

# SDG INDUSTRY MATRIX

FINANCIAL SERVICES

TRANSPORTATION

INDUSTRIAL MANUFACTURING

HEALTHCARE & LIFE SCIENCES

FOOD, BEVERAGE & CONSUMER GOODS

ENERGY, NATURAL RESOURCES & CHEMICALS



Climate Action Opportunities:  
An Industry Lens

Produced jointly by:



Global Compact  
**LEAD**

and



International

“ The value at risk to manageable assets from climate change is **US\$4.2 TRILLION** (in present value terms)... indirect impacts will affect the entire global economy. ”

ECONOMIST INTELLIGENCE UNIT REPORT 'THE COST OF INACTION:  
RECOGNISING THE VALUE AT RISK FROM CLIMATE CHANGE'



## CLIMATE ACTION PRESENTS A BUSINESS OPPORTUNITY, AS WELL AS A RESPONSIBILITY.

Drawing on insights from the SDG Industry Matrix, this Climate Extract identifies industry specific ideas for climate action. Although achieving all 17 Sustainable Development Goals (SDGs) is inextricably linked with climate action, this Extract focuses on SDGs 7, 12 and 13. It profiles opportunities to create 'shared value' which in the context of the SDGs represents the coming together of market potential, societal demands and policy action to create a more sustainable and inclusive path to economic growth, prosperity and well-being\*.

This Extract supports the broader purpose of the SDG Industry Matrix which has been jointly conceived and led by the United Nations Global Compact and KPMG International to convert the interest stimulated by the Sustainable Development Goals into strategic industry activities which grow in scale and impact.

\* 'Unlocking the Power of Partnership: A Framework for Effective Cross-Sector Collaboration', KPMG International

## INDUSTRY SPECIFIC OPPORTUNITIES

The Matrix below highlights some examples of significant opportunities for six industries to take climate action. These are complemented by a list of several industry specific collaborative initiatives through which companies are cooperating to the mutual benefit of business and planet. Neither are intended to be an exhaustive list.

The industry specific opportunities build on the United Nations Global Compact's three environmental principles for business:

- 7** Support a precautionary approach to environmental challenges;
- 8** Undertake initiatives to promote greater environmental responsibility; and
- 9** Encourage the development and diffusion of environmentally friendly technologies.



# IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES



## Financial Services

### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Facilitate the **raising of finance** for transition to a low carbon economy by developing a broad portfolio of investment options including carbon markets.

Apply financial expertise to renewable **energy pricing models** which meet the three objectives of financial viability, energy efficiency and universal access.

**Underwrite renewable energy developments** such as wind farms and solar power arrays.

Evaluate the risk of 'stranded assets' and consider global exposure limits or divestment across industry segments such as **fossil fuel** energy generation, coal mining, coal transportation infrastructure and unconventional oil extraction.

### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



Develop new **pricing models** which incentivize more sustainable living.

Develop **innovative products**, such as 'pay as you drive' auto insurance and discounted premiums for energy-efficient buildings, to incentivize reduced energy use and thereby greenhouse gas emissions.

Be an **active steward** of investments in portfolio companies, engaging with management and exercising shareholder voting rights to influence more climate-sensitive and climate-resilient business strategies.

### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Invest in – and/or raise **finance** for – climate risk mitigation, climate resilience and climate adaptation including climate and green bonds, and other debt and equity instruments.

Increase coverage of national and regional natural **catastrophe insurance** schemes.

Integrate climate risks into **underwriting practices, investment analysis and decision making**.

Take steps to **measure, reduce and report climate exposure against set targets** and progress on actions to confront climate change, continuing to increase the level of transparency and consistency of reporting across the industry sector.

### MULTI-STAKEHOLDER PARTNERSHIPS/ COLLABORATIONS

[Banking Environment Initiative](#)

[Investment Leaders Group](#)

[Sustainable Stock Exchanges Initiative](#)

[The Portfolio Decarbonisation Coalition](#)

[ClimateWise](#)

[1-in-100 Initiative](#)

[Climate Bonds Initiative](#)

[Munich Climate Insurance Initiative](#)

[UNEP FI Principles for Sustainable Insurance Initiative](#)

[A2R: Anticipate, Absorb, Reshape](#)

[UN Principles for Responsible Investment](#)

## IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES (CONT.)



### Transportation

#### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Upgrade fleets to use alternative, less carbon-intensive fuels and drive the **use of renewables**.

**Coordinate research and development** of next generation biofuels within the sector to increase the speed at which they become commercially viable.

#### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



**Improve operation** of vehicles, vessels and aircraft to maximize energy efficiency.

Improve **management of fleets** and rail rolling stock.

Collaborate with governments to increase accessibility and affordability of **public transport networks**.

Participate in **taxi ride sharing** schemes to reduce the number of taxi journeys.

Build a **freight eco-system** which connects freight road agents in order to improve the efficiency of freight movement and thereby reduce road freight carbon footprint.

#### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Develop **disaster response capacity** of transportation hubs (e.g. airports and ports) in countries at high risk of extreme climatic events.

**Inform public policies** on urban design and transportation infrastructure (including multi-modal enabling transport corridors) to accelerate the transition to more sustainable cities and transport networks.

Engage with governments and other stakeholders to **reduce transit delays** at land border checkpoints, ports and airports.

#### MULTI-STAKEHOLDER PARTNERSHIPS/ COLLABORATIONS

[Secretary-General's High-Level Group on Sustainable Transport](#)

[Partnership on Sustainable, Low Carbon Transport](#)

[Global Partnership for Sustainable Transport](#)

[Sustainable Mobility Project 2.0, WBCSD](#)

[UNEP Partnership for Clean Fuels and Vehicles](#)

[Low-Carbon Sustainable Rail Transport Challenge](#)

[Sustainable Shipping Initiative](#)

[Urban Electric Mobility Initiative, UN Habitat](#)

[Clean Cargo Working Group](#)

[Future of Fuels](#)

## IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES (CONT.)



### Industrial Manufacturing

#### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Develop and manufacture high capacity **solar power storage** systems.

Increase the proportion of **energy from renewable sources**.

#### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



Identify and adopt new technologies and process improvements to **reduce fossil fuel combustion** from industrial plants and manufacturing facilities.

Increase **energy efficiency** in industrial plants, manufacturing facilities, and distribution.

Source **materials** with lower embedded energy and develop innovative circular economy approaches to reduce, reuse and recycle materials.

Collaborate across the building and infrastructure value chain to identify and adopt methods of avoiding emissions from use of **cement and concrete** products.

#### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Design and implement natural **disaster risk mitigation, preparedness, response and recovery** plans at industrial plants and manufacturing facilities in high risk locations.

#### MULTI-STAKEHOLDER PARTNERSHIPS/ COLLABORATIONS

[BSR Beyond Monitoring Working Group](#)

[Cement Sustainability Initiative](#)

[UNIDO-UNEP Resource Efficient and Cleaner Production](#)



## IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES (CONT.)



### Healthcare & Life Sciences

#### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Increase **energy efficiency of hospitals** and other healthcare facilities, both through more energy efficient design of new hospitals and through retrofitting more efficient heat and power units in existing hospitals.

Increase the proportion of **renewable energy** in hospitals and other health facilities, including solar-powered photovoltaics for water pumps and vaccine cold chains in rural facilities.

Increase **energy efficiency** across other aspects of the value chain including sourcing, manufacturing, packaging and logistics.

#### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



**Reduce hazardous hospital waste.**

**Increase recycling** of health sector materials and equipment.

Influence **suppliers and partners** of medical devices, pharmaceutical products and other products and services to reduce their environmental impact.

#### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Invest in **preventative and curative healthcare** research, product and service design that responds to the health impacts of a changing climate which include: changing patterns of vector-borne, food-borne and water-borne diseases; increased air pollution; undernutrition; and heat-related mortality, exhaustion and stroke, particularly for vulnerable groups.

Collaborate with governments to help design and build **resilient health systems** able to anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stresses. These include not only the health impacts above but also increased morbidity and mortality arising from natural disasters (heatwaves, floods, droughts and storms), conflict and forced migration.

In conjunction with governments and the World Health Organisation, integrate **meteorological data** and new technologies into **disease surveillance** and **early warning** systems.

#### MULTI-STAKEHOLDER PARTNERSHIPS/ COLLABORATIONS

[2020 Healthcare Climate Challenge](#)

[Health Care Climate Council](#)

[European Action On Global Life Sciences](#)

[Practice GreenHealth](#)

[Coalition for Sustainable Pharmaceuticals and Medical Devices](#)

## IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES (CONT.)



### Food, Beverage & Consumer Goods

#### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Design consumer products which **lower consumer energy use**, including quick rinse shower and cleaning products which can lower water consumption.

Generate **energy from food** no longer fit for consumption.

#### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



Strive for **sustainably sourced** key **commodities** - palm oil, soy, paper and pulp and beef - to avoid deforestation.

Phase out Hydro fluorocarbons and derivative chemical refrigerants, replacing them with **natural refrigerants**.

Increase **energy efficiency** across the value chain including sourcing, manufacturing, packaging and logistics.

**Reduce food and solid waste**, in collaboration with other stakeholders including suppliers, consumers, retailers and governments.

**Reduce packaging** and increase recycling.

**Reduce water consumption** in production process (especially for beverages).

Raise **consumer awareness** of the importance of sustainable consumption and practical approaches.

Develop and apply common **standards and methodologies** for sustainability across the whole life cycle of a product.

#### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Support farmers to develop more **climate resilient agriculture**.

Support innovative solutions (eg plant and aquaculture protein) to address **food security** for a growing world population with rising income levels.

Where communities surrounding a production facility have limited access to water, integrate **community access to water** within production facility design.

