

# How Climate Change Impacts Business Strategies

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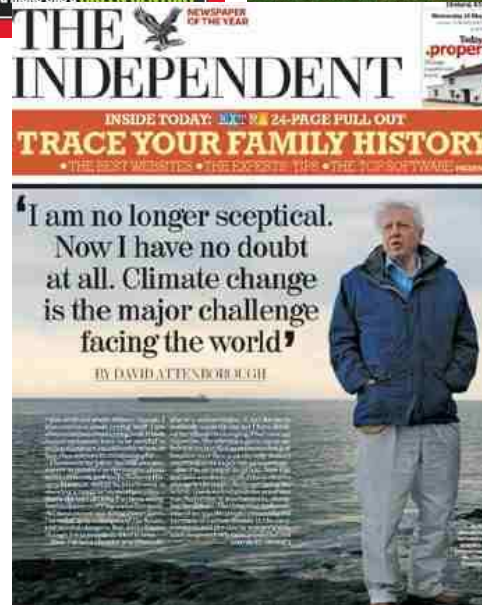


# Agenda

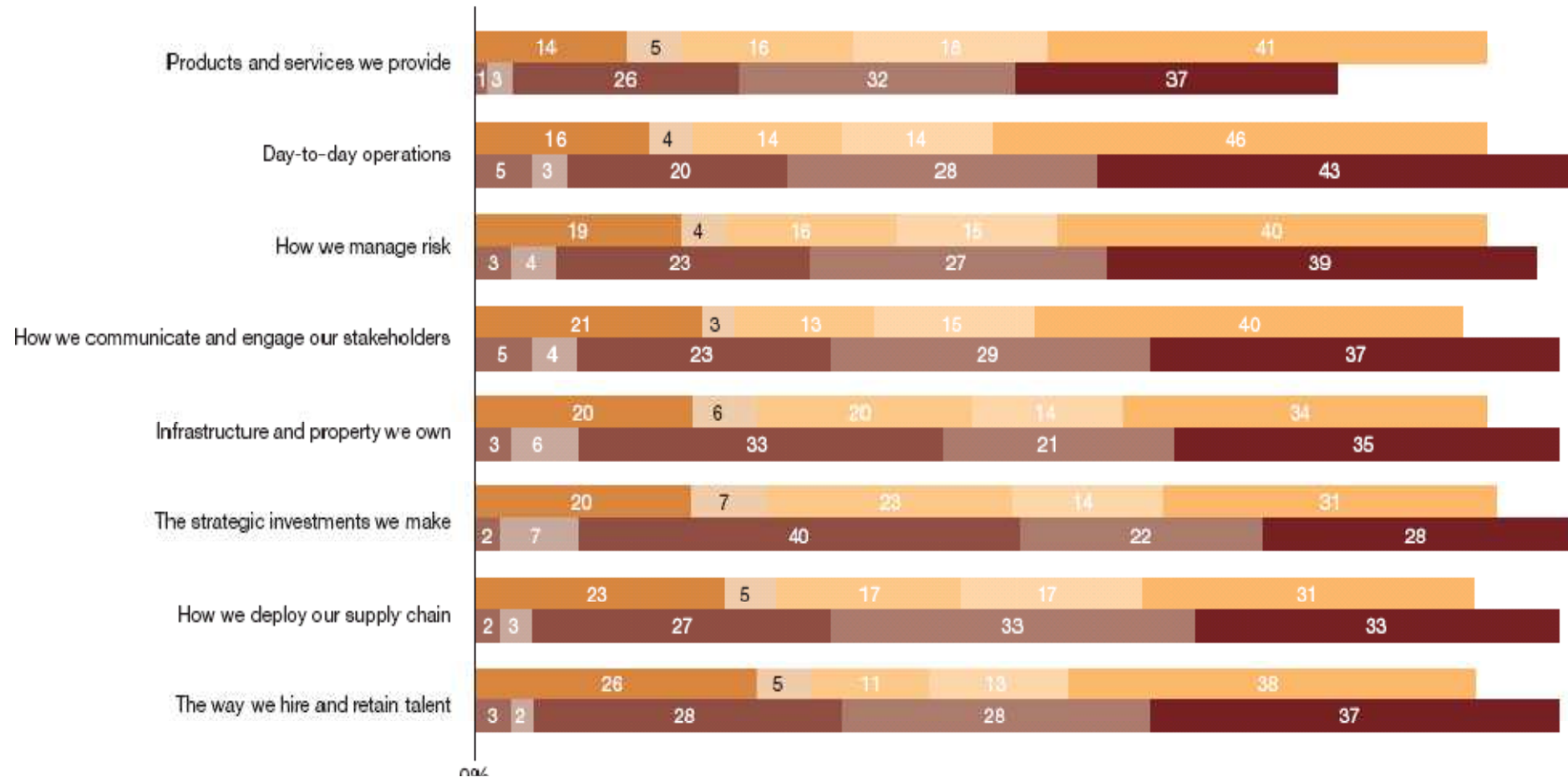
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1. Latest trends – Climate Change on the Business Agenda
2. Relevance of Climate Change in a Business Context  
(Framework for Analysis)
3. Opportunities and Challenges
4. Carbon Management Tips

