# Curriculum Vitae of Dr. Georg Zachmann (as of September 1, 2020)

<u>Personal</u>

Born	November 21, 1979 in Löbau/Sa. (Germany)
Nationality	German
Family status	married, three children
Email	gz@bruegel.org
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## Professional Experience

2015 -	Senior Fellow at the Brussels based Think Tank <b>Bruegel</b> working on Energy and Climate Policy
2018 -	Project Leader <b>Low Carbon Ukraine</b> , an IKI project implemented by BerlinEconomics
2009 - 2015	Research Fellow on Energy and Climate Change at <b>Bruegel</b>
2008 - 2009	Post-Doc position at the Laboratoire d'Analyse Economique des Réseaux et des Systèmes Energétiques (LARSEN) in Paris
2007 - 2008	Desk Officer at the <b>German Ministry of Finance</b> (I B 1 – Economic Policy Division)
2004 - 2007	Project Associate, Department of International Economics at German Institute for Economic Research ( <b>DIW Berlin</b> )
2002 - 2004	Research Assistant, German Institute for Economic Research ( <b>DIW Berlin</b> )

## **Education**

2005 - 2009	<b>Doctorate at Dresden University of Technology</b> . Thesis title: "Empirical Evidence for Inefficiencies in European Electricity Markets – Market Power and Barriers to Cross Border Trade" under the supervision of Prof. Ch. von Hirschhausen. Awarded the Loyola de Palacio Best PhD prize
2002 - 2004	Diploma in economics at Humboldt University Berlin

in

statistics

and

economic

history)

(specialisation

### **Publications**

- "A European carbon border tax much pain, little gain," Bruegel Policy Contribution 05/2020 (jointly with B. McWilliams)
- "Greening the recovery by greening the fiscal consolidation", Bruegel Policy Brief 02/2020 (jointly with B. McWilliams, S. Tagliapietra)
- "Six years after Ukraine's Euromaidan: reforms and challenges ahead", Bruegel Policy Contribution 14/2020 (jointly with M. Dabrowski, M. Domínguez-Jiménez)
- "Racing against COVID-19: a vaccines strategy for Europe", Bruegel Policy Contribution 07/2020 (jointly with R. Veugelers)
- "Recommendations on energy storage", Policy Evaluation (joinly with O. Mykhailenko, A. Vereshchynska)
- "RES quotas for 2020 2024", Policy Paper (jointly with F. Meißner, C. Stiewe)
- "Balancing of fluctuating renewable power sources", Policy Paper (Jointly with F. Meißner)
- "Energy Sector Issues in Uzbekistan", German Economic Team Policy Briefing 01/2020 (jointly with B Eshchanov, C. Stiewe)

- "The European Union energy transition key priorities for the next five years," Energy Policy (132), p 950-954 (jointly with S. Tagliapietra, O. Edenhofer, J-M Glachant, P. Linares, A. Loeschel)
- "Estimating the cost of capital for wind energy investments in Turkey," Energy Policy(131) p 295-301. (jointly with G. Fredriksson, S. Tagliapietra)
- "How to make the European Green Deal work," Bruegel Policy Contribution 13/2019 (jointly with G. Claeys, S. Tagliapietra)
- "The European Union-Russia-China energy triangle," Bruegel Policy Contribution 16/2019
- "Estimation of the economic impact of current and potential Russian sanctions against Georgia" Policy Study 03/2019 (jointly with R. Giucci, V. Movchan, A. Mdinaradze, A. Lehmann, C. Stiewe)
- "Assessing power plant park scenarios for 2030", German Economic Team Technical Note 06/2019 (jointly with C. Stiewe)

- "Export and patent specialization in low-carbon technologies", in "Global Innovation Index 2018", Cornell University, INSEAD, World Intellectual Property Organization (WIPO) (jointly with R. Kalcik)
- "LNG und Nord Stream 2 im Kontext unsicherer Gasimportnachfrage der EU", ifo Schnelldienst 17/2018
- "Brexit and Energy Policy", Bruegel Parliamentary Testimony (jointly with S. Tagliapietra)
- "The distributional effects of climate policies" Bruegel Blueprint Series 28 (jointly with G. Fredriksson, G. Claeys)
- "Developing the EU long term climate strategy", Bruegel Policy Paper (jointly with A. Marcu)
- "Electricity consumption and crypto-mining in Georgia: What is the link?", German Economic Team Georgia Policy Briefing 02/2018 (jointly with N. Dornbusch, R. Giucci)
- "Mining cryptocurrencies in Georgia: Estimation of economic relevance", German Economic Team Georgia Policy Study 03/2018 (jointly with R. Giucci, N. Dornbusch)
- "Adressing Europe's failure to clean up the transport sector", Bruegel Policy Brief 2/2018 (jointly with S. Tagliapietra)

