

**The role of sustainability performance in incumbent firms' responses to scenarios of future change.**

**A backcasting study**

*Josefa Kny (Norbert Elias Center for Transformation Design and Research (NEC), Europa-University Flensburg, Germany)*

*\*\*\*Draft (May 25th, 2018). Please do not cite or circulate without permission from author.\*\*\**

**1. Introduction**

In transition research, large companies which can be conceptualized as regime actors are increasingly discussed in respect to their role in sustainability transitions. For example, authors examine incumbents' ambivalent potential to accelerate and to impede transformative change: "Due to their [large incumbent firms'] influence and resources, they could potentially be important for fostering the breakthrough of alternative solutions and an acceleration of sustainability transitions. However, since fundamental change to current systems threatens their vested interests, they usually use their power to prevent change and secure their current positions" (Augenstein/Palzkill 2016, 5). Others see the position of incumbents as complimentary to the role of small, innovative firms: "Because of their complementary skills and challenges with regard to sustainable entrepreneurship, a co-evolution of 'Emerging Davids' and 'Greening Goliaths' is more likely to result in sustainability than either of the two alone" (Hockerts/Wüstenhagen 2010, 482). In practice, while still predominantly impeding change, incumbent firms show an increased interest in sustainability issues in response to a conceivably stronger regulation of ecological and social concerns (Smink et al. 2015). Amongst others, the European Guideline on Non-financial Reporting, the UK Modern Slavery Act or the on-going trial against the German energy supplier RWE concerning their impact on climate change can be regarded as current manifestations of this development. With regard to the future, this trend could possibly either extend and grow or lose momentum over time. However, since large companies' possible reactions towards such changes have thus far remained largely unexplored, this paper will shed light on such increasingly important developments. Focus of the paper is the following question: How do large companies perceive plausible future scenarios which entail higher or lower degrees of sustainability-oriented regulation? And correspondingly, how do they strategically discuss their sustainability performance towards a given future scenario? By focusing on the role of large companies, implications for actor configurations within the economic system as well as transition pathways will be revealed and discussed.

## 2. Method

The paper draws on empirical research within the research project GIVUN<sup>1</sup> on the so-called “Economy for the Common Good” (ECG) movement, which aspires to align economic activity more strongly with values such as ecological sustainability, social justice and democracy (Felber/Hagelberg 2017). It can be conceptualized as aiming to change the dominant unsustainable socio-technical regime. The qualitative research consists of case studies focusing on the applicability of common good oriented practices in four large multinational enterprises from different industries headquartered in Germany, including retail, mechanical engineering and energy supply.

For workshops with company representatives in spring 2017, we developed a combination of backcasting and focus group methodology (Svenfelt et al. 2011; Robinson et al. 2011). The participants were confronted with two different plausible future scenarios of their business environment in the year 2030 that comprise economic, social as well as ecological developments. Several division resp. department managers from different business units took part in the workshops in the corresponding company headquarters. They discussed their company’s preferred roles in the corresponding scenario as well as the strategic implications of reaching that status, led by the following questions: Which internal and external developments and changes would be necessary to position the company within the given future scenarios? Here, who are the relevant actors and what measures need to be taken?

For the study, we developed two plausible future scenarios. With respect to the meta-analysis of Greeuw et al. (2000), on the one hand, we constructed a “Wait and see”-scenario, where current societal and economic trends are sustained and a lack of political design raises the pressure on social and ecological systems. On the other hand, we built a “Just do it”-scenario that draws on significant political change towards higher social and ecological standards within the geographical region of the companies’ headquarters without actually solving social, ecological and economic problems on a global and sustainable scale.<sup>2</sup> The two scenarios are based on key factors identified in recognized foresight studies and visions for a sustainable society as, for example, compared in a meta-analysis by Jacob et al. (2015), the European Environmental Agency (EEA 2015), and the Commission on the Future of Work of the Robert Bosch Foundation (Walter et al. 2013).<sup>3</sup> The time scale leading up to

---

<sup>1</sup> The research project GIVUN (“The Economy for the Common Good in comparison with corporate sustainability strategies”) was funded by the German Federal Ministry of Education and Research (BMBF; support code 01UT1427 A+B).

<sup>2</sup> Disruptive dystopian and utopian scenarios – “Doom Monger”-, resp. “Carpe Diem”-scenarios in the classification of Greeuw et al. (2000) – were renounced to leave enough room to maneuver to the companies as well as prevent the participants from discussing the probability of the given scenario.

