

- Thank you for the opportunity to address you
- This is an important event because without action at all levels – city, regional and national – sustainability will remain a lofty theoretical goal instead of an established, beneficial reality.
- But it urgently needs to become our reality, our way of life and our road into the future. This event focuses on establishing sustainable economies at state level.
- Policy and the creation of enabling environments are key components in this. Partnerships across society – not only to formulate society-wide supported solutions, but also to implement them – are just as critical. This involves government at all levels. It involves business. And it involves important contributions by academia and citizens.
- Coming from business, I will talk about three things today: the environmental and social challenges facing business, policy and enabling environments, especially for business, and the benefits of significantly scaled-up partnerships.
- Business-as-usual not a sustainable business model
- In long term, will no longer be profitable for business
- Sustainability transition must offer **opportunity** for business to embark on green track
- This is why KPMG studied the challenges and opportunities businesses face from environmental and social changes

“Expect the Unexpected”.

- Companies face an uncertain future
- Many unaware and unprepared
- This should worry policymakers at a time of economic difficulty
- Also tremendous opportunities and prospects for business
- **If the right conditions are there**
- An overview...
- We identified 10 environmental and social megaforges
- Business both contributes to them and is affected by them:
- Climate change: dire physical impacts predicted – many examples in Germany: changed rainfall patterns and tornadoes in state of Brandenburg stand out.
- Soaring population: 8.4 billion in 2030
- Not enough water: 40% shortfall by 2030

- Not enough food
- Increasing energy insecurity and price volatility
- Strain on material resources
- Collapsing ecosystems
- Disappearing forests
- Ever-expanding cities – More than half the world's population already lives in cities and the trend is continuing. In Germany, some 75% of the population lives in cities.
- Exploding global middle class
 - To make matters worse, megaforges are connected
 - Interact in unpredictable ways
- Addressing one problem often worsens another
- Can't tell you how it will play out
- Only certain thing = surprises, shocks and chain reactions.

Recap: big challenges ahead

Government policies and enabling environments

- What does this mean for policy makers?
- Of course responses to many of these mega forces are being tabled at the supra-national and international levels.
- This includes the recent proposal by the European Commission for a new Environment Action Programme which aims to focus the EU on sustainable growth and includes a fully functioning green, circular economy by 2050.
- This also includes inter-governmental negotiating processes, such as the climate change process.
- I'll be the first to admit that the climate change process is not moving at an electrifying speed. But I'll also be the first to admit that it has yielded obligations for all countries to prepare national sustainable development plans and for developing countries to develop nationally appropriate mitigation actions, called NAMAs.
- Clearly well-coordinated, concerted international action remains preferable. Nevertheless, these processes have also meant that green and climate-related elements are increasingly finding their way into policies at all levels.

- Put differently: mega forces aside, there are more and more sustainability policies coming our way – and there is an urgent need to prepare for this.
- Perhaps the need to prepare becomes most obvious when looking at the environmental cost of business operations – in other words, the costs that a business incurs but does not pay for.
- KPMG found that the external environmental costs of key economic sectors are doubling every 14 years. These are the costs of the impacts business has on the environment and indirectly on society, but does not yet pay.
- However, as sustainability policies evolve, the pressure for more of these costs to be reflected in services and products will grow. For companies unprepared, this could have a major impact and key economic sectors could see profits lost. Contrasting profits against external environmental costs illustrates this point.
- On a global level, if food producers had to pay for the full cost of their environmental impacts, they would see their earnings wiped out twice over.
- The global mining sector would see its earnings drop by 64% and airlines by 52%.
- If we assume, for the sake of argument, that the global numbers also apply to German businesses in the same way, then the picture is stark.
 - If German food producers had to pay the full cost of their environmental impacts they would lose their entire €21.9 billion earnings and would likely be out of business altogether
 - The German mining sector would lose more than 4 billion of its €6.7 billion earnings
 - German airlines would lose 12.5 million of €24 million earnings in 2010.
- These are sobering figures – figures that cannot be ignored if a fully-functioning green, circular economy is to be achieved.
- The major point is that what defines value and how you create it is not static. A smart strategy lays the foundation for future value, rather than seeking to preserve the past.
- Need a systemic approach
- Not about addressing megaforges in isolation
- Identify the right entry points in the system to effect meaningful change
- Holistic collaboration across ministries and departments at all levels of government.

- The impacts of the megaforges felt across government:
 - Energy, health and environment
 - Business, trade, agriculture, treasury, international development
 - Local, regional and national

- Germany has long been a leader in acting on environmental issues and has earned considerable international admiration for this. Many argue that the “Laender” and cities were the main driving force in environmental action in the country.

- The state level in Germany continues to be key in turning international and national policies into enabling environments that create opportunity, both at the state and local levels. Without this, it is hard to see how a circular economy can be established.

- The creation of enabling environments can broadly be grouped into four key areas: fiscal policy, public purchasing, laws and regulations, and positioning.

1. Fiscal:

- This can involve incentives and green taxes.
- Carbon taxes and emission trading are additional options.
- Green investments need to be rewarded. In a circular economy, there needs to be a change from focusing on taxing work and profits towards taxing consumption and the use of resources.
- Whichever options are chosen, they need to have a common vision of sustainability as their starting point.

2. Public purchasing:

- The public sector needs to function as a role model and do its purchasing under a strict code of sustainability criteria.
- This needs to include all purchases, from infrastructure to office material to services.