# Climate Change on the Business Agenda



# 12<sup>th</sup> Annual PwC Global CEO Survey – Climate Change



Q: When, if at all, do you anticipate making changes to the following areas of your business to respond to the challenges posed by climate change?

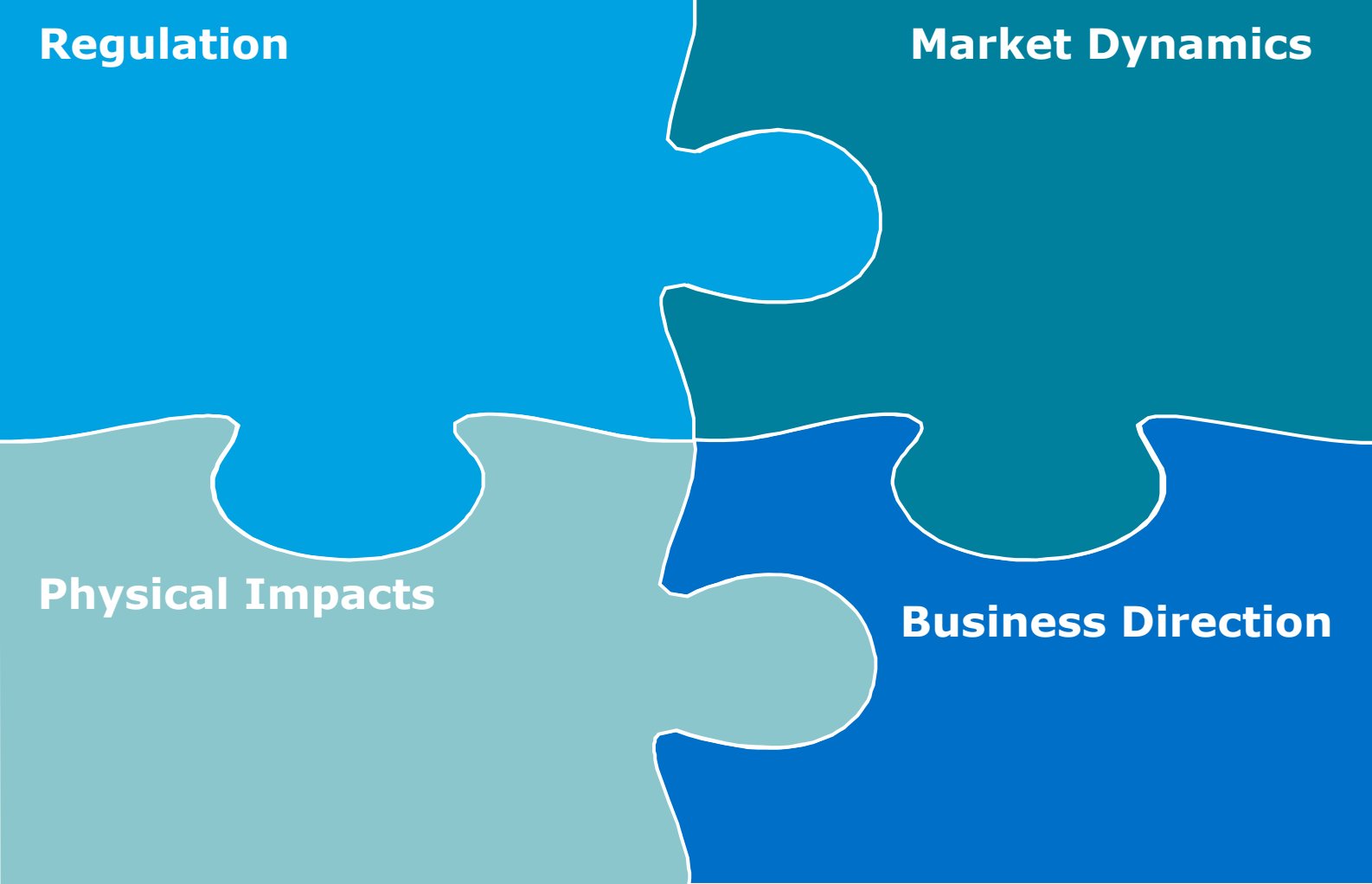
Q: When do you anticipate a return on investment in these areas?

