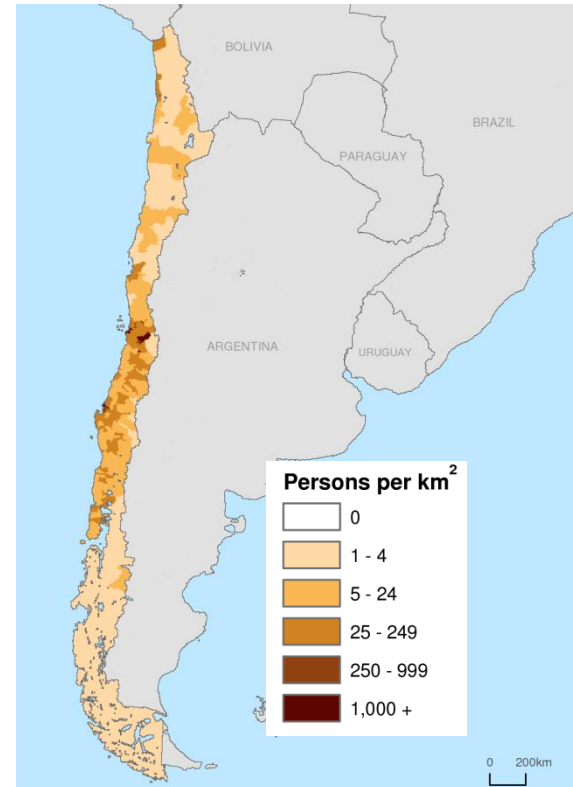
Source: SolarGIS (2014a), SolarGIS (2014b)

Direct Normal Irradiation Chile



Average annual sum, period 1994-2010 [kWh/m²]
<1000 1400 1800 2200 2600 3000 3400 3800 > SolarGIS © 2013 GeoModel Solar

Population density



Source: SEDAC (2005)

BASIC DATA

General basic data (2013)			
Area	756,102 km ²	GDP	137,109 bn chil\$ (~ 208.2 bn € ^{**})
Population (2014)	17.4 m	GDP (per capita)	7.8 m chil\$ (~ 11,865 € ^{**})
Language	Spanish	GDP growth	+4.2 %
Government type	Republic	Inflation	1.8 %
Administrative division	15 regions, 54 provinces	Unemployment rate	6.4 %
Basic energy market data (2013)			
Electricity consumption	68.8 TWh		
Total electricity import	-		
Electricity price 2012 (residential) gross	90.08 chil\$ / kWh (~ 14.43 €ct / kWh*)		
Electricity price 2012 (industry) gross	61.56 chil\$ / kWh (~ 9.86 €ct / kWh*)		
Share of renewable energy (gross electricity generation)	36 % (5.85 % , without hydro power generation)		
Estimated increase in electricity consumption (2012 - 2030)	+ 6-7 % p. a.		
Annual average global solar irradiation	2,048 kWh / m ² a (north), 1,475 kWh/m ² a (south)		

* Annual average exchange rate 2012: 1 Euro = 624.330 chil\$, **Annual average exchange rate 2013: 1 Euro = 658.6 chil\$