"Learning for decarbonisation: Start early, concentrate on promising technologies, exploit regional strength and work with your national system", Cop21 Ripples Consortium Policy Brief (jointly with A. Roth)

#### 2017

- "The Impact of Brexit on the EU Energy System", Study for the ITRE Committee (jointly with G. Fredriksson, A. Roth, S. Tagliapietra)
- "A new strategy for European Union-Turkey energy cooperation", Bruegel Policy Contribution 27/2017 (jointly with S. Tagliapietra)
- "Europe's comparative advantage in low-carbon technology" in Bruegel Blueprint 26 (ed. R. Veugelers) (jointly with R. Kalcik)
- "From big oil to big data? Perspectives on the European energy industry of the future" in Bruegel Blueprint 26 (ed. R. Veugelers) (jointly with S. Tagliapietra)
- "Review of EU-Third Country Cooperation on Policies Falling within the ITRE Domain in Relation to Brexit", Study for the ITRE Committee (jointly with J. Marcus, G. Petropoulos, A. Sapir, S. Tagliapietra, A. Terzi, R. Veugelers)
- "Policies for ensuring sufficient gas storage levels", German Advisory Group Ukraine Policy Briefing 04/2017
- "The carbon buyers' club: international emissions trading beyond Paris", Bruegel Policy Brief 3/2017
- "Boosting gas trading in Ukraine", German Advisory Group Ukraine Policy Paper 01/2017

- "A gas hub for Ukraine. Scoping the discussion", German Advisory Group Policy Briefing 20/2016
- "Towards an industrial development strategy: The competitive performance of industry sub-sectors", German Advisory Group Policy Briefing 19/2016 (jointly with D. Saha)
- "Climate policy in China, the European Union and the United States: Main drivers and prospects for the future", Centre for Climate Change Economics and Policy, Grantham Reserach Institute on Climate Change and the Environment and Bruegel Policy Brief (jointly with A. Averchenkova, S. Bassi, K. Benes, F. Green, A. Lagarde, I. Neuweg)
- "Going local: empowering cities to lead EU decarbonisation", Bruegel Policy Contribution 22/2016 (jointly with S. Tagliapietra)

- "An approach to identify the sources of low-carbon growth for Europe", Bruegel Policy Contribution 16/2016
- "Energy across the Mediterranean: a call for realism" in: "Seven Years after the Crisis: Intersecting Perspectives", OCP Policy Center and Bruegel Policy Report (jointly with S. Tagliapietra)
- "Reaching the point-of-no-return for Ukraine's gas sector", German Advisory Group Ukraine Policy Paper 03/2016
- "Options for balancing Georgia's electricity supply and demand", German Economic Team Georgia Policy Paper 02/2016 (jointly with D. Saha)
- Energy across the Mediterranean: a call for realism", Bruegel Policy Brief 3/2016 (jointly with S. Tagiapietra)
- "Ukraine energy update 2015/16" German Advisory Group Ukraine Technical Note 01/2016 (jointly with D. Naumenko)
- "Restructuring of Naftogaz. Considerations on scope and ownership of the business units", German Advisory Group Ukraine Policy Briefing 03/2016
- "Rethinking the security of the European Union's gas supply", Bruegel Policy Contribution 01/2016 (jointly with S. Tagliapietra)

- "When and how to support renewables? Letting the data speak", in A. Ansuategi et al. (eds.), Green Energy and Efficiency, Springer (jointly with M. Peruzzi and A. Serwaah)
- "Can a global climate risk pool help the most vulnerable countries?", Bruegel Policy Brief 04/2015 (jointly with D. Schoenmaker)
- "Methodological issues in predicting potential comparative advantages of Belarus", German Economic Team Belarus Technical Note 02/2015
- "How to unbundle Naftogaz: Options and Policy Recommendations", German Advisory Group Ukraine Policy Paper 05/2015
- "Structural challenges for the Belarussian export sector. Analysis and recommendations" German Economic Team Belarus Policy Briefing 07/2015 (jointly with R. Kirchner)
- "European climate finance: securing the best return", Bruegel Policy Brief 03/2015 (jointly with G. Wolff)

