Global Net-Zero Action

TRANSITION TO A **NET-ZERO EMISSIONS ECONOMY**

8 - 11 June 2021
2:00pm - 5:00pm GMT+8

Co-Organized by:

MiGHT
Malaysian Industry-Government Group for High Technology

confexhub®
Thought Leader Network Solutions

Strategic Partner:

TROPICAL CARBON FARMING INNOVATION HUB

Knowledge Partner:

THE GLOBAL CATALYST

www.globalnetzeroaction.com

Transition to a Net-Zero Emissions Economy

2019 was recorded as the second warmest year in the warmest decade (2010- 2019). It is apparent that global temperatures are expected to increase between 1.5 to 5 degrees Celsius in many cities by 2030 to 2050. To fight against climate change, 194 countries who subscribed to the Paris Agreement have agreed to act to the climate change threats with GHG emission reduction frameworks, initiatives and plans. Challenge now remains on response and buy-in from companies and industries to implement sustainable operation including sustainability-related legislations, monitoring system and decarbonization programs within organizations.

The Global Net-Zero Action (GNZA 2021) is conceptualised to trigger discussions for the need of systemic shifts that will change the trajectory of GHG levels in the atmosphere. The program will provide essential skills and knowledge for organisations to effectively manage the risks and opportunities associated with the transition to a low-carbon economy.

The GNZA2021 will further elaborate the practical understanding of climate change issues and associated economics in adopting low GHG emission practices, as the private and public organizations need to develop a multi-disciplinary carbon management skills, knowledge and leadership to address this complex climate change challenges at the international, regional, national and local levels through both economic incentives and regulatory controls. Decarbonisation innovations and technologies deployed to manage the releases of greenhouse gases will also be presented.

Key takeaways from the Global Net-Zero Action 2021 are:

Lessons learned from the physical hazards and socioeconomic impacts of climate change

Implications that could impact businesses, industries and government services for inactivity or proactivity in climate action

Steps that businesses, industries and governments could take to response with the imperatives of sustainability

Who Should Attend:

- Participants from organisations of all sizes and industry sectors that wish to gain a 'competitive edge' by building capacity to manage the emerging risks and opportunities presented by domestic and global carbon and energy markets.
- Diverse range of Industry professionals and backgrounds, being: academics, designers, construction managers, cost planners, engineers, facilities managers, general managers, sustainability managers, executives, energy managers, marketing managers, policy advisers, product designers and manufacturers, project managers, consultants and lawyers.
- Aspiring professionals wishing to enter the sustainability / energy and carbon management profession who desire a quality and government accredited qualification.

Industries That Attend:

- Coal producers
- Natural gas producers
- Oil refiners and Enhanced Oil Recovery
- Chemicals sector
- Metals (iron, steel, etc) and minerals industries
- Pharmaceuticals
- Renewable energy companies
- Oil (petroleum) and gas sector
- Food and beverage industry
- Cement industry
- Building/construction materials
- Science academia
- Environmental policy makers
- Fuels/Biofuels/synthetic fuels
- Energy providers
- C02 transportation specialists
- NGOs and sustainability research institutes
- CCUS value chain members
- Separation and purification experts
- Raw materials supply chain
- Aggregates producers
- Hydrogen producers
- Aviation industry
- Space industry
- Fuel cell manufacturers and adopters
- Energy storage companies

Media Partners:

The Paris Agreement Overview (as of April 2018)

175
Countries
Ratified the PA

168
Countries
Submitted NDC

10
Developing Countries
Submitted National Adaptation Plans

25
Countries
Implemented National Carbon Taxes

USD100bn
Mobilization
By Developed Countries

ASIA's Climate Change and Carbon Management Response

ZERO
China, Japan & South Korea
Net-Zero Emissions by 2050

USD1.7
Trillion
Infrastructure Investment By 2030

USD1.9
Trillion
Eco-labelling Products Demand By 2050

90
Million Hectares
of Reforestation by 2050

45%
Asia's Share
of Global GHG Emissions

35%
Asia's Share of Global GHG Emissions
in Power Generation

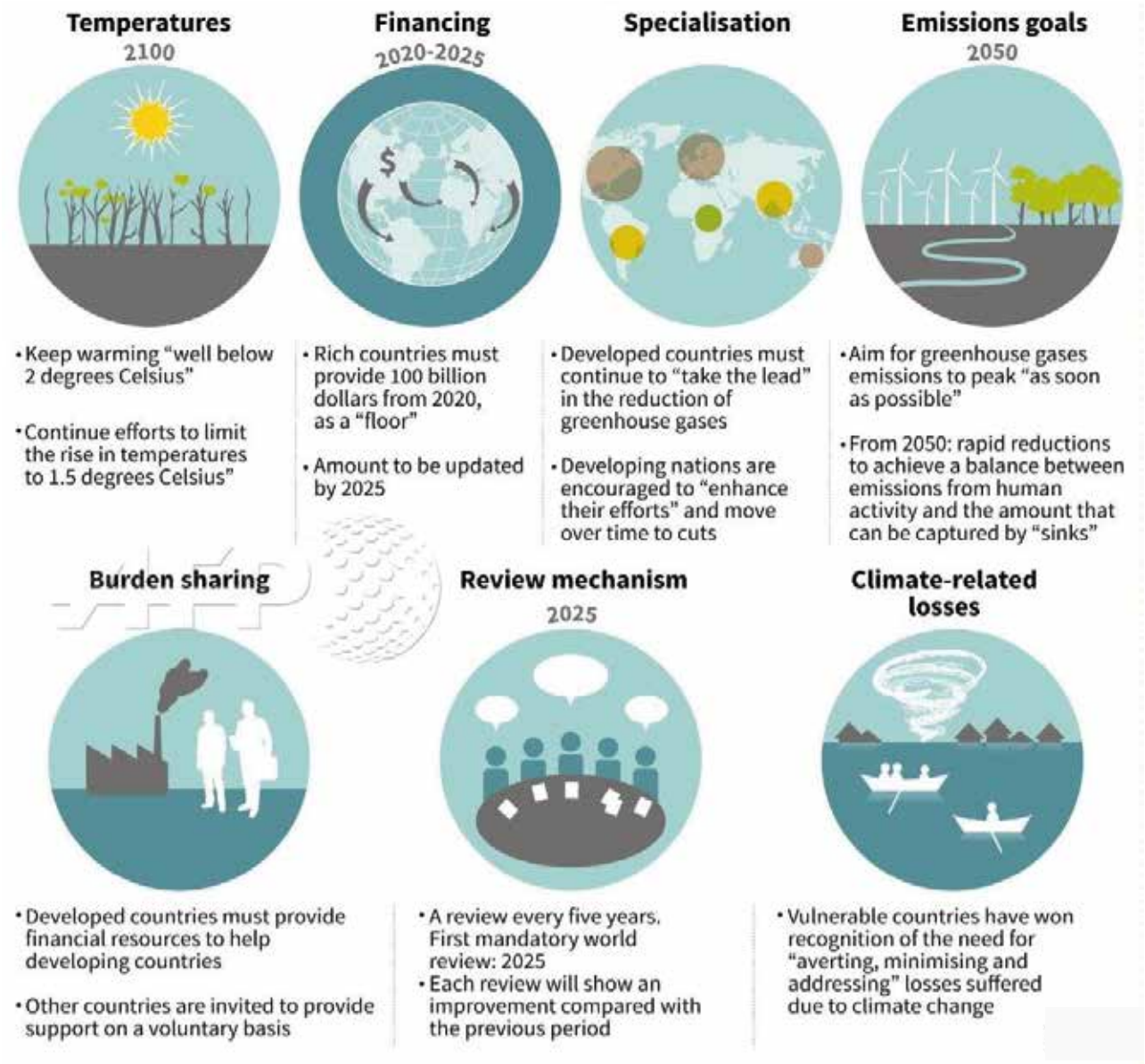
30%
Asia's Share of Global GHG Emissions
In Buildings and Transportation

