

Summary of Qualifications and Experience

Name: Jeffrey Howard Michel

Address: Sommerhuder Strasse 23
22769 Hamburg
Germany

Birth: November 9, 1942 in New York, USA

Citizenship: USA

Telephone: +49 (0)40 - 51906826, +49 (0)176 - 28061314, +1 (770) - 3166506

E-Mail: jeffrey.michel@gmx.net

Degrees: Bachelor of Science in Humanities and Engineering
Massachusetts Institute of Technology, 1964

Master of Science in Electrical Engineering
Tulane University, 1969

Foreign Languages: German – fluent
French – reading and speaking knowledge
Spanish – childhood knowledge
Czech – reading knowledge
Finnish – grammatical knowledge

Office Proficiencies: MS Office, HTML

Websites: www.heuersdorf.de
www.volksmeter.de

Work Experience: 1966 – 1969 The Boeing Company, Space Division, New Orleans, USA, formulation of computer test procedures

1970 – 1978 Gerätewerk Lahr, Lahr, Germany, audio and measurement technology design

1979 – 1991 Independent consultant for electronic products and documentation

1987 – 1990 Independent energy researcher on the German Democratic Republic

1989 – 1991 Environmental journalist (Deutschlandfunk Radio, Cologne)

1990 – present Independent consultant on energy policy

- 1990 – 1996 Board member of the JUNG Foundation promoting ecological youth projects in eastern Germany
- 1991 Environmental impact consultant for the Environmental Ministry of the Czech Republic, Prague, Czechoslovakia
- 1992 Coordinator of the German-American Environmental Days, Carl-Schurz-Haus, Freiburg, Germany
- 1992 – 1995 Energy Director, European Energy and Environment Park, Leipzig, Germany
- 1993 – 1997 Director of the CO₂ model community of Lützschena-Stahmeln, Germany
- 1996 – 2008 Energy coordinator of Heuersdorf, Germany (www.heuersdorf.de)
- 1997 – 1999 Energy coordinator of Leipzig-Grünau, Germany
- 2001 – 2007 Technical coordinator of the Zittauer Seminar for eastern European energy research
- 2001 On-location coordinator for the Third Youth Climate Conference of Germany in Heuersdorf
- 2002 On-location coordinator for the Second Energy Conference of the PDS Party in Heuersdorf
- 2006 – 2007 Director of European Operations, USCL Corporation, Carmichael, California
- 2017 – present Policy advisor to the City of Schöningen, Germany

Selected Publications:

- Spring 1987 Economic Exchanges Specific to the Two German States
(*Studies in Comparative Communism*, University of Southern California, Los Angeles)
- April 1990 *Düstere Aussichten für reine Luft*
Poor Prospects for Clean Air
(*Deutschland Archiv*, Cologne)

- August 30, 1993 *Der Klimaschutz als Leitlinie kommunaler Gestaltung am Beispiel der Gemeinde Lützschena bei Leipzig*
The Town of Lützschena near Leipzig as an Example of Climate Protection for Guiding Community Planning
(European Energy and Environment Park, Leipzig)
- October 29, 1996 *Sächsische Energiepolitik im Leipziger Südraum*
Saxon Energy Policy in Leipzig Southern Region
(PDS Sachsen, Dresden)
- December 1997 *Kohle zu Strom – und weiter?*
Coal to electricity – and then?
(*UmweltMagazin*, Würzburg)
- January 1998 *Virtuelles Kraftwerk Heuersdorf*
Heuersdorf Virtual Power Station
(Community of Heuersdorf)
- March 30, 1998 *Verwendung der Informationstechnik zur Förderung nachhaltiger Lebensbedingungen in der Öko-Siedlung "Gartenstadt Quasnitz"*
Employing Information Technologies to Promote Sustainable Development in the Ecological Settlement "Gartenstadt Quasnitz"
(Projektentwicklungsgesellschaft "Gartenstadt Quasnitz", Lützschena)
- October 22, 1999 *Ansätze für eine umweltgerechte Energieversorgung in Leipzig-Grünau*
Approaches to Ecologically Compatible Energy Services in Leipzig-Grünau
(Municipal Administration, Leipzig)
- October 2000 Eastern Germany: Air quality improved ... possibly
(*Acid News*, Gothenburg)
- June 2001 *Alternative Brennstoffe zur Reduzierung von CO₂-Emissionen im Bereich der Braunkohlenwirtschaft*
Alternative Fuels for Reducing CO₂ Emissions in the Lignite Industry
(Deutsche Energie Agentur, Berlin)