■ Never 
 ■ Beyond 5 years 
 ■ Next 5 years 
 ■ Next 12 months 
 ■ Already making

■ Never 
 ■ Beyond 5 years 
 ■ Next 5 years 
 ■ Next 12 months 
 ■ Already making

# Framework for Analysis: Key Risks and Opportunities

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# Physical Impacts from a Changing Climate



Impacts caused by changes in climate

- Vulnerability of physical assets (eg. Infrastructure)
- Disruption to supply chain
- Business interruptions (eg. travel industry and agriculture)
- Workforce disruption
- Changes in core market conditions

Extreme weather

Drought

Flooding

Restoration/  
Clean up Costs

Health impacts on  
workforce

Forest fires

Direct losses

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# Implications of Regulatory and Voluntary Mechanisms



- ETS and National Trading Schemes
- Denmark and France requiring CO2 emission reporting
- Emission reporting (voluntary and regulation driven)
- Global securities regulators such as SEC (US) & FSA (UK) are exploring ways to amend disclosure regulations to include climate change as a material risk
- Future possibility: Aviation and Forest Products subjected to ETS

CO2 tax	ETS	Reporting	GHG inventory disclosure
Carbon Disclosure Project (CDP)	Compliance costs		CO2 footprint

# Market Dynamics



Companies requesting CO2 emissions from suppliers eg: Nestle, Tesco, Walmart

Carbon emissions playing a role in transactions – Rio Tinto bid for Alcan due to low carbon risk

Airlines - Virgin Blue, British Airways, Air Canada offering offsets

The compliance market driven by instruments such as the ETS was estimated at \$59 USD billion last year; voluntary market at \$337 million USD

Renewable energy 20-40% annual growth

Goldman Sachs spent \$23 million to acquire a 10.1% stake in Climate Exchange plc

CO2 tax

Cost of Raw materials

Changing consumer demand

Long-term economic consequences –

Labelling schemes

Energy costs

Carbon markets

Eg. Stern Study

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# The Business Response and Opportunities



- Businesses developing strategies to manage climate change related risks and opportunities
- Access to capital: CDP, FTSE4Good, DJSI
- Energy companies - diversification and solutions such as CCS
- Allianz - climate change insurance products & reductions by 20% by the year 2020
- Yahoo, Dell and SwissRE declared carbon-neutral status
- “Green Funds” - Citibank and Morgan Stanley developed funds for low carbon business pursuits
- GE - clean technologies and equipment generating revenues that are nearly tripling the initial sales targets