75%
Asia's Share of GHG Emissions
In Transport comes from Road Transportation

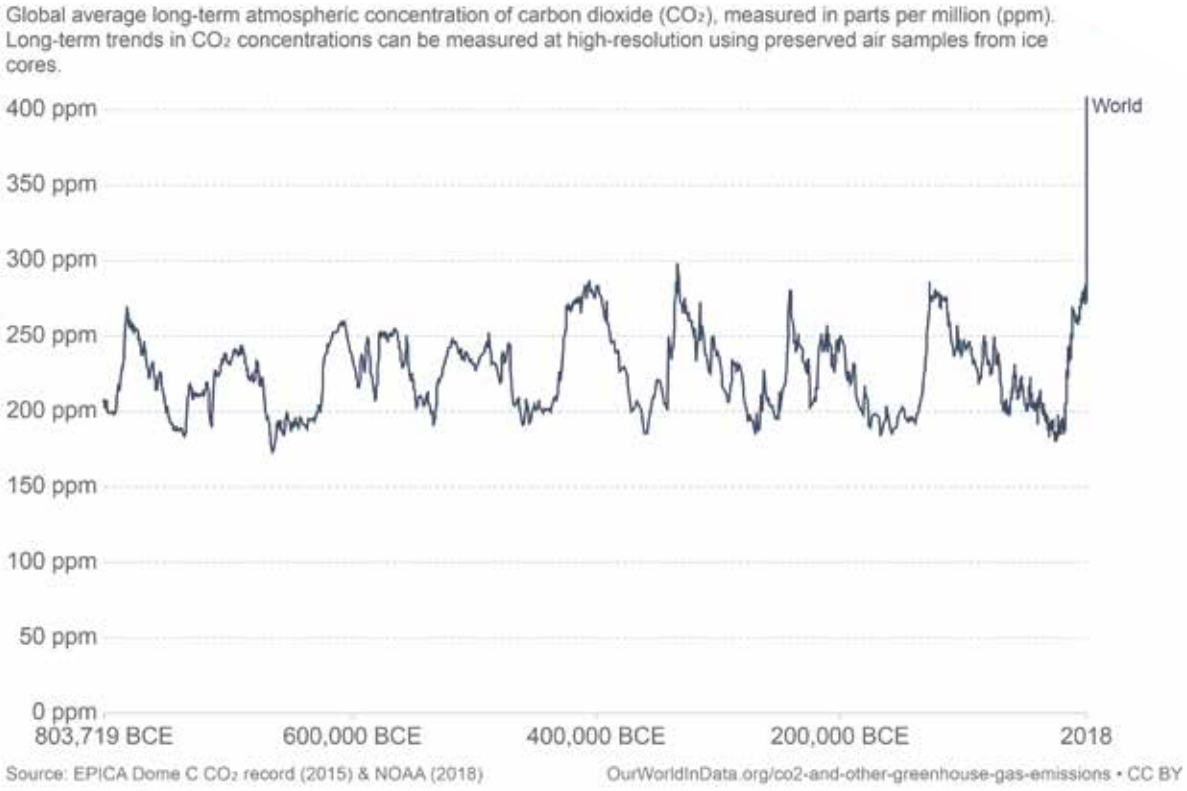
What is Carbon Footprint

- Total amount of CO2 and other greenhouse gas emissions by an organization.
- Measure the impact of activities on the environment, in particular climate change
- Relates to the amount of greenhouse gases produced through burning fossil fuels for electricity, heating and transportation etc.
- Units - tonnes (or kg) of carbon dioxide.

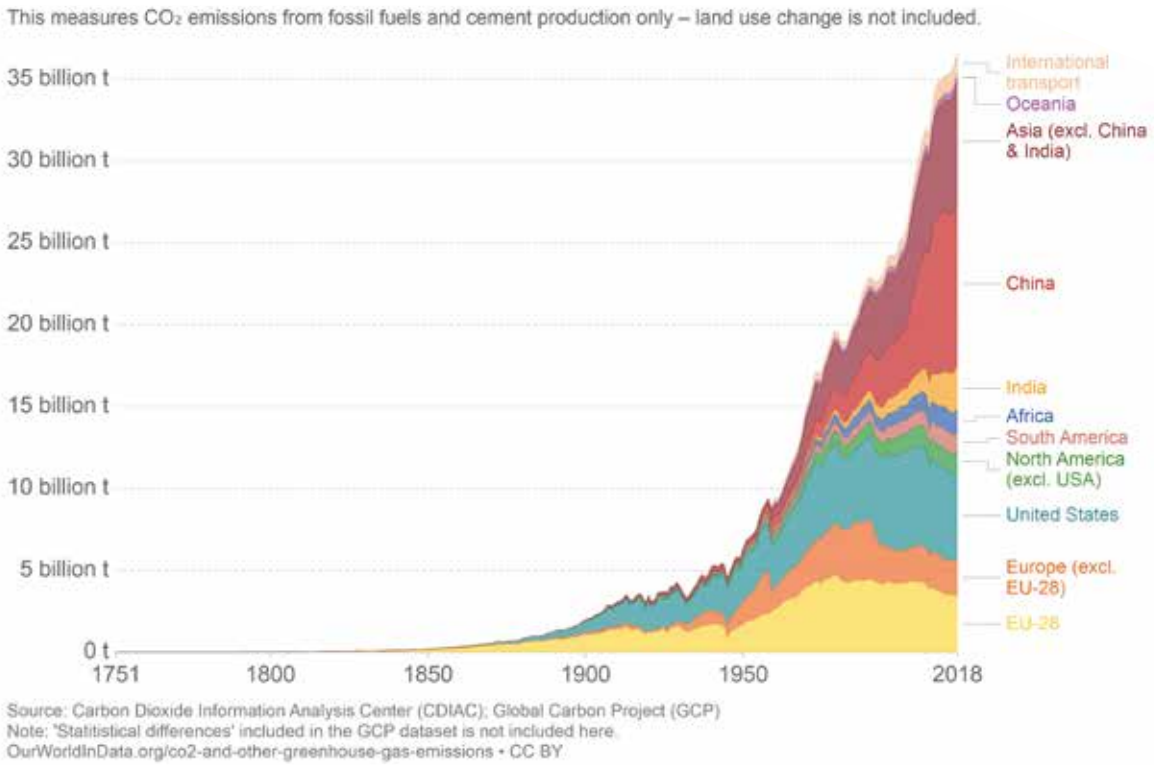
The Paris Climate Change Agreement: Key Points