PHOTOVOLTAIC MARKET INDICATORS

Indicators					
Market size (on- and off-grid capacity installed per year)	2010: n/a	2011: n/a	2012: 2.6 MW	2013: 4.1 MW	2014e: 400 MW
Installed PV capacity (08/2014)	244 MW				
Expansion targets at national level	<ul style="list-style-type: none"> In 2008, the so-called Non-Conventional Renewable Energy Law (Ley 20.257) introduced a quota for the feed-in of non-conventional renewable energies (ERNC*). Since 2010, companies producing commercially available energy must provide an annual share of 5 % coming from ERNC sources. From 2015, this percentage will be increased each year to a total of 10 % by 2024. The law also introduced tradable renewable energy certificates as well as penalty payments that parties need to pay in case of non-compliance. In 2013, the binding quotas were increased with the coming into force of a new law: the share of ERNC in the overall electricity mix is to be increased to 20 % by 2025 (Ley 20.698 from 2013). No concrete expansion targets for PV. 				
Most important market drivers since 2013	<ul style="list-style-type: none"> Chile offers excellent conditions for the use of solar energy, especially in the North. Given the high solar irradiation, the Atacama desert is one of the most suitable areas for the generation of solar energy. Chile is one of the countries with the highest energy prices in Latin America. Here, the energy prices have doubled within the past seven years, according to Energy Minister Maximo Pacheco. Even in an international comparison the prices in Chile can be considered as high. Due to a dynamic economic development, the energy demand is expected to double by 2020 as compared to 2010. The Chilean government count on their national energy strategy 2012 to 2030, giving high priority to an expansion of ERNC. Net metering/billing has been in force since October 2014. A growth in the market segment of small-scale installations is possible. 				

* ERNC - Energías renovables no convencionales: wind, solar, micro-hydropower, wave and geothermal energy as well as energy from biomass.

NET METERING/BILLING

Category	Details
Net Metering Regulation*	<p>On 22 April 2012, the “Regula el Pago de las Tarifas Eléctricas de las Generadoras Residenciales” law on net metering (Ley 20.571**) was published. After two years of work on the technical details of regulation, Chile’s net metering scheme was issued on 6th September 2014 and thus came into law.</p>
	<p>Scope</p> <ul style="list-style-type: none"> ▪ End customers participating in the regulated energy market (customers with demand of ≤ 500 kW). ▪ Generation capacity of up to 100 kWel from non-conventional renewable energies (solar, micro-hydropower, wind, geothermal energy, biomass) and CHP. ▪ Priority electricity generation for personal use; the surplus energy is fed into the public distribution system.
	<p>Remuneration</p> <ul style="list-style-type: none"> ▪ The monthly energy input is set off against the actual energy consumption. ▪ A possible surplus can be made available in the following months. ▪ If the accumulated surplus cannot be balanced within a period of six months, the utility company must pay the difference. ▪ The remuneration for an energy surplus is stipulated in the amount of the reference rate minus distribution losses and grid charges; a higher remuneration for small installations is being discussed.
	<p>Guaranteed connection to the supply system</p> <ul style="list-style-type: none"> ▪ The operators of the distribution system are required to provide a connection to the grid.
	<p>Costs</p> <ul style="list-style-type: none"> ▪ End customers must pay for the net metering equipment (meter etc.) and for the grid connection costs themselves.

* Net Metering Regulation according to Ley 20.571 from 22 April 2012 available at <http://www.leychile.cl/Navegar?idNorma=1038211>

** A German translation of the law 20.698 can be found at the website of the German Chilean Chamber of Commerce: http://chile.ahk.de/fileadmin/ahk_chile/Dokumente/Formular/GesetzEE.pdf



Further information on the Net Metering Regulation is available at the Energy Ministry’s website: www.minenergia.cl

DIRECT MARKETING AND TRADABLE RE CERTIFICATES

Category	Details
Direct marketing of RE	<ul style="list-style-type: none"> ▪ The Ley Corta I law from 2004 gives every electricity producer access to the spot market irrespective of their capacity. Here, they can sell electricity at a marginal cost and the power provided at a local marginal price. ▪ System operators are required to provide a connection to the grid and have the right to supply electricity from power plants below 9 MW. ▪ The Ley Corta II law from 2005 provides the possibility to issue an invitation to tender for long-term supply contracts between electricity generation and power distribution companies. Within these contracts, the rates are fixed for a period of up to 15 years and can be determined independently by the negotiation partners.
Tradable RE certificates	<ul style="list-style-type: none"> ▪ ERNC producers will receive tradable RE certificates per MWh of electricity generated. ▪ Electricity generation companies can buy additional certificates in order to comply with the ERNC quota (see slide 5). ▪ The average price for tradable certificates for electricity generating company was 6,426 US\$/MWh in 2010; in 2011 the price was 6,667 US\$/MWh. ▪ Penalty payments that parties need to pay in case of non-compliance with the ERNC quota are approx. 30 US-Dollar US\$/missing MWh.
Exemption of network charges	<ul style="list-style-type: none"> ▪ According to Ley Corta I, ERNC producers are fully exempt from transmission charges up to a capacity of 9 MW and partially exempt between 9 and 20 MW.