- December 2001 *Bestandsaufnahme von Fördermaßnahmen für regenerative Energien in den USA*
Assessment of Policies for Promoting Renewable Energies in the USA
(Deutsche Energie Agentur, Berlin)
- February 2002 *Überblick über die energiepolitische Strategie der Europäischen Union 2000 / 2001*
Survey of the Energy Strategy of the European Union in 2000 / 2001
(PDS Sachsen, Dresden)
- April 2002 *Auswertung des Energieverbrauchs im verarbeitenden Gewerbe zum Zwecke der Verbrauchsreduzierung*
Assessment of Energy Consumption in Manufacturing for the Purpose of Reducing Consumption
(Büro Wirtschaftsinformationen, Neugersdorf)
- October 2002 *Solar Escalation Instead of Nuclear Proliferation*
(EU INCO-COPERNICUS Program, Austria/Bulgaria)
- April 2003 *Die Bedeutung des CO₂-Emissionshandels der Europäischen Union für die Erhaltung der Gemeinde Heuersdorf*
The Significance of CO₂ Emissions Trading for Preserving the Community of Heuersdorf
(Community of Heuersdorf)
- June 7, 2003 *USA – Wind und Sonne statt Öl und Gas?*
USA – Wind and Sun Instead of Oil and Gas?
(Neues Deutschland, Berlin)
- October 2003 *Rahmenbedingungen für regenerative Energien in den USA*
Conditions for Renewable Energy in the USA
(*Energiewirtschaftliche Tagesfragen* journal, Essen; reprinted in the *Latvian Journal of Physics and Technical Sciences*, 4/2003, Latvia, *Energia* 12/2003, Slovakia, and in *Energetika*, 12/2003, Czech Republic)
- November 26, 2003 *Windkraft statt Braunkohle*
Wind Power Instead of Lignite

	<i>(Junge Welt, Berlin)</i>
February 2004	<i>Heuersdorf und der Kampf für eine Energiewende</i> Heuersdorf and the Struggle for a Change of Energy Policy <i>(Sonnenenergie, Berlin)</i>
February 2004	<i>Überblick über Subventionen und subventionsähnliche Leistungen im Bereich der Braunkohlewirtschaft</i> Survey of Subsidies and Subsidy Equivalents in the Area of the Lignite Industry <i>(Federal Environmental Ministry, Berlin)</i>
July 12, 2004	<i>Sunrise im Westen der USA</i> Sunrise in the Western USA <i>(Neues Deutschland, Berlin)</i>
August 17, 2004	<i>Business für Erneuerbare</i> Business for Renewables <i>(Neues Deutschland, Berlin)</i>
August 23, 2004	<i>Strom aus der Küche</i> Electricity from the Kitchen <i>(Neues Deutschland, Berlin)</i>
November 8, 2004	<i>Kalifornien auf der Überholspur</i> California in the Passing Lane <i>(Neues Deutschland, Berlin)</i>
March 2005	Lignite policy threatens German climate strategies <i>(Acid News, Gothenburg)</i>
March 2005	<i>Historisches Heuersdorf</i> Historic Heuersdorf <i>(Der Holznagel, Lillienthal)</i>
April 2005	Status and Impacts of the German Lignite Industry <i>(Swedish NGO Secretariat on Acid Rain, Gothenburg)</i>
2004/2005	Historic Heuersdorf <i>(Heritage at Risk, ICOMOS International Council on Monuments and Sites, Munich)</i>
May 5, 2005	Lignite Power Challenges German Climate Policy