Atmospheric CO_2 Concentration

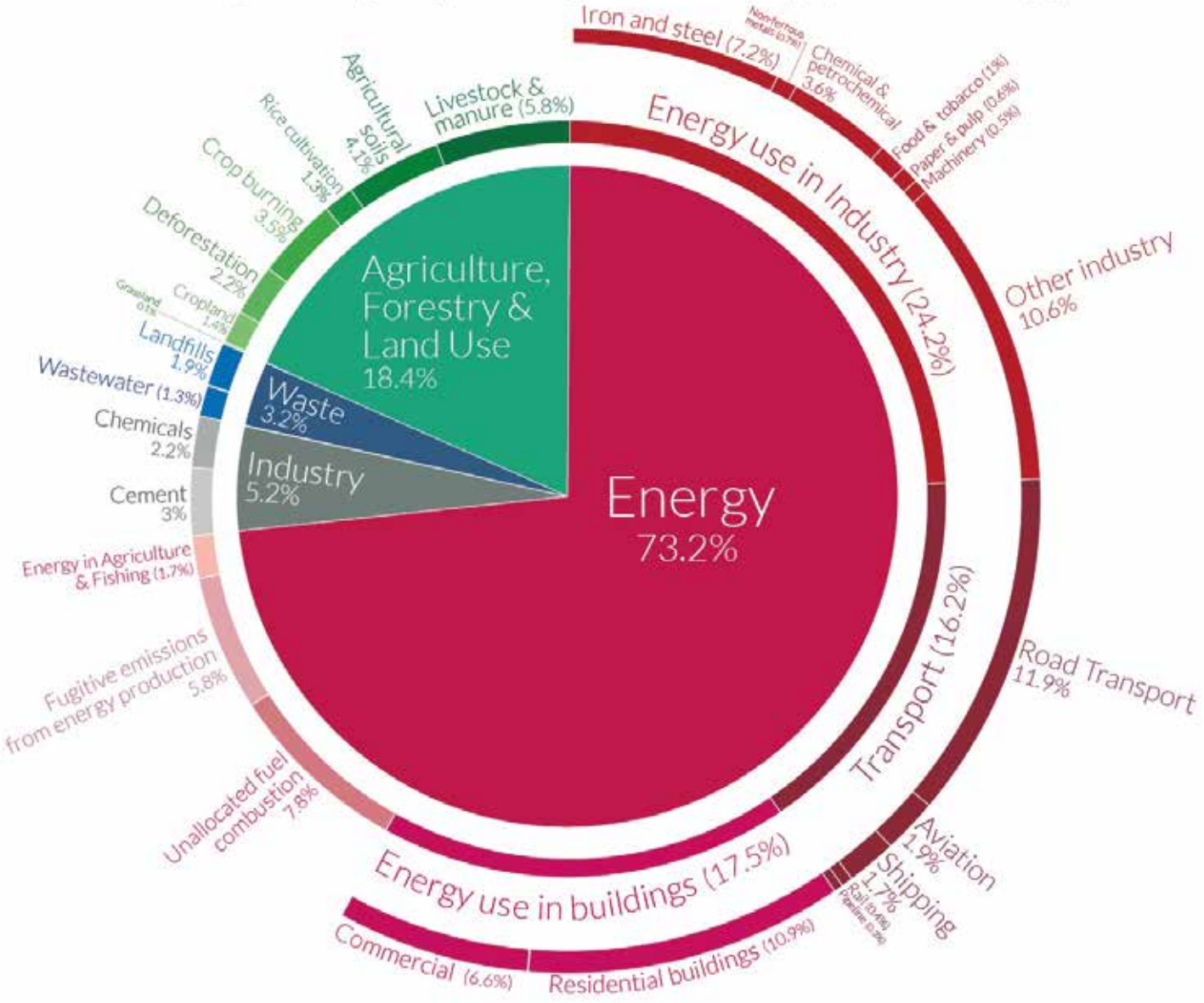


Annual Total CO_2 Emissions, by World Region



Global Greenhouse Gas Emissions by Sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO_2eq.