OTHER SUPPORT SCHEMES (1/2)

Category	Details
Rural electrification efforts	<ul style="list-style-type: none"> Within the framework of the programme on rural electrification efforts (Programa de Energización), individual projects in the fields of decentralised power generation and energy efficiency have been granted support since 1994. By the end of 2011, PV installations with a total capacity of 527.5 kWp have thus been installed. Further information: http://cer.gob.cl/presentaciones/talleres/2013/santiago_diciembre/Subdere%20Financiamiento%20-%20Julio%20Cuadra.pdf
Tax concessions	<ul style="list-style-type: none"> With the implementation of Ley 19.420* from 1995, tax concessions for companies located in the northern provinces Arica and Parinacota were introduced. When they invest in PV installations, the concessions on assets in kind (building installations , machines and equipment) are 30 % for the province of Arica and 40 % for the province of Parinacota; they are set off against the VAT the operator has to pay for the installations once they are in operation. At the beginning of 2013, the law was amended; it now covers investments that are made by 31 December 2025. Originally, tax concessions were only granted until 31 December 2011, so the law had expired for some time.



Chile's Renewable Energy Centre (CER) published a manual on the development of RE projects (in Spanish), which can be downloaded from the following link: http://issuu.com/cerchile/docs/guia_de_gestion_01/1?e=5566222/6107363

*The current version of the Ley 19.420 law can be found on the website of the library of the Chilean National Congress at: <http://bcn.cl/19ith>

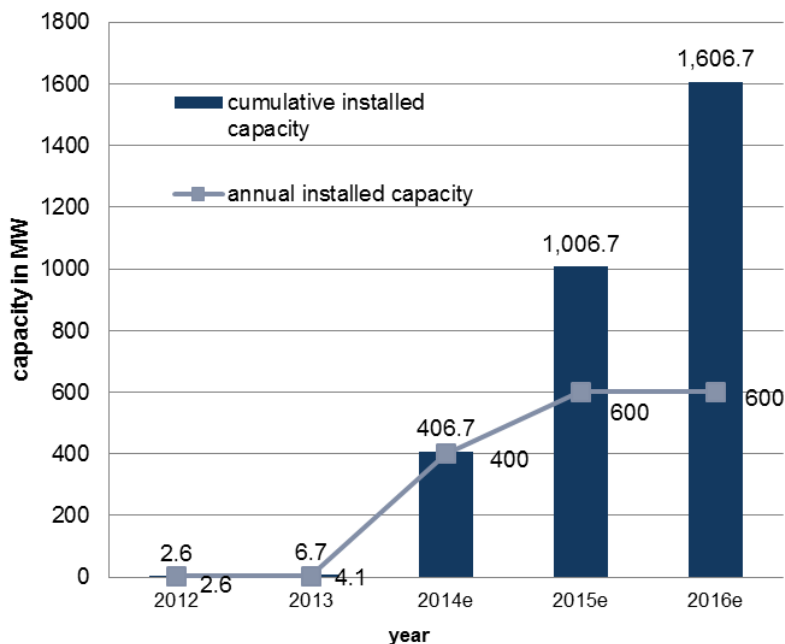
OTHER SUPPORT SCHEMES (2/2)