	(<i>Energy Central, Aurora</i>)
August 2005	Lignite Mining and Ecology (<i>Bulgarian Utilities Magazine, Sofia</i>)
September 2005	<i>Zunehmende Anerkennung von Heuersdorf als Kulturstandort</i> Increasing Recognition of Heuersdorf as a Cultural Venue (<i>Gemeinsame Zeitung, Regis-Breitingen</i>)
Winter 2005	<i>Ein Dorf kämpft ums Überleben</i> A Village Struggles to Survive (<i>Wohnen + Gesundheit, Neubuern</i>)
May 18, 2006	Lignite Power, Climate Protection, and Metering in Germany and the EU (AESP Pricing Conference, Chicago)
June 1, 2006	Making Smart Metering Pay for Energy Conservation (POWER-GEN Europe conference, Cologne)
July 25, 2006	<i>Die ostdeutsche Braunkohlenwirtschaft: Überblick und Auswirkungen</i> The Eastern German Lignite Industry: Overview and Effects (City of Lützen)
August 30, 2006	International Case Study: Harnessing Smart Metering for Kyoto Compliance (Smart Metering West Coast 2006 conference, San Francisco)
September 23, 2006	<i>Der Fluch der ostdeutschen Braunkohle - Abaggerung Ost für die ökologische Erneuerung Schwedens</i> The Curse of the Eastern German Lignite Industry – Excavation of the East for the Ecological Renewal of Sweden (Zukunft statt Braunkohle conference, Pulheim)
4/2006	Harnessing Smart Metering for Kyoto Compliance (<i>Metering International, Steenberg</i>)
January 22, 2007	Demand-Side CO ₂ Reduction Using Advanced Power Meters

- (Electric Utilities Environment Conference, Tucson)
- March 22 – 23, 2007 *Die Braunkohle: Energie aus Verwüstung und Vertreibung*
Lignite: Energy from Destruction and Expulsion
(Greenpeace, Horní Jiřetín & Prague)
- 2006/2007 The Mining Destruction of Heuersdorf and Threat to Nietzsche's Gravesite
(*Heritage at Risk*, ICOMOS International Council on Monuments and Sites, Munich)
- April 3 - 4, 2007 Climate Protection Strategies using Advanced Power Meters
(*Energy Central*, Aurora, Colorado, www.energycentral.net)
- May 2, 2007 It's Time for Smarter Power Meters
(*Conserve Magazine*, Staunton, Virginia, www.conservemag.com)
- June 2, 2007 Europe Has Found a Way to Make Solar Pay
(*Conserve Magazine*, Staunton, Virginia, www.conservemag.com)
- June 2, 2007 *Energiezukunft ohne Unterpfand - Die Braunkohle setzt die Substanzwirtschaft fort*
Energy Future without Commitment – Lignite Continues the Economy of Attrition
(*Briefe zur Orientierung im Konflikt Mensch – Erde*, Kirchliches Forschungsheim, Wittenberg)
- October 2, 2007 *Energiesparen am Stromzähler*
Saving Energy at the Power Meter
(*Telopolis*, Munich)
- December 2007 The Case for Renewable Feed-In Tariffs
(*Online Journal of EUEC*, Tucson, Arizona)
- February 2008 *Smart Metering und Klimaschutz*
Smart Metering and Climate Protection
(*Telepolis Journal Energien intelligent nutzen*, Hannover)
- February 20, 2008 Large-Scale Photovoltaic Deployment in Germany

	(POWER-GEN Renewable Energy & Fuels, Las Vegas)
March 31, 2008	<i>Auch Braunkohlestrom wird teuer</i> Lignite Power is also Getting Expensive (<i>Neues Deutschland</i> , Berlin)
March 2008	German Lignite: Expensive and Unsustainable (<i>Acid News</i> , Gothenburg)
May 23, 2008	<i>Enrons späte Rache</i> Enron's late vengeance (<i>Neues Deutschland</i> , Berlin)
October 20, 2008	Germany's Strategic Transition to a Renewable Energy Society (German Embassy, Washington)
April 2009	Germany Plugs in to Renewable Energy (with Suzanne Wilton, <i>Climate Change Central</i> , Calgary)
October 9, 2009	Lignite Impedes German Climate Policy (<i>Energy Tribune</i> , Houston)
November 13, 2009	<i>Unzulänglichkeiten von CO₂-Abscheidung und -Endlagerung</i> Intractabilities of CO ₂ Capture and Storage (Ausschuss für Umwelt und Landwirtschaft, Partei Die Linke, Dresden)
November 17, 2009	<i>Wende in der Energiepolitik für Deutschland, Frankreich & die USA</i> Change in Energy Policy for Germany, France and the USA (Amicale de Hambourg, Hamburg)
January 31, 2010	<i>Kohlenstoffreiche Braunkohle erschwert die deutsche Klimapolitik</i> Carbon-Rich Lignite Impedes German Climate Policy (Planetary Engineering Group Earth, Gartenau)
February 1, 2010	Factors of Enhanced Solar Deployment (Energy & Environment Conference, Phoenix)
February 5, 2010	<i>CCS: Das Ende der subventionsfreien Braunkohle</i>