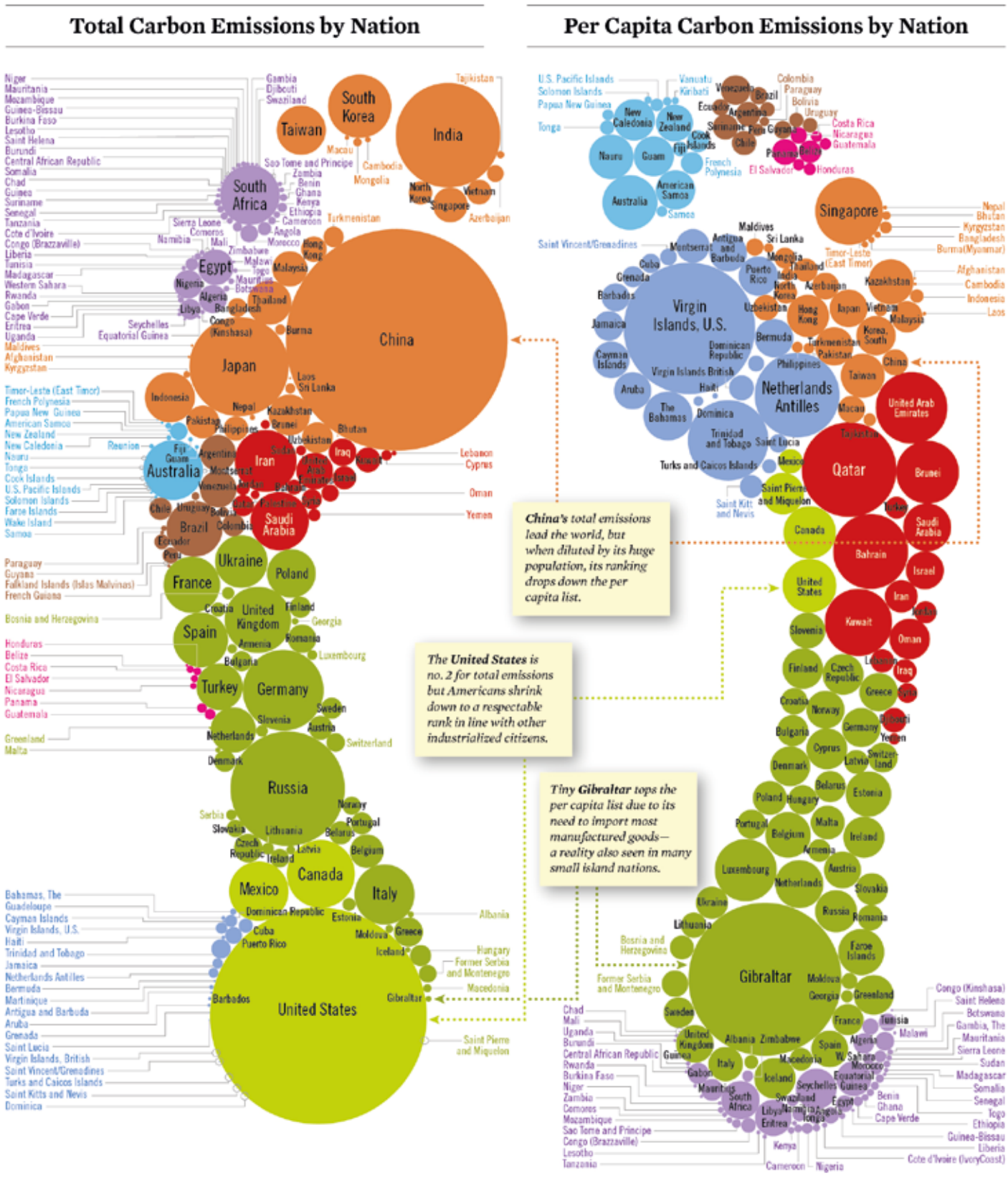


Source: Climate Watch, the World Resources Institute (2020).

Tracking Carbon Emissions

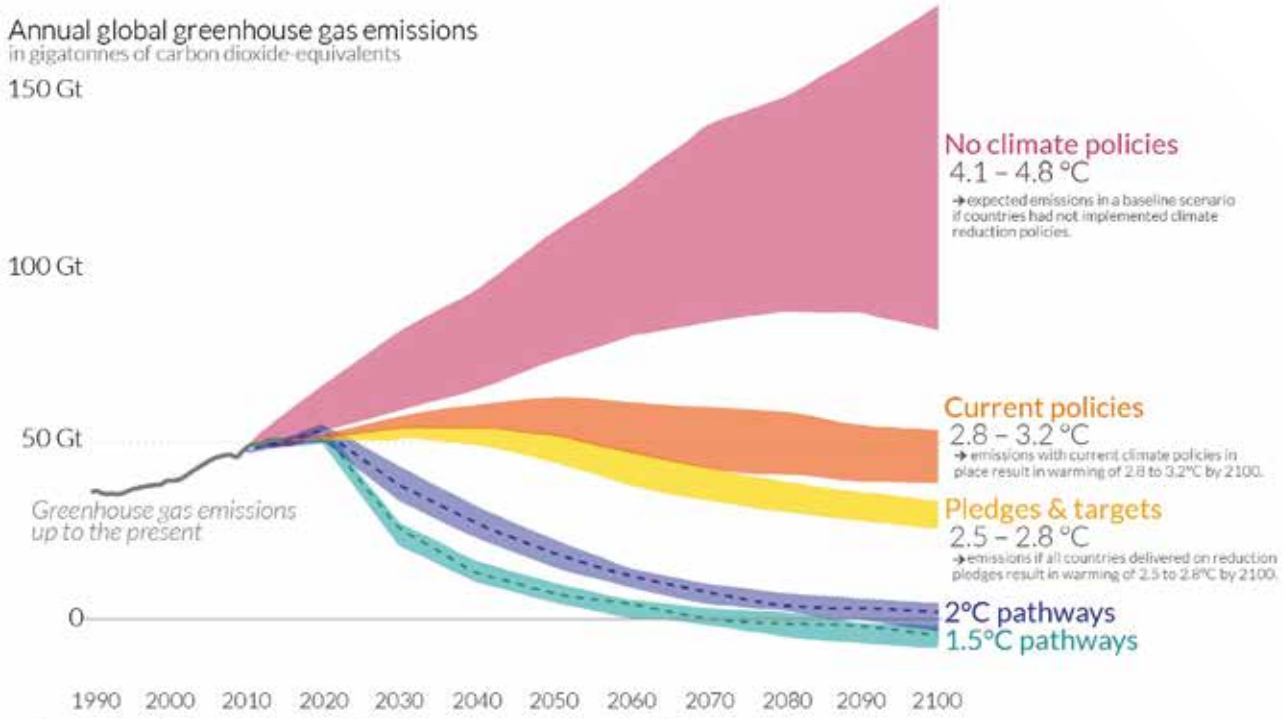
A footprint comparison of total carbon dioxide emissions by nation and per capita shows there's plenty of room for smaller countries to reduce their carbon footprints.

By Stanford Kay



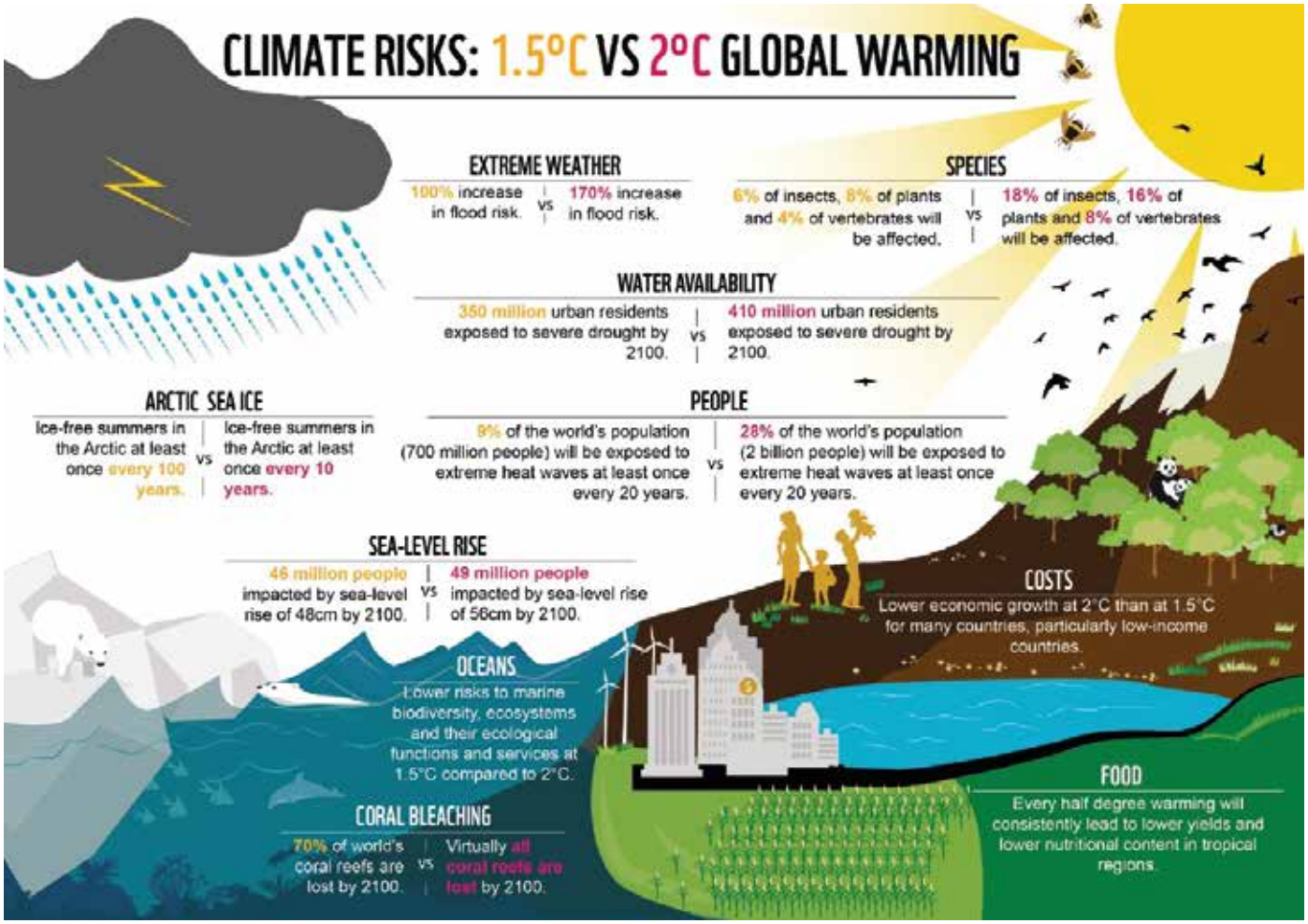
Global Greenhouse Gas Emissions and Warning Scenarions