Category	Details
Calls for tenders	<ul style="list-style-type: none"> ▪ Small-scale calls for tenders frequently occur for building RE power generation installations both for personal and public use. All public calls for tenders are regularly published at http://www.mercadopublico.cl. ▪ Information on the calls for tenders for solar energy projects (CSP & PV) can also be found on the website of the Chilean Economic Development Agency CORFO at http://www.corfo.cl/sobre-corfo/licitaciones. ▪ The Ministry for Public Properties (Ministerio de Bienes Nacionales) calls for tenders for land use rights for public properties as part of PV power plant projects on their website http://licitaciones.bienes.cl. ▪ The law 20.698* (see slide 5) provides for additional public calls for tenders for ERNC capacities by the Energy Ministry if the annual expansion targets are not met.
Energy 2014 agenda	<p>In their energy agenda from May 2014, the new government announced the following PV-relevant measures:</p> <ul style="list-style-type: none"> ▪ Solar roof programme for public buildings ▪ New financing instruments for PV projects ▪ Lighthouse project “solar city“ in the city of Calama ▪ Information campaigns to promote PV for commercial and industrial use

* A German translation of the law 20.698 can be found at the website of the German Chilean Chamber of Commerce: http://chile.ahk.de/fileadmin/ahk_chile/Dokumente/Formular/GesetzEE.pdf

MARKET DEVELOPMENT AND BARRIERS

PV market development (on- and off-grid)



Main barriers in Chilean PV market

Obstacles in electricity marketing

There is no compensation arrangement for RE producers so far (since October 2014, the net metering system has been in force). Commercialisation only via bilateral electricity supply contracts with major customers or marketing on the spot market possible.

Financing obstacles

Provision of borrowed capital from Chilean banks to finance projects is virtually impossible without a long-term energy supply contract (PPA).

Insufficient electricity grid infrastructure

An expansion of already existing grid infrastructures is necessary; however, the merger of the two major transmission grids SIC and SING is delayed. Load distribution centres are still inexperienced with non-constant load flows.

MARKET NEWS (1/4)

Date	Topic	Source
01/10/2014	<p>Pattern Development signs PPA for 104 MW solar project in Chile Energy Group LP has expanded into the solar power market, signing a 22-year power purchase agreement (PPA) with an affiliate of Antofagasta Minerals SA for its Conejo Solar photovoltaic power project in Chile. The 104 MW Conejo Solar project, which will be constructed some 30 kilometers east of Taltal in Chile's Atacama Desert, was originated by Pattern Development, which expects the facility to be the largest solar energy project in Chile with a PPA upon completion.</p>	PV-Magazine
29/09/2014	<p>Solarpack inaugurates 25 MW PV plant in Chile Spanish solar developer Solarpack has inaugurated its largest solar PV project in Chile – the 25 MW Pozo Almonte Solar development, which is located in Tarapacá, the First Region of Chile. The project has become the largest solar PV plant to be interconnected to the country's Northern Interconnected System (SING), and will generate 13% of the annual power required by local mining firm Doña Inés de Collahuasi, which has signed a power purchase agreement (PPA) with the plant.</p>	PV-Magazine
15/09/2014	<p>Chile environment agency adds 392MW to national PV pipeline Two more large-scale PV plants, with a combined generation capacity of 392MW, have been approved for Chile by the country's environmental authority. The newly announced 112 MW project, Llanta Solar Project, will be built in Chile's Atacama Desert region. Llanta Solar Project will require around US\$235.2 million of investment. The other project to be approved, Alfa Solar, will also be located in the north of Chile, in Antofagasto. The 280 MW project will require US\$560 million of investment,</p>	PV-Tech
04/09/2014	<p>SunEdison to supply solar power to Chilean copper mine SunEdison has signed a 20-year solar power supply deal Los Pelambres copper mine from its 69.5 MW Javiera solar plant in Chile's Antofagasta region. The Javiera power plant is currently under construction and is expected to be connected to the grid in the first months of 2015. The project will deliver all of its electricity to the Central Interconnected System (SIC) and will supply Los Pelambres, a copper concentrate and molybdenum mine located in the Coquimbo region.</p>	PV-Magazine