<sup>3</sup> The scenario building process was conducted along the phases described by Gaßner/Kosow (2008): scenario field definition, identification of key factors, analysis of key factors and scenario generation.

the year 2030 was chosen as it implies sufficient time for considerable changes to be implemented within the working life of those participants included in the study.

Confronting the participants from each company with two scenarios serves as discussion stimulus and frames the research. As an introduction, the company representatives imagined their own professional life in the year 2030. Afterwards, they discussed their firms' position, its activities and challenges in detail consecutively within two tangible future situations. Thereby, the companies' willingness to and directions of change under certain future conditions can be examined. Each firm's specific reaction towards a given scenario as well as its preferred strategical "pathway" can be explored.

While the limited number of company representatives cannot encompass the whole organization, it can, however, provide a deeper insight: Direct reactions towards the future scenarios as well as justifications of executives that shape the firms' behavior can be analyzed. To answer the research question, the analytical focus was put on how the companies' sustainability performance was discussed. To analyze the data, a Thematic Analysis approach (Braune/Clarke 2012) was used.

### **3. Two future scenarios: "Everything under Control" (EuC) and "Long live the Market" (LitM)**

In the following, the two scenarios used as discussion stimuli and research frame will be presented in more detail. Both scenarios focus on Germany within its European context and the global developments affecting it. They share a baseline of certain societal, ecological and economic trends that are highly unlikely to change within the next two decades as the studies included in the scenario building process (see above) suggest. In economic terms, growth increase will rather be found in newly industrializing countries than in Europe, hence, living standards between the different world regions will converge. Within regions, however, inequalities will rise. The global demand for natural resources will increase, paving the way for social conflicts over natural resources. As already is the case, Europe will be even more dependent on other countries, partly even on resource monopolies. Ecologically, higher average temperatures, more extreme weather events and an increase in biodiversity loss are to be expected, while greenhouse gas emissions will not significantly decline. In the work sector, precarious and freelance employment will rise due to organizational processes that increasingly rely on automatization, production networking and knowledge intensity.

The "Everything under Control"-scenario imagines a year 2030 in which the European Union is replaced by a smaller union of states, "NowEurope", that puts emphasis on ecological policies as subsidies for sustainable infrastructures, as well as making taxes on carbon emissions within the transport and production sector compulsory, accompanied by an alternative welfare measuring system. This leads to the migration of several corporate groups into other European countries and

world regions, while others stay and rather invest into recycling and reparation business models. Digital platforms and new value-creation networks have developed. While the prosperity level within the region has generally sunken, redistribution has increased. People attach importance to ecological and fair consumption.

In the “Long live the Market”-scenario, in contrast, European states are constantly under pressure which consequently puts competition before ecology by maintaining ecological standards at a low level and only investing in sustainable infrastructure where it is overdue. Here, costs mostly exceed the willingness to invest, and international agreements are too weak to hold countries accountable for ecological and social omissions. For companies, the legal basis of their activities is unsafe, since first trials against ecological and social violations fought by activists groups have been won. Efficiency gains have resulted in lower costs and higher consumption. Hence, the existing awareness for sustainable consumption is not put into practice.

#### **4. Results**

In this section, the companies’ reactions towards and anticipated positions within the two given future scenarios are described. They are structured by categories that were developed from the data material, led by the research question on sustainability performance. These are (1) general position and preference, (2) organizational structures and processes, (3) business models and products as well as (4) procurement activities, (5) employee relations and (6) political relations.

##### *(1) General position and preferences:*

In the EuC-scenario, the examined firms that already consider themselves advanced in the field of socio-ecological responsibility find it attractive to strengthen their forerunner position to benefit from competitive advantages. The companies that primarily focus on growth and profit maximization would remain oriented towards the demands of customers and legal compliance. They, therefore, would only improve their sustainability engagement if it helped them to benefit from subsidies (in sustainable infrastructures). While the first see and approve of the region-wide regulation as the establishment of a level playing field, the latter consider a (partial) migration of their activities to less regulated world regions. The same tendency holds true concerning the companies’ scope of the market: The firms that put more emphasis on the regional (European) market would endorse such a regulation, while more internationally oriented companies would expand to less regulated regions to maximize their profits.