– Each pathway comes with uncertainty, marked by the shading from low to high emissions under each scenario.
– Warming refers to the expected global temperature rise by 2100, relative to pre-industrial temperatures.



Data source: Climate Action Tracker (based on national policies and pledges as of December 2019).
OurWorldinData.org – Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the authors Hannah Ritchie & Max Roser.



Total Asian GHG Emissions

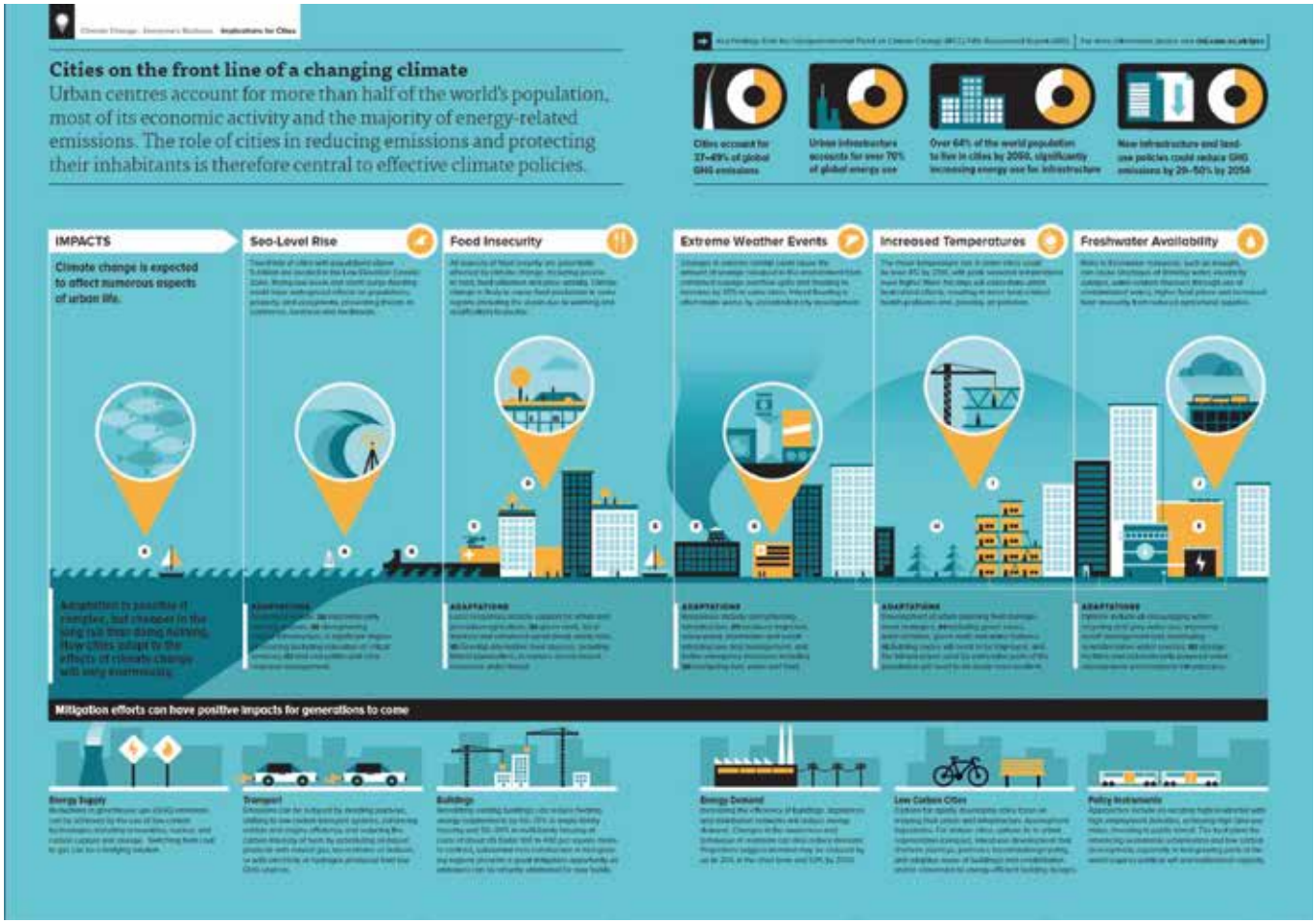
Total Asia GHG emissions, 2016, $MtCO_2e$[1]