MARKET NEWS (2/4)

Date	Topic	Source
24/06/2014	<p>Chilean Environmental Protection Agency approves 369 MW PV project The Environment Agency of Chile (EIS) has approved the construction of a solar photovoltaic (PV) power plant with a nominal capacity of 369 megawatts (MW) in the north of the country. The Chilean subsidiary of First Solar, Inc. (Tempe, Arizona, U.S.), project developer Parque Fotovoltaico Sol del Desierto SpA, plans to start working on the "Desert solar farm" in the province of Antofagasta in June 2015.</p>	SolarServer
05/05/2014	<p>JinkoSolar to supply 100 MW of solar PV modules for projects in Northern Chile JinkoSolar Holding Co. Ltd. (Shanghai) has signed contracts to supply 100 MW of solar photovoltaic (PV) modules for two projects in Northern Chile. Enel Green Power SpA (Rome) is building the first 60 MW phase of the Lalackama PV plant in the Antofagasta Region. The plant will be 129 MW-DC when complete. The other is a 40 MW PV plant in the municipality of Diego De Almagro in the Atacama Region.</p>	SolarServer
29/04/2014	<p>CER: Chile reaches 173 MW-AC of installed solar PV Chile's Center for Renewable Energy (CER) reports that the nation has reached 173 MW-AC of installed solar photovoltaic (PV) capacity, as well as 170 MW-AC under construction, in its April 2014 report. Additionally, CER estimates that Chile's PV plants generated 32 gigawatt-hours (GWh) of electricity during the month of March 2014, a dramatic increase from 1.8 GWh generated in the previous month.</p>	SolarServer
15/04/2014	<p>Chile debates green tax that can make solar more competitive Within the tax reform that is currently under debate in Chile's parliament, there is a plan to tax the CO2 emissions from thermoelectric plants over 50 MWt.</p>	PV-Insider

MARKET NEWS (3/4)

Date	Topic	Source
01/04/2014	<p>Grid connectivity in Chile to unlock solar potential The connection of the two biggest electric systems (named SIC and SING) has recently been approved in Chile. This game-changing decision will create a balance between the energy supply and demand in the country, helping the installation of solar power plants in the north where solar radiation is higher.</p>	PV-Insider
20/03/2014	<p>Chile reaches 150 MW of installed solar with further 225 MW under construction Installed photovoltaic power saw remarkable growth in Chile last month. During February, the San Andres SunEdison solar park in the Atacama region began operation with a capacity of 48.2 MW, increasing the country's cumulative PV capacity to 149.8 MW. The volume of solar projects under construction increased from 128 MW in January to 225 MW in February.</p>	PV-Magazine
20/03/2014	<p>Chile to add two new solar PV plants totaling 240 MW First Solar's Chilean subsidiary, First solar Energia Ltda., has been granted permission to develop a 162.3 MW solar project in the country's Atacama region, and Irish solar energy developer Mainstream Renewable Power will enter the Chilean market in 2015 after securing approval for its 88 MW Solar Estancia project in the Coquimbo region.</p>	PV-Magazine
21/02/2014	<p>Chile reports that the 100 MW Amanecer solar PV plant is online SunEdison Inc. (St. Peters, Missouri, U.S.) completed and commissioned its 100 MW Amanecer CAP solar photovoltaic (PV) plant in Northern Chile during the month of January 2014, according to a statement from the nation's Center for Renewable Energy (CER). SunEdison has not confirmed this, and did not return Solar Server requests for comment by press time. The plant is the largest in Latin America, and will supply electricity to CAP SA's (Santiago, Chile) mining operations under a power purchase agreement.</p>	SolarServer

MARKET NEWS (4/4)