While some company representatives in the LltM-scenario at first claim to raise their firms’ socio-ecologically responsible profiles by setting voluntary industry standards, they shift away from that position when they become aware of the intensified competitive pressure within the scenario.

Consequently, they rather give priority to self-preservation and reactive behavior. Although some firms would prefer to maintain their value orientation, the workshop participants doubt that they will be able to do so. Here again, the primarily profit oriented companies focus on the conservation of their status-quo as long as customers and (country-specific) regulations do not send other signals. All examined firms, to a certain degree, see advantages in terms of the stability and certainty of action that the EuC-scenario grants. Especially, the companies that consider themselves intrinsically value-oriented prefer this development as it allows them to maintain their socio-ecological orientation without suffering from any competitive disadvantages. However, most participants from all companies perceive the LltM-scenario as the continuation of current trends and, therefore, a probable future development that enforces risk aversion.

### *(2) Organizational structures and processes:*

Organization change is a dominant theme in all examined firms. Digitalization and acceleration are already causing them to shift their organizational structures and cultures in the direction of agility and flexibility, which can also include the selling or closing of unviable segments of business in the future. However, the pace of change differs: The companies that have already been moving towards more ecological business models in 2017, consider the EuC-scenario less change-demanding, while the firm that has rather maintained its status-quo experiences higher pressure on ecological innovation within the regulated region. The tide turns in the LltM-scenario: While the latter company can preserve its former course due to its sole focus on economic efficiency and growth, the others need to change their activities more radically and rapidly to concentrate on and gain efficiency. For one company, however, this might mean an intensified orientation towards a lean and agile profile to get rid of unprofitable segments of business, while another prefers the advantages of a complex corporate group to compensate for possible losses.

### *(3) Business models and products:*

All examined companies emphasize the role of customer preferences and competition. Hence, business models and products are adapted to what customers want. The EuC-scenario with its sustainability-aware consumer base, consequently, implies more socio-ecologically oriented business models and products for the regulated region. Similar to before, companies with value-based socio-ecological orientations and/or already initiated sustainability strategies approve of this development. Only one firm feels pressed to shift its innovation strategy to more ecological products for the regulated region. However, at the same time it considers a partial migration of its “old” business models and products. In the LltM-scenario, in contrast, all companies stress the need to radically adapt their products to individual customer preferences and their economic situations to survive in

the face of stronger competition. For all but one company, this means a drawback from socio-ecological orientation leaving them with reputation-enhancing social and ecological measures at certain points only.

#### *(4) Procurement activities*

For all companies, in both scenarios, the precise conditions in relevant procurement markets (i.e., monopolies on certain resources) affect their procurement strategies. Due to the general regulation within the (post-EU) region in the EuC-scenario, some company representatives expect and approve of a higher degree of regional procurement and circular economies. This would go hand in hand with stronger cooperation with suppliers within the region. To avoid competitive drawbacks, however, for some firms, costs will still explicitly remain a key factor in procurement activities. These companies predominantly hold their suppliers responsible for compliance with social and ecological standards. Here, cooperation within the supply chain remains less important. Especially in the LItM-scenario, the firms that would prefer to be more regionally oriented in their procurement activities consider their commitment to more social and ecological measures and suppliers weakened.

#### *(5) Employee relations*

With respect to social standards, employee relations can be seen as a theme falling under the greater topic of sustainability. For some companies, the EuC-scenario entails the opportunity to raise the standards of payment, job quality and internal co-determination, at least within the regulated region. This can be seen as either motivated by a firm's certain general value orientation or anticipated reputational gains. In the LItM-scenario, some companies will even expand their employee services if public infrastructures are weakened to maintain their own operability and reputation. Concerning job requirements, all companies expect a shift towards more knowledge-intensive activities involving digital literacy and sustainability knowledge in both scenarios. Consequently, low-skilled workers are less required. One firm even considers a relocation of certain functions to other less regulated and low-cost countries.

#### *(6) Political relations:*

Their anticipated role concerning policy-making processes is mentioned by all four examined companies. While some companies approvingly observe the stronger socio-ecologically oriented regulation in the EuC-scenario, one firm stresses the need to actively raise its voice in this process to influence it according to its own interests. Another firm's representatives do not express a preference but emphasize the need to comply with the given regulative situation. In the LItM-scenario, the companies in favor of regulation cautiously want to move into that direction without

too strong political positioning to avoid the loss of certain customer groups. The companies predominantly oriented towards their own profit rather consider the scenario as a chance to make use of legal vacuums.

