

Entwicklungspolitik



German Development Institute





# Disruptive Structural Change: Do We Have Innovative Policy Responses?

**European and Latin American Perspectives** 

Policy Research Workshop at the German Development Institute Bonn, 26-27 April 2016

This workshop will explore the socio-economic implications of global technological megatrends and the key principles and best practices of innovative industrial policy responses. It will bring together two technological domains that so far have been largely addressed in parallel by separate research communities: the revolutionary changes to production technologies caused by a whole wave of new ICTs and robotics as well as technologies underpinning the green transformation and decarbonization of economic growth within planetary boundaries. These two megatrends have one thing in common: they trigger disruptive structural change with far-reaching social implications. Effective policy responses – better even: proactive policy guidance – are called for. The workshop will provide a platform to discuss some of the emerging policy innovations and trigger a debate among policymakers and researchers from Europe and Latin America on commonalities and differences of regional/country strategies with a view to stimulating mutual learning.

# DAY 1, Tuesday, 26<sup>th</sup> April 2016

#### 9.30 - 10.15 Opening

- Welcome and introduction: Disruptive structural change and innovative policy responses *Tilman Altenburg, Head of Department, DIE*
- Meeting the Sustainable Development Goals: The need for more interactive policies
  *Christiane Bögemann-Hagedorn, Deputy Director, BMZ*

# 10.15 – 10.30 Coffee break

#### 10.30 – 12.00 Session 1: New objectives for industrial policy

The discourse on industrial policy is distinctly changing. The emphasis is moving from specific tools to broader goals and from short-term interventions to influencing long-term development paths. Industrial policy is thus being reconnected with major societal challenges. What are the general implications for policy design and implementation and how is policy practice changing in Europe and Latin America?

- Industrial policy as a normative exercise *Wilfried Lütkenhorst, DIE*
- Industrial and innovation policies for smart specialisation *Slavo Radosevic, University College, London*
- Linking industrial and innovation policy in the EU Mark Nicklas, European Commission, DG Internal Market, Industry, Entrepreneurship and SMEs, Acting Head of Unit
- New trends in industrial and innovation research Wolfgang Polt, Joanneum Research, Head, Institute for Economic and Innovation Research, Austria, tbc

Moderator: Tilman Altenburg, DIE

#### 12.30 – 13.30 Lunch break

# 13.30 – 15.00 Session 2: The Internet of Things, Robotics and Co.: Still time to get prepared?

New production technologies – from the internet of things to robotics, from additive manufacturing to nanotechnology - promise extraordinary productivity gains, yet have problematic implications as well. Automation may make not only routine but also 'white collar' employment redundant, and 'winner takes all' dynamics may lead to an unprecedented concentration of corporate power and growing levels of income and wealth inequality. How can societies manage the transition in ways that exploit the productivity gains while minimizing undesirable societal effects?

- The next production revolution: key features and policy implications *Alistair Nolan, OECD*
- How Germany confronts the challenges of "Industry 4.0" Matthias Kuom, German Aerospace Center (DLR)
- How regional clusters respond and SMEs get prepared Thorsten Hülsmann, Director, EffizienzCluster Management GmbH
- Robots vs. people? Winners and losers Daniel Buhr, Professor, University of Tübingen

Moderator: Christian von Drachenfels, VDI/VDE-IT

# 15.00 – 15.30 Coffee break

# 15.30 – 17.00 Session 3: Decarbonizing the world economy

The global transformation towards a low-carbon and development path – as called for by the G-8 and the Paris Agreement - constitutes a mega-challenge that will require a rapid, policy-induced demise of our fossil fuel-based productive capacities and infrastructure. While some conventional industrial policy insights will continue to be valid, a radical decarbonization under time pressure poses new challenges and requires innovative policy solutions. Can industrial policy adapt to this disruptive change or will it have to be redefined? Can we draw on existing good practice?