- CCS: The End of Unsubsidized Lignite
(*Sachsens Linke*, Dresden)
- February 8, 2010 *Keine Kohle für CCS*
No Coal for CCS
(*Neues Deutschland*, Berlin)
- July 27, 2010 The Solar Real Estate Initiative
(*Eutopia News*, Studio City)
- August 26, 2010 European Assessments of Carbon Capture
and Storage
(McIlvane Company, Northville)
- September 4, 2010 *Braunkohlewirtschaft und das Kohlendioxid-
Speicherungsgesetz*
Lignite Industry and the Carbon Dioxide
Storage Law
(Partei Die Linke, Hamburg)
- February 4, 2011 *Klimaschutz, Kohlenutzung und CCS*
Climate Protection, Coal Usage, and CCS
(Testimony before the Parliament of
Saxony, Dresden)
- March 27, 2011 *Ausblick auf die zukünftige Verfügbarkeit
von globalen Ressourcen*
Perspectives on the Future Availability of
Global Resources
(MIT Club of Germany, Berlin)
- April 9, 2011 *CCS und der globale Klimaschutz*
CCS and Global Climate Protection
(Bundestreffen der CO₂-Bürgerinitiativen,
Salzwedel)
- April 14, 2011 CCS: Kosten und Hindernisse
CCS: Costs and Impediments
(Die Linke, Berlin)
- June 6, 2011 *CO₂-Speicher-Gesetze*
CO₂ Storage Laws
(Testimony before German Parliament,
Berlin)
- September 11, 2011 *CCS und der globale Klimaschutz*
CCS and Global Climate Protection
(Bundestreffen der CO₂-Bürgerinitiativen,
Maxdorf)
- September 28, 2011 *Wer von CCS profitiert*

- Who Profits from CCS
(*Neues Deutschland*, Berlin)
- September 29, 2011 Carbon Capture and Sequestration (CCS) and Global Climate Protection
(Texas A&M University, College Station)
- October 11, 2011 Properties, Extraction and Use of Fossil Fuels
(Bankwatch, Bulgaria)
- November 16, 2011 *CCS: Wirksam gegen den Klimawandel?*
CCS: Effective against climate change?
(Landestreffen der CO₂-Bürgerinitiativen, Niebüll)
- July 13, 2012 In Europa ist *CCS viel zu teuer*
CCS is much too expensive in Europe
(*Junge Welt*, Berlin)
- September 2012 *Durch Klimaschutz mehr Kohle*
Climate Protection Increases Coal Usage
(*Waterkant*, Emsdetten)
- October 27, 2012 The Risks of Carbon Capture and Storage
(Imperial College Club of Germany, Munich)
- February 21, 2013 *Fracking: historischer Werdegang und internationale Perspektiven*
Fracking: Historic Development and International Perspectives
(Die Linke, Bergedorf)
- April 20, 2013 *Hintergründe für eine Entscheidungsfindung zu "Fracking in Hamburg"*
Background for Decisions on Fracking in Hamburg
(Die Linke, Hamburg/Harburg)
- May 10, 2013 *Ozeanversauerung*
Ocean Acidification
(Evangelische Akademie, Berlin)
- May 13, 2013 *"Fracking in Hamburg" als Beitrag zur Energiewende?*
Fracking in Hamburg as a Contribution to the Energy Transition?
(Green Party, Börnsen)
- June 2013 Lost hopes for CCS – added urgency for renewable energy