"Making low-carbon technology support smarter", Bruegel Policy Brief 02/2015

- "Designing a new EU-Turkey strategic gas partnership", Bruegel Policy Contribution 10/2015 (jointly with S. Tagliapietra)
- "Accounting for gas distribution losses", German Advisory Group Ukraine Technical Note 02/2015 (jointly with S. Golovin)
- "Energy-intensive production: Potential in Georgia", German Economic Team Georgia Policy Briefing 05/2015 (jointly with D. Saha, L. Pavlenishvili)
- "Can Ukraine secure enough gas for the winter 2015/16? A scenario analysis", German Advisory Group Ukraine Policy Briefing 08/2015
- "Can low electricity prices be a comparative advantage of Georgia?", German Economic Team Georgia Policy Paper 02/2015
- "Georgia's economic specialisation: Present and future", German Economic Team Georgia Policy Paper 01/2015 (jointly with D. Saha, M. Peruzzi)
- "Ukraine's import dynamics in 2014", German Advisory Group Ukraine Policy Briefing 03/2015 (jointly with R. Giucci, M. Ryzhenkov, V. Movchan)
- "Implications of an economic detachment of the rebel-held area", German Advisory Group Ukraine Policy Study 01/2015 (jointly with R. Giucci, R. Kirchner, V. Kravchuk, D. Saha)

- "Rebalancing the EU-Russia-Ukraine gas relationship", Bruegel Policy Contribution 15/2014 (jointly with A. Loskot-Strachota)
- "Green Growth: What could be in it for Georgia?", German Economic Team Georgia Policy Briefing 07/2014
- "Energy Security of Georgia", German Economic Team Georgia Policy Paper 01/2014
- "Elements of Europe's energy union", Bruegel Policy Brief 5/2014
- "Remerge: regression-based record linkage with an application to PATSTAT", Bruegel Working Paper 852 (jointly with M. Peruzzi M. & R. Veugelers)
- "A scaleable approach to emissions-innovation record linkage", Bruegel Working Paper 851 (jointly with M. Huberty & A. Serwaah)
- "A flexible, scaleable approach to the international patent 'name game'" Bruegel Working Paper 850 (jointly with M. Huberty & A. Serwaah)

"Energy Security of Georgia", German Economic Team Policy Paper 01/2014

"Memo to the Commissioner for Climate Policy" in "EU to DO 2015-2019: Memos to the new

EU leadership", Bruegel

- "Memo to the Commissioner for Energy" in "EU to DO 2015-2019: Memos to the new EU leadership", Bruegel
- "Improving gas transmission network regulation in Ukraine by implementing Energy Community rules-a-tailor made proposal", German Advisory Group Policy Paper 03/2014 (jointly with S. Ruester)
- "Can Ukraine secure enough gas for the winter? A scenario analysis", German Advisory Group Technical Note Series 05/2014
- "Short-term gas supply options for Ukraine", German Advisory Group Ukraine Policy Briefing 06/2014 (jointly with R. Giucci)
- "Economic Reform Agenda for Ukraine", German Advisory Group Ukraine Reform Agenda (jointly with R. Giucci, R. Kirchner, S. von Cramon-Taubadel)
- "Evaluating the options to diversify gas supply in Ukraine", German Advisory Group Policy Paper 01/2014 (jointly with D. Naumenko)
- "EU gas demand scenarios and implications for Ukraine as a gas transit country", German Advisory Group Policy Briefing 03/2014 (jointly with R. Giucci)
- "When and how to support renewables? Letting the data speak", Bruegel Working Paper (jointly with M. Peruzzi and A. Serwaah)

#### 2013

- "Energy Competitiveness", in Bruegel Blueprint 17 "Manufacturing Europe's future" (ed. R. Veugelers) (jointly with V. Cipollone)
- "Electricity without borders: a plan to make the internal market work", Bruegel Blueprint 16
- "You'd better bet on the ETS", Bruegel Policy Brief 02/2013
- "Electricity infrastructure: More border crossings or a borderless Europe?", Bruegel Policy Contribution 05/2013
- "A stochastic fuel switching model for electricity prices", Energy Economics 35, p 5–13

- "Private long-term investment in uncertain times", Bruegel Policy Contribution 22/2012
- "Smart choices for growth", Bruegel Policy Contribution 21/2012
- "Investment and growth in the time of climate change", Bruegel-EIB book, Brussels (jointly with

E. Calthrop, A.-. Riess, A. Kolev)

- "How wide is the Mediterrenean?", Bruegel Policy Contribution 08/2012 (jointly with M. Tam, L. Granelli)
- "Cutting carbon, not the economy", Bruegel Policy Contribution 03/2012
- "The great transformation: decarbonising Europe's energy and transport", Bruegel Blueprint 16 (jointly with M. Holtermann, J. Radeke, M. Tam, M. Huberty, D. Naumenko, A. Ndoye)
- "Retailers' risk management and vertical arrangements in electricity markets", Energy Policy, 40, p. 465-472 (jointly with R. H. Boroumand)
- "Emission Trading as a Catalyst for Energy Efficiency Improvements: Options and Potential for Moldova" German Economic Team Moldova Policy Paper 01/2012 (jointly with J. Radeke)