- What are the technological options for decarbonising the world economy by 2050? *Guido Schmidt-Traub, SDSN, tbc*
- Green growth as a disruptive industrial policy agenda Anna Pegels, DIE
- Climate policy and competitiveness Karsten Neuhoff, German Institute for Economic Research (DIW Berlin), Head of Climate Policy Unit
- The German energy transition as a project of industrial transformation *Rainer Quitzow, Institute of Advanced Sustainability Studies*

Moderator: Georgeta Vidican, University Erlangen-Nürnberg

# DAY 2, Wednesday, 27<sup>th</sup> April 2016

#### 9.00 – 10.30: Session 4: Defining priorities: Strategies and tools

The role of industrial policy in selecting and pushing specific technologies and subsectors has remained a hotly debated issue. While many economists still warn against "picking winners", policy practitioners across the world are struggling with ways to identify and support key sectors, and overcome systemic coordination failures. This session identifies best practices for defining priorities jointly with the private sector and civil society without stifling the creativity of markets.

- Approaches for identifying dynamic competitive advantages: From diversity towards a unifying framework? *Tilman Altenburg, Head of Department, DIE*
- How ambitious should industrial policies be? Mario Cimoli, Director of Production, Productivity and Management Division, UN-ECLAC
- Selecting priority sectors for productive transformation in Chile *Claudio Maggi, Head of Competitive Development Division, Chilean Economic Development Agency, CORFO*
- Selecting priority sectors for productive transformation in Mexico Héctor Núñez, Professor, Economic and Academic Research Center (CIDE), Mexico

Moderator: Michiko Iizuka, UNU-MERIT

# 10.30 – 11.00 Coffee break

# 11.00 – 12.30 Session 5: Innovative policy solutions

The international debate is no longer about <u>whether</u> industrial policy is needed at all but about <u>how</u> to design and implement interventions in the most efficient and least distortive way. The challenge is to work collaboratively with stakeholders to overcome coordination failures and incentivate market actors to come up with innovative solutions. This session provides good practice examples.

- Orchestrating systemic change: Germany's National Platform Electromobility Birgit Hofmann, Federal Ministry of Economic Affairs and Energy, Head of Environmental Innovations and Electric Mobility
- Competitive elements in industrial policy implementation: The excellence cluster competition in Germany Dieter Labruier, Forschungszentrum Jülich
- Parallel impact research: The example of electromobility regions Helmuth v. Grolman, Deutsches Dialoginstitut

- Policies to foster innovation in Brazil Mariano Laplane, President, Centre for Strategic Management and Studies (CGEE), Brazil
- Policies to foster innovation in Argentina Sergio Drucaroff, Undersecretary of Production Management, Ministry of Production, Argentina

Moderator: Andreas Stamm, DIE

#### 12.30 – 13.30 Lunch break

#### 13.30 – 15.00 Session 6: The role of international cooperation

Latin America and Germany look back at a long history of collaboration, building on a strong base of shared goals and values, joint interests and a good track record of cooperation experience. Germany supports Latin America's activities to make its development more productive, more equitable and environmentally sustainable. BMZ and UN-ECLAC in particular both coincide in their quest for "productive development with equity" ( a programmatic ECLAC title). This led to the establishment of a strategic partnership between both institutions more than a decade ago. This session takes up the key challenges discussed in the previous sessions and draws practical conclusions for the tasks ahead in the future cooperation agenda.

- Confronting the challenges of disruptive structural change: Latin American responses Raúl García-Buchaca, Director of Programme Planning and Operations Division, ECLAC, tbc
- Insights for structural change in Uruguay Sebastián Torres, Director de Planeación, Oficina de Planeamiento y Presupuesto, Presidencia de la República Oriental de Uruguay.
- Promoting Innovation in the Green Economy by including Quality Infrastructure Ulrich Harmes-Liedtke
- How Technical Cooperation contributes to the challenges of structural change in Latin America
  *Jürgen Klenk, GIZ*

Moderator: Paul Bornkamm, BMZ, tbc

#### 15.00 - 15.30 Closure

• What we take away from the workshop Mario Cimoli, Director of Production, Productivity and Management Division, UN-ECLAC