Low High

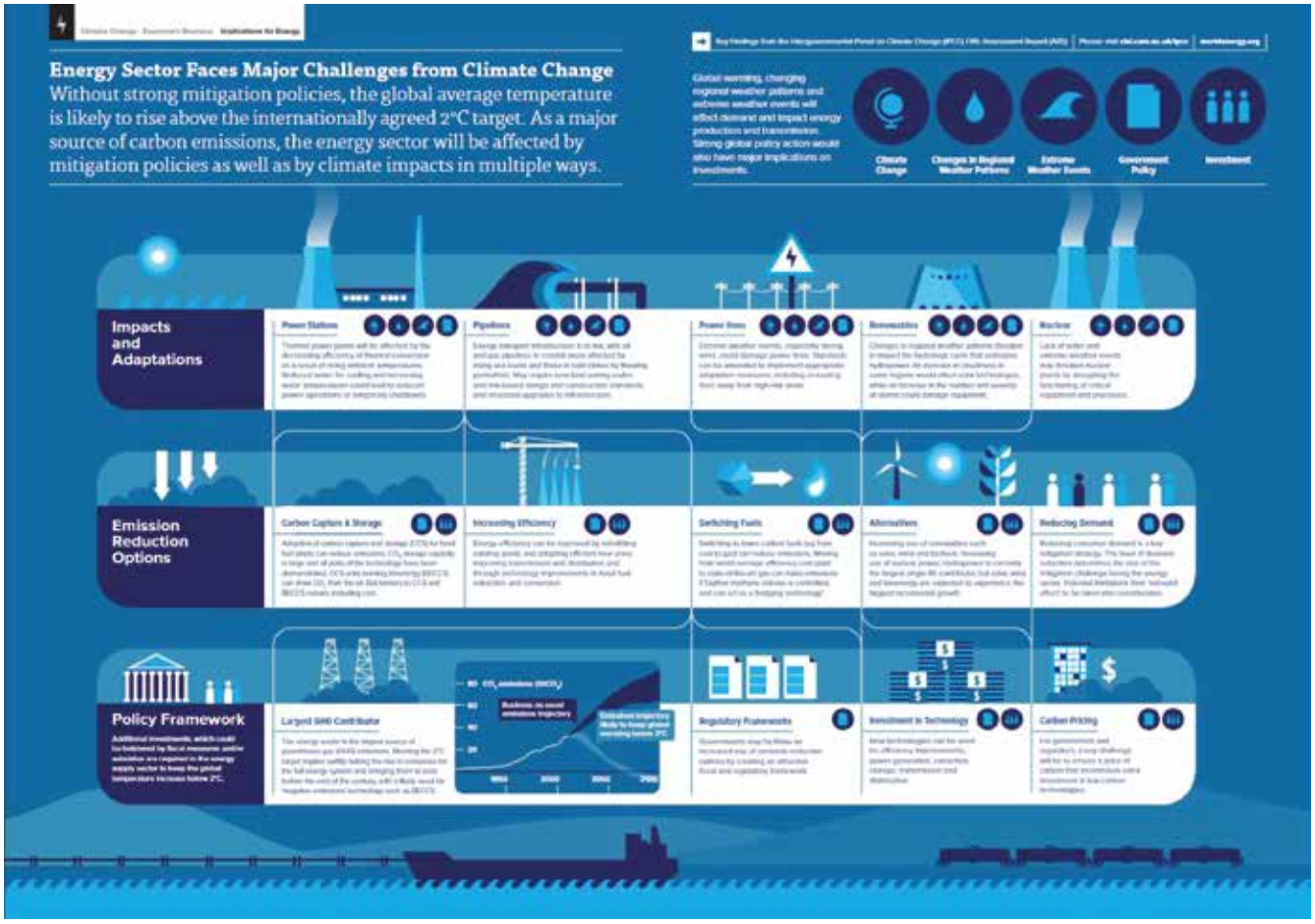
Country[2]	By sector							Total emissions		
	Power	Industry	Agri-culture	Defores-tation	Trans-portation	Buildings	Waste	CO_2	Non-CO_2	GHG
China	4,023	7,732	1,689	4	970	628	1,017	10,338	5,726	16,064
India	1,060	1,327	1,912	34	288	141	758	2,249	3,271	5,520
Indonesia	181	742	456	1,115	147	26	237	1,630	1,274	2,904
Japan	484	422	64	0	244	118	31	1,214	148	1,363
Australia	188	512	290	10	111	15	88	441	773	1,215
Pakistan	43	183	470	0	50	19	90	192	662	854
South Korea	279	233	37	0	153	53	46	675	127	803
Thailand	93	220	186	15	92	7	59	320	352	672
Myanmar	7	44	226	321	5	4	28	345	289	635
Vietnam	78	209	193	3	42	12	60	233	364	597
Malaysia	106	199	24	52	73	5	46	288	218	506
Philippines	54	77	176	1	38	6	81	130	304	435
Bangladesh	34	76	226	5	12	9	71	86	348	434
New Zealand	3	19	111	1	18	2	18	37	134	171
Total	**6,634**	**11,995**	**6,061**	**1,561**	**2,242**	**1,046**	**2,631**	**18,178**	**13,992**	**32,170**