#### 2011

- "Assessing the impact of the EU ETS using firm level data", Bruegel Working Paper (jointly with J. Abrell and A. Ndoye)
- "Eastern European lessons for the Southern Mediterranean", Bruegel Policy Contribution 07/2011 (jointly with A. Sapir)
- "Green exports and the global product space: Prospects for EU industrial policy", Bruegel Working Paper (jointly with M. Huberty)
- "Is European climate policy the new CAP?", Bruegel Policy Brief 01/2011
- "Reconciling the Single Market Objective with the Renewable Energy Objective", in "Think Global Act Europe - The contribution of 16 European think tanks to the Polish, Danish, and Cypriot trio presidency of the European Union"

#### 2010

"Power to the people of Europe", Bruegel Policy Brief 04/2010

"Rare earth - no case for government intervention", Bruegel G20 Monitor 11/2010

- "Catching the maximum market value of electricity storage technical, economic and regulatory aspect", RSCAS Working Papers 02/2010, European University Institute (jointly with H. Xian)
- "The Dynamics of Global Crude Oil Production", Discussion Papers of DIW Berlin 1075, DIW Berlin, German Institute for Economic Research (jointly with A. Zaklan and A. Neumann)

- "Inefficient arbitrage in inter-regional electricity transmission", Journal of Regulatory Economics, Springer, 37(3), p. 243-265 (jointly with D. Bunn)
- "Implications of recent developments in global and European natural gas markets for Ukraine", German Advisory Group Policy Paper 06/2010 (jointly with D. Naumenko)
- "Electricity Sector in Moldova: Evaluation of strategic options" German Economic Team in Moldova Policy Paper PP/01/2010 (jointly with A. Oprunenco)

- "Energieverbrauch in der Ukraine: Weniger ist mehr" (Energy demand in Ukraine). Ukraine Analysen 63
- "A sensitivity analysis of economic value of different electricity storage technologies", LARSEN Working Paper 24 (jointly with H. Xian)
- "HHI, an irrelevant indicator without a relevant market", LARSEN Working Paper 21 (jointly with D. Perrot-Voisard)
- "Expected vs. Observed Storage Usage: Limits to Intertemporal Arbitrage" in A. Creti (ed.) "The Economics of Natural Gas Storage: A European Perspective", Springer (jointly with A. Neumann)
- "The EU Integration of the New Member States' Electricity Markets Testing for Wholesale Price Convergence Using the Kalman Filter" in F. Lévêque and J.-M. Glachant (eds.) "Electricity Reform in Europe: Towards a Single Energy Market", Edward Elgar
- "Ensuring EU Enlargement to New Member States" in F. Lévêque and J.-M. Glachant (eds.) "Electricity Reform in Europe: Towards a Single Energy Market", Edward Elgar (jointly with Ch. von Hirschhausen).
- "Eastern Partnership: Prospects for intensifying the Belarus EU relations in the energy sector?" German Economic Team in Belarus Policy Paper PP/08/2009
- "The Belarusian Electricity Sector: Financing Sources for Investments" IPM Policy papers 03/2009 (jointly with A. Zaborovskiy)
- "Exporting electricity to the EU more than switching frequencies" German Advisory Group Policy Paper 07/2009 (jointly with D. Naumenko)

#### 2008

"Restructuring the Belarusian Electricity Sector: Setting the Agenda" IPM Policy papers 05/2008 (jointly with A. Zaborovskiy and R.Giucci)

"The case for tariff differentiation in the Belarusian electricity sector" IPM Policy papers

04/2008 (jointly with A. Zaborovskiy)

- "First Evidence of Asymmetric Cost Pass-through of EU Emissions Allowances: Examining Wholesale Electricity Prices in Germany", Economics Letters 99(3), p. 465-469 (jointly with Ch. von Hirschhausen)
- "Convergence of Electricity Wholesale Prices in Europe? A Kalman Filter Approach", Energy Economics 30(4), p. 1659-1671
- "A Markov Switching Model of the Merit Order to Compare British and German Price Formation" DIW Berlin Diskussionspapier 714

#### 2007

- "Preisbildung und Marktmacht auf den Elektrizitätsmärkten in Deutschland" (Price Formation and Market Power in German Electricity Markets) jointly with Ch. von Hirschhausen and H. Weigt. Report for the Association of Industrial Energy Users (VIK)
- "Strom Länderberichte Mittelosteuropa" (Electricity Country Reports Central Europe) and "Umweltschutz als Kostenfaktor in den Neuen Mitgliedsländern" (The Cost of Environmental Protection in the New Member States Energy Sectors) in the framework of a project for the German Ministry of Economics and Labor

#### 2006

"DIW Weekly Bulletin on the German EU Presidency" jointly with C. Binzel, A. Danzer, H. Engerer, F. Holz, A. Muravyev, A. Oshchepkov, K. Schindler, M. Schrooten, U. Thießen, N. Weißhaar. DIW Wochenbericht, No. 51-52, 2006