Date	Topic	Source
20/01/2014	<p>Etrion to build 70 MW Chile PV plant Switzerland-based renewable energy specialists Etrion have commenced construction of a 70 MW PV power plant in Chile's Atacama region. The project – titled Project Salvador – is part of Etrion's wider 100 MW solar pipeline in the country, and will be completed in collaboration with Total S.A. and local solar energy company, Solventus Energias Renovables. Completion is expected by the end of the first quarter of 2015. Initially, Project Salvador will operate on a spot market basis, calculated in US dollars. There will also be the possibility for utility companies to secure future power purchase agreements for the plant.</p>	PV-Magazine
12/12/2013	<p>1.26 MW PV plant to power Chile's mining operations French solar energy company SolaireDirect has completed a 1.26 MW PV plant in northern Chile in conjunction with local mining company Minera Dayton. Northern Chile's Coquimbo region, an area regarded as the world's largest for copper production, will be home to the plant.</p>	PV-Magazine

CONTACT INFORMATION

Category	Name	Website
Ministry of Energy Ministry of Environment	Ministerio de Energía Ministerio de Medio Ambiente	www.minenergia.cl www.mma.gob.cl
Ministry of Economics	Ministerio de Economía, Fomento y Turismo	www.economia.cl
Center for Renewable Energies	Centro de Energías Renovables - CER	cer.gob.cl
Energy Market Regulator	Superintendencia de Electricidad y Combustibles - SEC	www.sec.cl
National Energy Commission	Comisión Nacional de Energía - CNE	www.cne.cl
(Trade promotion organisations) Chilean Economic Development Agency	Corporación de Fomento de la Producción - CORFO German Chilean Chamber of Commerce - CAMCHAL	www.corfo.cl chile.ahk.de
Solar Industry Association Renewable Energy Industry Association	Asociación Chilena de Energía Solar - ACESOL Asociación Chilena de Energías Renovables - ACERA	www.acesol.cl www.acera.cl
National Authority for the Environment	Servicio de Evaluación Ambiente -SEA	www.sea.gob.cl
Electricity Utility Association	Asociación de Empresas Eléctricas A.G. - ASEL	www.electricas.cl
Chilean Dispatch Center	Centros de Despacho Económico de Carga – CDECs	www.cdec.cl
Major Chilean Electricity Utility	Endesa Chile S.A.	www.endesa.cl
Major Transmission Grid Operator	Transelec Chile S.A.	www.transelec.cl
Major Distribution Grid Operator	Chilectra S.A.	www.chilectra.cl

REFERENCES

- CAMCHAL, German Chilean Chamber of Commerce (2013): Zielmarktanalyse Chile 2013: Fotovoltaik am chilenischen Energiemarkt, http://www.export-erneuerbare.de/EEE/Redaktion/DE/Downloads/Publikationen/AHK_Zielmarktanalysen/zma_chile_2013_pv.pdf?__blob=publicationFile&v=1, accessed on 29.04.2014.
- CAMCHAL, German Chilean Chamber of Commerce (2014): Dezentrale Strom- und Wärmeversorgung, Kleinanlagen zur Eigenversorgung: Bioenergie, Kleinwind, Photovoltaik, Speicher. Chile 2014.
- CER, Centro de Energías Renovables (2011): Impacto de la Ley Arica sobre el Desarrollo de una Industria Solar en Chile, <http://cer.gob.cl/archivos/LeyArica.pdf>, accessed on 05.05.2014.
- CER, Centro de Energías Renovables (2012): Chile: Development and Opportunities of the Renewable Energy Market, <http://www.kallman.com/presentations/Chile-Development-and-Opportunities-Renewable-Energy-Market.pdf>, accessed on 29.04.2014.
- CER, Centro de Energías Renovables (2013): Guía de Gestión ERNC, http://cer.gob.cl/archivos/2014/febrero/guias/Guia%20de%20Gestion_%2001.pdf, accessed on 29.04.2014.
- CER, Centro de Energías Renovables (2014a): Reporter CER Febrero 2014 – Resumen Anual, <http://cer.gob.cl/sobre-las-ernc/datos-y-estadisticas/>, accessed am 05.05.2014.
- CER, Centro de Energías Renovables (2014b): Reporter CER Septiembre 2014, http://www.cer.gob.cl/mailling/2014/septiembre/REPORTE_SEP2014%20FINAL.pdf, accessed on 01.10.2014.
- CIA (2014): The World Fact Book – Chile, <https://www.cia.gov/library/publications/the-world-factbook/geos/ci.html>, accessed on 29.04.2014.
- DB Research (2014): Solar Industry Report 2014 Outlook.
- dena (2012): Länderprofil Chile
- dena (2013): Chile: Einführung des Net-Meterings im Frühjahr erwartet http://www.export-erneuerbare.de/EEE/Redaktion/DE/DENA/Kurzmeldungen/Marktnachrichten/2013/20130225_chile_einfuehrung_des_net_meterings_im_fruehjahr_erwartet.html, accessed on 29.04.2014.
- GTAI (2014): Wirtschaftsdaten kompakt: Chile, http://www.gtai.de/GTAI/Content/DE/Trade/Fachdaten/PUB/2012/11/pub201211278004111_159470.pdf, accessed on 01.10.2014.
- IEA (2012): Energy Prices and Taxes: Quaterly Statistics 2/2012.