Source: McKinsey Global Institute

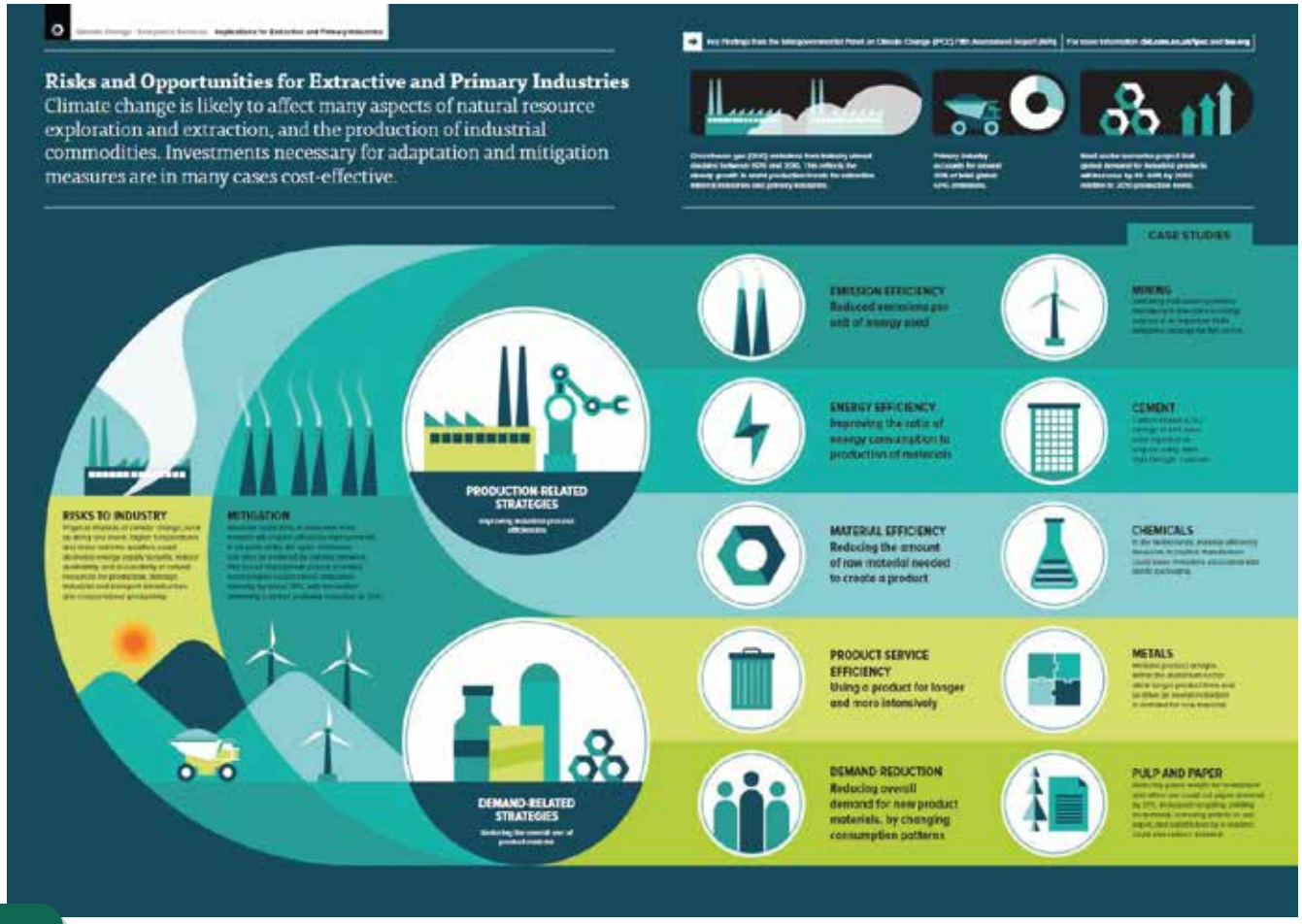
Impacts of Climate Change on Cities



Impacts of Climate Change on Energy Sector

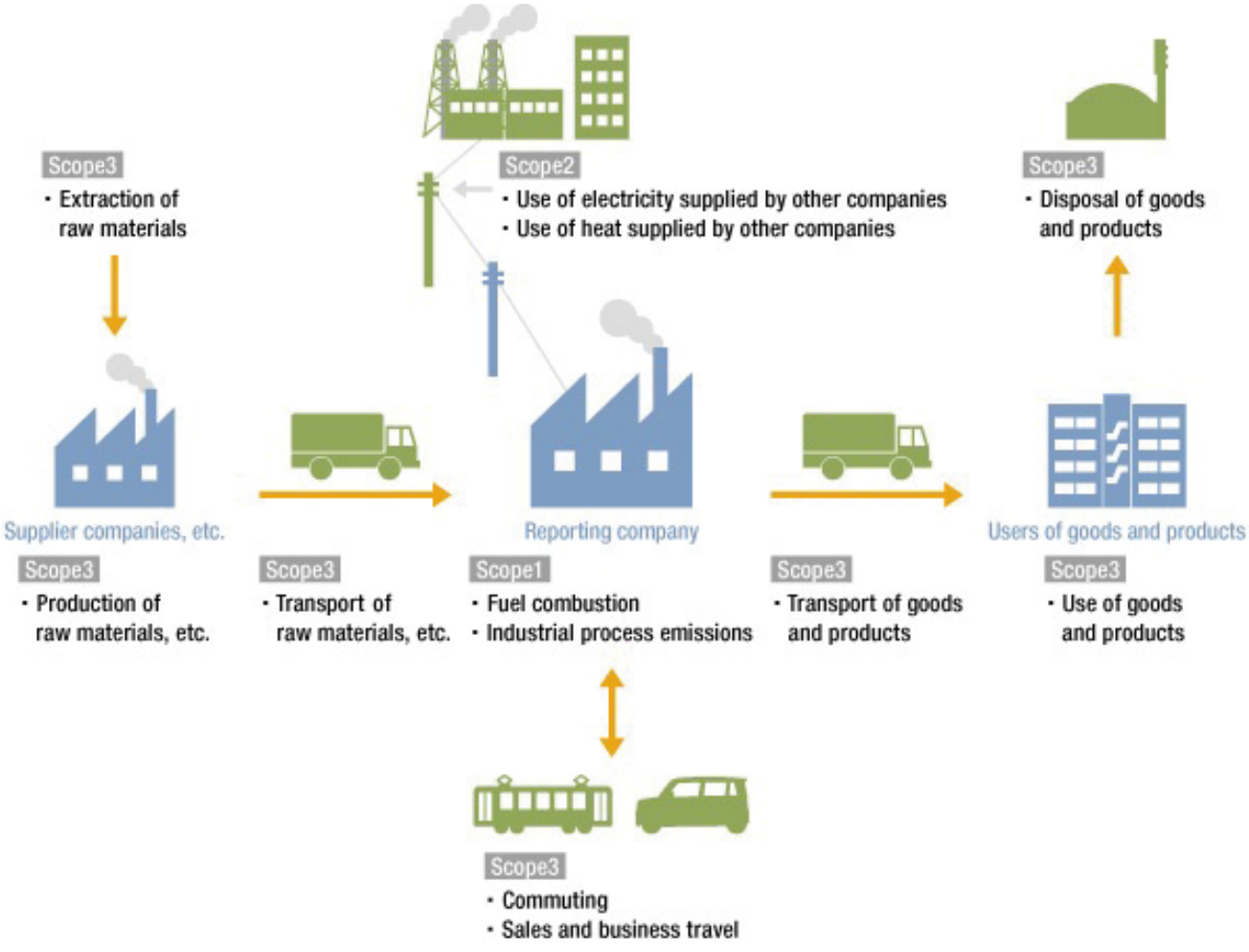


Impacts of Climate Change on Industries



Carbon Footprint of Buildings

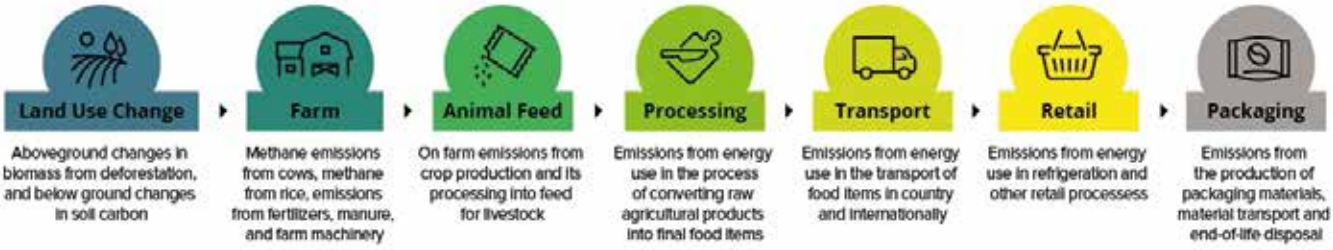