## **5. Discussion**

After the detailed description of the incumbent firms' anticipated dealings with different future scenarios, several implications of these results will be discussed in the following. While the results were specifically related to the four examined cases, I will attempt some conclusions as to whether these findings hold also for other companies that share structural characteristics with these four firms, one of these being their international realm of action.

When confronted with a comprehensive scenario of future change, incumbent firms approve of the stronger political regulation of ecological and social issues as it promises stability. Generally, this can be explained by their need for investment security for business model and technological innovations. Hence, a stronger social-ecological regulation is conceived as a driving force for ecologically and socially oriented technological and business model innovation for all companies in the sample. However, while some incumbent firms welcome such a development since they already see themselves as 'forerunners' on a 'greening' path, others tend to fear a more pressing need to change their activities as a means of survival and will not exceed compliance level concerning their sustainability performance. On the one hand, the organizational culture within each firm, defined as "the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with norms for behavior in the organization" (Deshpande/Webster 1989: 4), helps to explain the general approach. Value-driven firms attribute a strong relevance to their sustainability performance that goes beyond the market requirements and even allows reduced profit margins. Others, however, put more emphasis on demand and, hence, profit orientation, thereby following the dominant shareholder value principle and leaving sustainability measures behind as long as shareholders do not demand it (vgl. Dörre 2012, Dyllick/Muff 2016). Both tendencies – the emphasis on socio-ecologically improved conditions, resp. costs – are also reflected in dealing with procurement. On the other hand, the company's specific market reach influences whether the level playing field that is created within a certain regulated region is regarded as beneficial or hindering. If the firm's activities predominantly focus or can be concentrated on the respective region without strong efforts, the regulation improves the need and extent of performing sustainably. If the market reach, however, exceeds the region and addresses a global level, the regional regulation raises doubts about the protective measures and the global marketability of products.

In case of a less regulated and more competitive environment, firms see themselves forced to maintain or even lower their current sustainability performance to preserve themselves. While for some, especially the value-driven companies, this means a setback, others conceive it as less stressful. Here, the specific branch and competitive situation determines the firm's orientation, that is its impact and position within the sector and, hence, its anticipated power to set social and ecological standards within the branch and supply chain. However, when confronted with a highly competitive environment, all companies prioritize the economic efficiency of their activities and their self-preservation, and consider their sustainability performance secondary.

Interestingly, the strategic measures envisioned by the participants to preserve the firm in a more, as well as a less regulated scenario do not significantly differ. All companies describe an organizational change towards agile and flexible structures and processes that entails more autonomy and appreciation, as well as voluntary flexible working hours and participation. The role of social sustainability within these processes, however, is twofold: Rather than intrinsically-led improving the social working standards for all employees, it is primarily motivated by the need to meet the challenges of accelerated futures (Kalff 2017). Here, in addition, highly qualified employees are much sought after, while low-skilled workers are rather exposed to worse working conditions.

Generally, the rather flexible adaptability of corporate groups to different situations seems to be decisive. Being vast and diverse structures, they are able to shift towards or drift away from an intensified sustainability performance by closing or selling corporates with "unsustainable" business models and founding or buying sustainability-oriented corporates. While this behavior might improve the company's sustainability performance in terms of business models and products, it might also pose a challenge for social sustainability, since employees and suppliers are predominantly exposed to the corresponding strategic decisions. Moreover, strategies of mass customization will be increasingly pursued by the examined companies. On the one hand, this development may allow ecological advances through the reduction of material waste by use of integrated information systems and just-in-time production (Pollard et al. 2016). On the other hand, it also demands high flexibility in production which often entails outsourcing and, hence, externalizing economic and social risks to suppliers within a globalized value chain (ibid.; Sommer 2017).

With regard to firm size, the examined companies sell their products on international mass markets and are not willing to fundamentally change this focus. Consequently, the customization of products, that is considered highly relevant in the future, needs to be compliant with mass market orientation. Hence, large companies enjoy advantages due to their size and continued growth within the current economic system in terms of, e.g. fixed cost degression, market access and zones of influence (Posse 2015). This is even more valid in the LItM-scenario with its intensified global competition and may



also lead to migration from the protectively regulated region in the EuC-scenario as formulated by several companies. Consequently, sufficiency-driven business models (Bocken/Short 2016) are only relevant to incumbents if they form profitable business areas.