Reputation

Preparation for new regulations

Reducing long-term costs

Long-term License to Operate

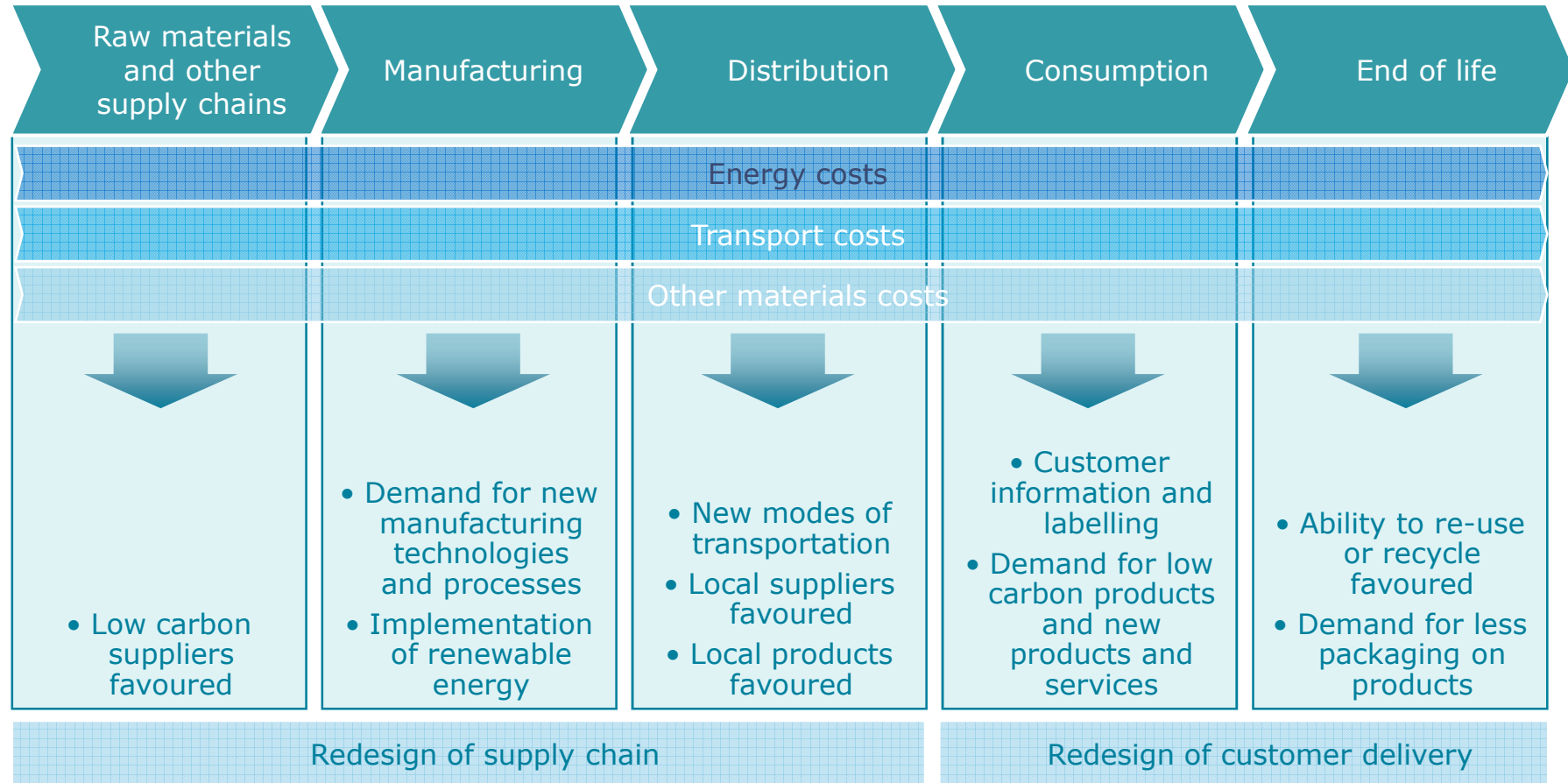
Preferred supplier and employer

offsetting

Preferred product or service

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# Value Chain Impacts



# Tips for Carbon Management

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- Measure and monitor carbon emissions
- Forecast emissions and set targets
- Report emission reduction progress internally and externally
- Assign costs to abatement and price carbon into investment opportunities
- Identify and leverage new carbon opportunities
- Review progress against targets in line with your climate change strategy



***Thank You***

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