3. Laws and regulations:

- Policy clarity instead of policy flip-flopping on all sustainability related issues. This includes long-term clarity.
- Ensuring that policies that constrain sustainable actions are reduced.

4. Positioning:

- In many ways, Germany is already seen as a frontrunner in environmental action. This needs to be expanded to include sustainability across the board. In this context, Germany has a key opportunity to position itself as a centre of excellence and best practice for sustainability-related issues.

Recap: More and more sustainability policies are coming that depend on enabling environments and the creation of business opportunities for their success.

- Such enabling policies and environments will be especially needed in the dynamo of the economy and where the largest part of the population lives: in cities
- Globally, cities consume some 67% of world primary energy and are responsible for some 80% of total global greenhouse gas emissions.
- Globally, cities are increasingly aware of their responsibility.
- Globally, cities are showing more political will to act than many countries.
- And many are:
- Rio de Janeiro is implementing an emissions monitoring system. The city of Durban is rolling out solar water heaters at a big scale.
- Hamburg, Chicago, Seattle, Greater London and Toronto all aim to reduce their emissions by between 80% - 100% by 2050; Melbourne and Copenhagen by 2025.
- The C40 Cities Climate Leadership Group, currently chaired by New York's mayor Bloomberg, covers some 59 mega cities worldwide which are taking steps to slash emissions of greenhouse gases by 248 million metric tons in 2020, and by more than 1 billion tons by 2030.
- In capturing methane from urban landfills, investing in energy efficiency, retrofitting buildings and streetlights, the city actions reduce the equivalent of emissions produced by Mexico and Canada combined each year.

- In Germany, two good examples are Berlin and Chemnitz.
- Berlin's energy saving partnership, which reduces the energy needs of public buildings, has saved the city some €30 million in energy and maintenance costs.
- Chemnitz, together with ICLEI, the local governments organization, undertook a renewable energy potential analysis, which gave the city a holistic overview of the current state of climate change, future trends, and potentials of energy efficiency and renewable energy. The analysis has been instrumental in informing on-going policy plans and identifying priority measures and key action areas.
- The examples I have given already allude to the most effective actions that cities can take. They include energy efficiency, transport, renewable energy, waste and infrastructure.
- Of course energy efficiency measures offer city governments the most cost-effective means to address economic, social and environmental issues. And within this, in most cities the greatest potential lies in retro fitting existing building stock.
- Recent research confirms that energy efficient buildings have a much higher occupancy rate and much lower running costs.
- Earlier I mentioned the need to leave old models of business behind and to embark on the new. For example, could a city's waste be used to power its public transport?
- But new business models need to work. Not all cities are the same and not every approach works for every city.
- Each city has a unique typology that determines the challenges and opportunities which it will face in the transition to a more sustainable model.
- The drivers that have an impact on urban sustainability are (1) Economic Activity (2) Population (3) Resource Security (4) Environment (5) Infrastructure and (6) Government and Culture.
- For example, the engine for a city's prosperity significantly influences the nature and ambition of the sustainability strategy that should be adopted. Population growth and existing infrastructure are potentially the greatest influence on urban sustainability investment strategies. This calls for careful assessments.
- Cities with highly intensive economies also have the greatest opportunities to improve their impacts, especially through the positive engagement with local business concerns.

Recap: Given urbanization trends, cities can make a major contribution, especially if they have identified what will best suit their typology.

- Moving away from differences ... what unites cities is that local government is the level of government that is closest to business and citizens. As a result, cities have a huge potential to act inclusively by engaging in new and innovative partnerships.

Scaled-up partnerships

- The fundamental mode of human interaction is that of cooperation, not competition. The firm establishment of a sustainable economy will be highly dependent on cooperation and partnerships. Partnerships to boost funding, to accelerate implementation and to enable an inclusive transition.
- In terms of funding, the global financial crisis has left all levels of government capital constrained - 85% of the capital required to meet today's low-carbon targets must come from the private sector.
- Instead of relying on government and direct investments, new approaches to growth financing can be complemented by alternative methods of funding, including the capital markets, private institutional investors, multilateral/ bilateral and export credit agencies, domestic financial institutions, and asset leveraging.
- New approaches to growth financing include varying degrees of private sector participation through Public-Private Partnerships.
- Next to funding, the benefits of such partnerships lie in engaging the private sector in service delivery that is efficient. Private sector engagement changes the focus and can significantly speed up the implementation of sustainability action. Additionally, public-private-partnerships are able to deliver better value for money than alternative approaches.
- But to rise to the challenge, partnerships and cooperation need to go beyond the public and the private sector. There are two key reasons for that:
- First, not all sustainability solutions will immediately be accepted and supported by people. This means that people need to be both informed and included.
- And second, while many actions can and need to be taken now, the transition will need technological and other innovation, such as the development of specific sustainability measurement systems. As a result, partnering with academic and educational institutions will be important drivers for the transition to a green future.

Recap: The challenge cannot be met by government alone. Clearly including business, citizens and academia will significantly speed up the transition.

In conclusion

- We know we need to change course
- Not only on Climate Change
- But on all the megaforges KPMG identified in *“Expect the Unexpected”*.
- This change needs to be inclusive. And it needs to open doors for non-state actors to be part of the solution and to act – in other words, it needs to create opportunities.
- This will be the most effective way to establish a sustainable road into the future.
- Thank you