With regard to Dyllick and Muff's (2016) typology of business sustainability, the examined companies cannot be considered "truly sustainable businesses" within the two given future scenarios but can rather be positioned between "business sustainability 1.0", an economic orientation that "generate[s] positive side-effects for some sustainability issues, [while] their main purpose is to reduce costs and business risks, to increase reputation and attractiveness for new or existing human talents, to respond to new customer demands and segments, and thereby increase profits, market positions, competitiveness, and shareholder value (ibid., 164), and "business sustainability 2.0", namely an orientation towards the „triple bottom line“, where "value creation goes beyond shareholder value and includes social and environmental values. Companies create value not just as a side effect of their business activities, but as the result of deliberately defined goals and programs addressed at specific sustainability issues or stakeholders" (ibid, 165). Here, the role of regulation and stakeholder demands, again, is considered decisive.

## **6. Conclusion**

Giving focus to the sustainability performance and strategies, this paper sheds a light on large companies' perceptions of plausible future scenarios entailing lower or higher degrees of sustainability-oriented regulation. The anticipated incumbents' behavior was presented in order to give insights on general positioning and preferences, as well as on five areas of activity relevant to the question. It was revealed that several aspects influence a firm's sustainability performance within a given future scenario. While some can be traced to the specific nature of corporate groups, that is size, organizational structure and culture, others can be related to the external surrounding of the firm, namely legislation, political and customer pressure as well as the branch and competitive situation.

The 'greening of Goliaths' – to pick up Hockert and Wüstenhagen's (2010) notion – is, therefore, fundamentally limited by the fear of competitive disadvantages and the prioritization of self-preservation, independently of the specific branch and market position. However, a sustainability-oriented regulation can establish a level playing field that helps large companies to raise ecological and social standards without that fear and, hence, is even preferred by companies that already see themselves as forerunners in the field due to their value-driven and/or strategic sustainability orientation. Moreover, sustainability-aware consumerism can have a similar effect if it gains weight and encompasses all sectors.

However, this is not necessarily good news with respect to prospective sustainability transitions. In contrast, as all companies regard a more competitive future environment as more probable, they have already begun to shift their activities correspondingly. Extrapolated into the future, this means a stronger focus on economic efficiency, flexibility and self-preservation, while reducing sustainability strategies to a level of mere compliance. That even holds true for more value-driven incumbent companies. Hence, the contribution of large incumbent companies to a sustainability transition, according to this study, remains limited. Sustainability measures as such are not seen as strategic factor of corporate survival if not claimed by legislation or customer demand.

Frank Geels et al. (2014, 37) pose the question “how ‘Goliath’ can be weakened, eroded and destabilized, to enhance the chances of green Davids”. Subsequently, an important question to ask now would be: How can we stabilize, support and advantage those incumbents and business models that are *willing* to ‘green’ and thereby destabilize the ones that only conform with economic and profit objectives?

In addition, the role of digitalization for business sustainability should be examined in more detail. Up to now, its implications are complex and rather uncertain in terms of future developments (Lange/Santarius 2018).

## **Acknowledgements**

The author thanks Luise Tremel for an enriching joint scenario building process and the same as well and Jana Gebauer for an insightful discussion on this paper.

Financial support by the German Federal Ministry of Education and Research (BMBF) under support code 01UT1427 A is gratefully acknowledged.

## **Literature**

Augenstein, Karoline; Palzkill, Alexandra (2015): The Dilemma of Incumbents in Sustainability Transitions. A Narrative Approach. In: *Administrative Sciences* 6 (1), S. 1-23.

Bocken, N.M.P.; Short, S. W. (2016): Towards a sufficiency-driven business model. Experiences and opportunities. In: *Environmental Innovation and Societal Transitions* 18, S. 41-61.

Braun, Victoria; Clarke, Virginia (2012): Thematic Analysis. In: H. M. Cooper (Hg.): *APA handbook of research methods in psychology*. Washington, DC: American Psychological Association (2), S. 57-71.

Deshpande, Rohit; Webster, Frederick E. (1989): Organizational Culture and Marketing: Defining the Research Agenda. In: *Journal of Marketing* 53 (1), S. 3-15.

Dörre, Klaus (2012): Die neue Landnahme. Dynamiken und Grenzen des Finanzmarktkapitalismus. In: Klaus Dörre, Stephan Lessenich, Hartmut Rosa und Thomas Barth (Hg.): *Soziologie - Kapitalismus - Kritik. Eine Debatte*. 4. Aufl. Frankfurt am Main: Suhrkamp.