	(Air Pollution and Climate Secretariat, Gothenburg)
June 2013	CCS Sidelined by Tenuous Financing (<i>Acid News</i> , Gothenburg)
June 5, 2013	CCS: why the high hopes cannot be fulfilled (<i>Energy Post</i> , Amsterdam)
July 1, 2013	Carbon Capture and Storage and Climate Change (<i>EnergyBiz</i> , Aurora)
August 29, 2013	European and Global Prospects of Carbon Capture and Storage (McIlvane Company, Northville)
February 4, 2014	The Status of Germany's Energy Transition (Electric Utilities Environment Conference, Phoenix)
March 2014	Hamburg commits to fossil fuel beyond 2050 (<i>Acid News</i> , Gothenburg)
March 13, 2014	Can Germany Survive the Energiewende? (<i>Energy Post</i> , Amsterdam)
May 1, 2014	<i>Fracking im Kontext der Energiemärkte</i> Fracking in Relation to Energy Markets (Anti-Fracking Strategy Meeting, Hamburg)
June 2014	Hidden costs make coal expensive (<i>Acid News</i> , Gothenburg)
July 26, 2014	<i>Meer Schutz</i> More Ocean Protection (<i>The European</i> , Berlin)
September 29, 2014	German lignite thrives on policy ambivalence (<i>Energy Post</i> , Amsterdam)
October 2014	Lignite power provides bargain-priced pollution (<i>Acid News</i> , Gothenburg)
November 17, 2014	Wishing away lignite – EU climate policy ignores elephant in the room (<i>Energy Post</i> , Amsterdam)

April 2015	East German lignite at a crossroads (<i>Acid News</i> , Gothenburg)
April 27, 2015	Quo Vadis RWE? A power giant's struggle with the Energiewende (<i>Energy Post</i> , Amsterdam)
May 4, 2015	<i>Vattenfall-Übernahme durch MIBRAG, EPH, EP Energy - was ist das Geschäftsmodell?</i> Vattenfall Takeover by MIBRAG, EPH, EP Energy – what is the business model? (Bündnis 90/Die Grünen, Dresden)
June 30, 2015	Lignite in Europe: fighting back renewables (<i>Energy Post</i> , Amsterdam)
Autumn 2015	Lignite Rides the Rails in Europe (<i>Cornerstone Magazine</i> , Hoboken)
October 27, 2015	German accord: it will take a lot more to beat lignite (<i>Energy Post</i> , Amsterdam)
January 13, 2016	<i>Die Zukunft der sächsischen Braunkohle</i> The Future of Saxon Lignite (DIE LINKE, Dresden)
March 30, 2016	<i>CO₂: Meere sind Spiegel unserer Zivilisation</i> CO ₂ : The Oceans are the Mirrors of our Civilisation (<i>Presstext</i> , Österreich)
May 2016	Germany sets its sights on coal phase-out (<i>Acid News</i> , Gothenburg)
June 10, 2016	Oceans are the mirrors of our civilisation (International Organization for Promoting Geoethics)
July 27, 2016	Germany sets a new solar storage record (<i>Energy Post</i> , Amsterdam)
October 2016	Lignite power developments in Europe (<i>Acid News</i> , Gothenburg)
October 27, 2016	The Energiewende is running up against its limits

(*Energy Post*, Amsterdam)

- November 18, 2016 The Eurasian Lignite Backbone
(*Cornerstone Magazine*, Hoboken)
- April 2017 The mining curse that haunts lignite towns
(*Acid News*, Gothenburg)
- May 10, 2017 Divestment will not block German lignite
(*Energy Post*, Amsterdam)
- July 12, 2017 *Braunkohle schwächt die
Bergbaukommunen*
Lignite weakens the mining communities
(LIGA Libell, Potsdam)
- December 14, 2017 *Auf dem Weg zum CO₂-neutralen
Mitteldeutschland*
On the Way to a CO₂-neutral Central
Germany
(LIGA Libell, Potsdam)
- February 2018 The Communal Deficits of German Lignite
Usage
(*Acid News*, Gothenburg)

Newsletter: "Heuersdorf Aktuell", issued 1996 – 2009 on German energy
policy (at www.heuersdorf.de/Ha/Ha.html)

Associations: Thoreau Society (Life Member)

Awards: "Climate Hero" of World Wide Fund for Nature (WWF) 2005