Design and implement natural **disaster risk mitigation, preparedness, response and recovery** plans across value chains in high risk locations.

Eliminate agriculture driven **deforestation** and implement **sustainable land-use** commitments.

#### MULTI-STAKEHOLDER PARTNERSHIPS/ COLLABORATIONS

[The Consumer Goods Forum: Sustainability Pillar](#)

[Roundtable on Sustainable Palm Oil](#)

[Roundtable on Sustainable Soy](#)

[Roundtable on Sustainable Biomaterials](#)

[Food Loss and Waste Protocol](#)

[Sustainable Agriculture Initiative Platform](#)

[GHG Protocol Agriculture Guidance](#)

[The Sustainability Consortium](#)

[Statement on Climate Smart Agriculture](#)

[UN Global Compact Food & Agriculture Business Principles](#)



## IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES (CONT.)



### Energy, Natural Resources & Chemicals

#### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Identify and support the **key enablers to a low carbon future** and identify and overcome the barriers.

Identify and adopt **breakthrough technologies** to accelerate the transition to energy from renewable sources (solar, wind, hydro, geothermal and biomass).

Improve integration of renewables into **grids and electricity markets**.

Provide **off-grid communities** surrounding energy plants with access to affordable renewable energy; for instance, through low-carbon microgrids.

Develop technologies and funding models to increase **carbon capture and storage**.

#### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



**Reduce emissions** and **improve** operating and product **efficiency**. Include identifying methods of **reducing greenhouse gas emissions from gas production** by reducing flaring, managing methane emissions and increasing energy efficiency.

Put an appropriate internal **price on carbon** (where no regulatory carbon price yet exists) and use it to inform investment decisions.

Link C-Suite **remuneration** to energy mix and greenhouse gas emission mitigation targets.

Expand existing **bio-based technologies**, products and services within the Chemicals sector.

Develop and apply common **standards and methodologies** for sustainability across the whole life cycle of a product.

#### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Support **carbon trading** schemes and purchase carbon credits to offset emissions.

Ensure mines, power generation facilities and related infrastructure are **resilient to climatic disasters**.

#### MULTI-STAKEHOLDER PARTNERSHIPS/ COLLABORATIONS

[Oil and Gas Climate Initiative](#)

[International Petroleum Industry Environmental Conservation Association](#)

[WBCSD's "Reaching Full Potential" Initiative](#)

[The A.I.S.E. Charter for Sustainable Cleaning RE100](#)

[Caring for Climate](#)

## IDEAS FOR ACTIONS – CLIMATE OPPORTUNITIES FOR SIX INDUSTRIES

### LEADING BY EXAMPLE

#### SDG 7: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



**Ambuja Cements Limited** is reducing emissions from its cement production by substituting raw materials with waste materials, increasing use of wind and solar power, creating five captive ports to increase transportation by sea, setting up grinding stations closer to thermal power plants, and purchasing biomass from local farmers as an alternative fuel to replace traditional fossil fuels in its kilns. Ambuja furthered this effort by pioneering the use of a Social-Environmental Profit & Loss Analysis leveraging KPMG's True Value Methodology.

#### SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



**Michelin** developed the Green X which is its guarantee that the tire provides a level of energy efficiency among the highest in the market for its category without compromising other key characteristics, such as traction and treadwear. Lowering tire rolling resistance by optimizing a tire's weight, internal structure, tread design and tread compound makes it possible to reduce vehicle energy consumption, as well as the CO2 emissions and other greenhouse gases emitted by fossil-fuel engines.

#### SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



**Swiss Re** announced that by 2020 it will have advised 50 sovereigns and sub-sovereigns on climate risk resilience, and to have offered them US\$10bn capacity against this risk. This builds on Swiss Re's commitment (through the Grow Africa Partnership) to give farmers in Sub-Saharan Africa access to tools such as weather and yield index insurance products; invest about US\$ 2 million per year in resources to support the development of sustainable agricultural risk management markets; and provide agricultural insurance for up to 1.4 million smallholder farmers.

7 AFFORDABLE AND  
CLEAN ENERGY



12 RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



13 CLIMATE  
ACTION



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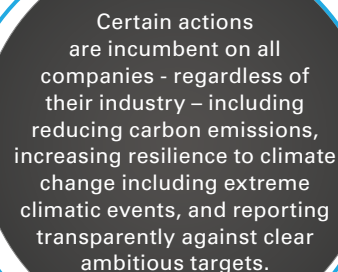
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Certain actions  
are incumbent on all  
companies - regardless of  
their industry – including  
reducing carbon emissions,  
increasing resilience to climate  
change including extreme  
climatic events, and reporting  
transparently against clear  
ambitious targets.

“ The Sustainable Development Goals provide a focus for the world’s efforts to meet global challenges including climate change...The opportunity clearly exists for the private sector to create and commercialise sustainable solutions at scale. ”

Stuart Gulliver, Group Chief Executive Officer, HSBC Holdings plc



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