REFERENCES

- IEA (2013): IEA Statistics, Electricity Information 2013.
- IEA (2014): Chile: Electricity and Heat for 2011, <http://www.iea.org/statistics/statisticssearch/report/?&country=CHILE&year=2011&product=ElectricityandHeat>, accessed on 29.04.2014.
- ME, Ministerio de Energía (2012): National Energy Strategy 2012-2030, <http://www.centralenergia.cl/uploads/2012/06/National-Energy-Strategy-Chile.pdf>, accessed on 30.04.2014.
- ME, Ministerio de Energía (2013): Ley N° 20.571, Reglamento y experiencias de evolución de la GD. <http://www.acee.cl/sites/default/files/noticias/documentos/Ministerio%20de%20Energ%C3%ADa,%20Ley%2020.751%20Reglament%20GD.pdf>, accessed on 29.04.2014.
- ME, Ministerio de Energía (2014a): Energías Renovables en Chile, El Potencial Eólico, Solar e Hidroeléctrico de Arica a Chiloé, http://www.minenergia.cl/archivos_bajar/Estudios/Potencial_ER_en_Chile_AC.pdf, accessed on 29.04.2014.
- ME, Ministerio de Energía (2014b): Agenda de Energía. Un Desafío País, Progreso para Todos, <http://www.minenergia.cl/documentos/estudios/2014/agenda-de-energia-un-desafio-pais.html>, accessed on 21.05.2014.
- ME, Ministerio de Energía (2014c): Balance Energetico 2013, <http://www.minenergia.cl/documentos/balance-energetico.html> , accessed on 10.10.2014.
- SEDAC (2005): Chile: Population Density, 2000 <http://sedac.ciesin.columbia.edu/maps/gallery/search?facets=region%3Asouth+america&facets=theme%3Apopulation&facets=country%3Achile> , accessed on 29.04.2014.
- SolarGIS (2014 a): Solar Map Latin America and the Caribbean, http://solargis.info/doc/_pics/freemaps/1000px/ghi/SolarGIS-Solar-map-Latin-America-and-Caribbean-en.png, accessed on 30.04.2014.
- SolarGIS (2014b): Solar Map Chile, http://solargis.info/doc/_pics/freemaps/1000px/dni/SolarGIS-Solar-map-DNI-Chile-en.png, accessed on 30.04.2014.
- Suelo Solar (2013): Energía solar Fotovoltaica y generación distribuida en Chile, <http://www.suelosolar.es/newsolares/newsol.asp?id=9204&idp=&idioma=es&idpais>, accessed on 29.04.2014.
- WB, World Bank (2014): Country Data – Chile, <http://data.worldbank.org/country/chile>, accessed on 29.04.2014.