Dyllick, Thomas; Muff, Katrin (2016): Clarifying the Meaning of Sustainable Business. In: *Organization & Environment* 29 (2), S. 156-174.

EEA – European Environmental Agency (2015): The European environment. State and outlook 2015: assessment of global megatrends. Luxembourg: Publications Office.

Felber, Christian; Hagelberg, Gus (2017): The Economy for Common Good. A Workable, Transformative Ethics-Based Alternative. In: *The Next System Project*. <http://thenextsystem.org/wp-content/uploads/2017/02/FelberHagelberg.pdf>.

Gaßner, Robert; Kosow, Hannah (2008): Methoden der Zukunfts- und Szenarioanalyse. Überblick, Bewertung und Auswahlkriterien. Hg. v. IZT. Berlin (izt-WerkstattBericht, 103).

Geels, F. W. (2014): Regime Resistance against Low-Carbon Transitions. Introducing Politics and Power into the Multi-Level Perspective. In: *Theory, Culture & Society* 31 (5), S. 21-40.

Hockerts, Kai; Wüstenhagen, Wolf (2010): Greening Goliaths versus emerging Davids - Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. In: *Journal of Business Venturing* (25), S. 481-492.

Jacob, Klaus; Bär, Hoger; Graaf, Lisa (2015): Metaanalyse von Visionen einer nachhaltigen Gesellschaft. Teilbericht 2 des Projektes „Nachhaltiges Deutschland 2030 bis 2050 - Wie wollen wir in Zukunft leben?“. Hg. v. Umweltbundesamt. Dessau-Roßlau (Texte, 59/2015).

Kalff, Yannick (2017): Digitalisierung und Demokratisierung. Betriebliche Mitbestimmung im Spannungsfeld zwischen Individuierung, Kontrolle und Emanzipation. Jena (Working Paper der DFG-Kollegforscher\_innengruppe Postwachstumsgesellschaften, 6/2017).

Lange, Steffen; Santarius, Tilman (2018): Smarte grüne Welt? Digitalisierung zwischen Überwachung, Konsum und Nachhaltigkeit. München: oekom verlag.

Pollard, Dennis; Chuo, Shirley; Lee, Brian (2016): Strategies for mass customization. In: *Journal of business & economics research* 14 (3), S. 101–109.

Posse, Dirk (2015): Zukunftsfähige Unternehmen in einer Postwachstumsgesellschaft. Eine theoretische und empirische Untersuchung. Heidelberg: Vereinigung für Ökologische Ökonomie.

Robinson, John; Burch, Sarah; Talwar, Sonia; O'Shea, Meg; Walsh, Mike (2011): Envisioning sustainability: Recent progress in the use of participatory backcasting approaches for sustainability research. In: *Technological Forecasting and Social Change* 78 (5), S. 756-768.

Smink, Magda M.; Hekkert, Marko P.; Negro, Simona O. (2015): Keeping sustainable innovation on a leash? Exploring incumbents' institutional strategies. In: *Bus. Strat. Env.* 24 (2), S. 86-101.

Sommer, Bernd (2017): Externalisation, Globalised Value Chains, and the Invisible Consequences of Social Actions. In: *Historical Social Research* 42 (4), S. 114–132.

Svenfelt, Åsa; Engström, Rebecka; Svane, Örjan (2011): Decreasing energy use in buildings by 50% by 2050 - A backcasting study using stakeholder groups. Backcasting for Sustainability. In: *Technological Forecasting and Social Change* 78 (5), S. 785-796.

Walter, Norbert; Fischer, Heinz; Hausmann, Peter; Klös, Hans-Peter; Lobinger, Thomas; Raffelhüschen, Bernd et al. (2013): Die Zukunft der Arbeitswelt. Auf dem Weg ins Jahr 2030. Bericht der Kommission "Zukunft der Arbeitswelt" der Robert Bosch Stiftung. Stuttgart: Robert-Bosch-Stiftung.

---

Josefa Kny is a PhD student at Europa-University of Flensburg. In her PhD project, she focuses on the applicability of the Economy for the Common Good's concept to large companies. Josefa holds a MA degree in Futures Studies and a BA in Political Science which she both acquired at Free University

Berlin. She is interested in interdisciplinary sustainability and transformation research as well as participatory methods of futures studies.