Carbon Footprint of Manufacturing

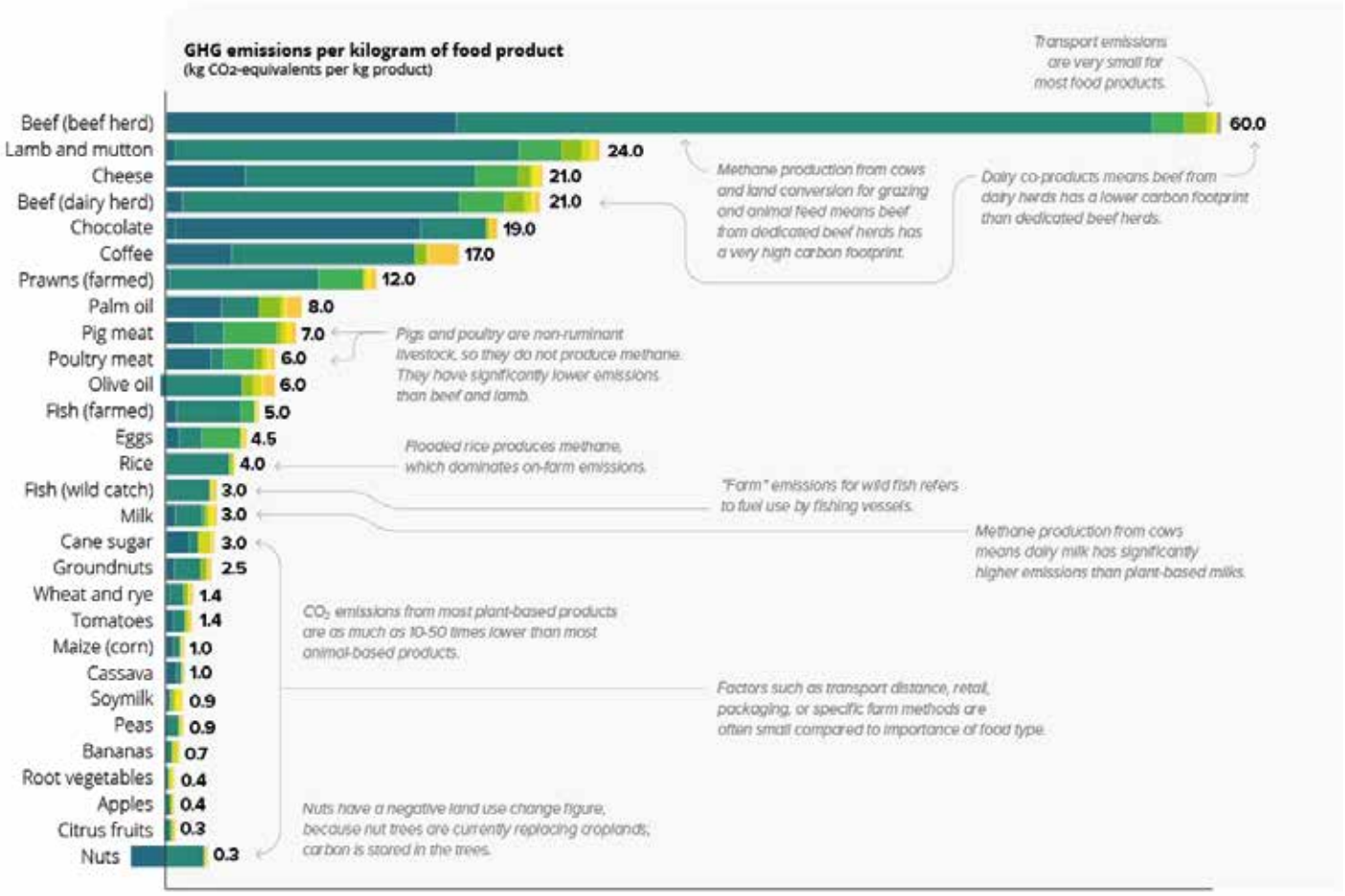


Carbon Footprint of Agriculture

FOOD / Greenhouse gas emissions across the supply chain

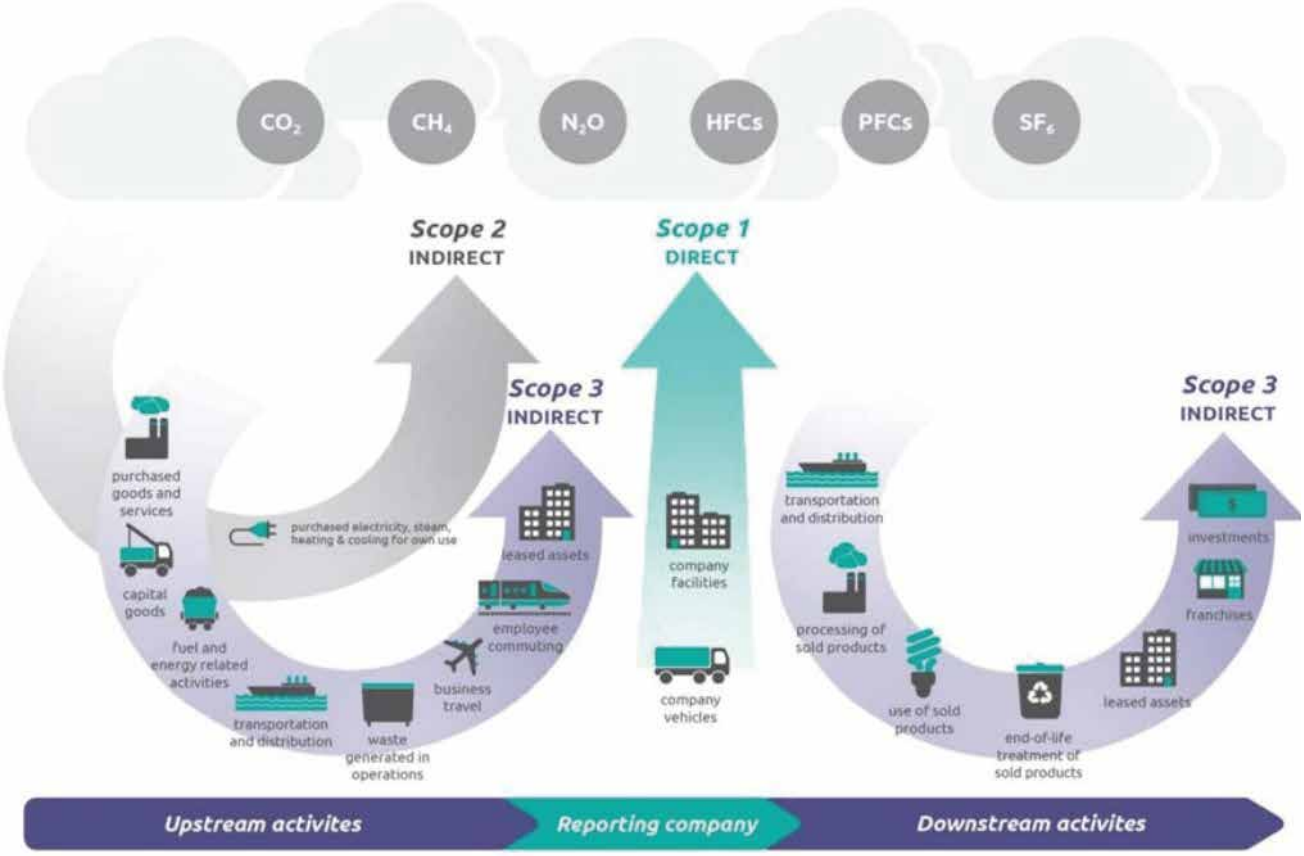
There is a vast difference in greenhouse gases (GHG) that are produced across various food types.



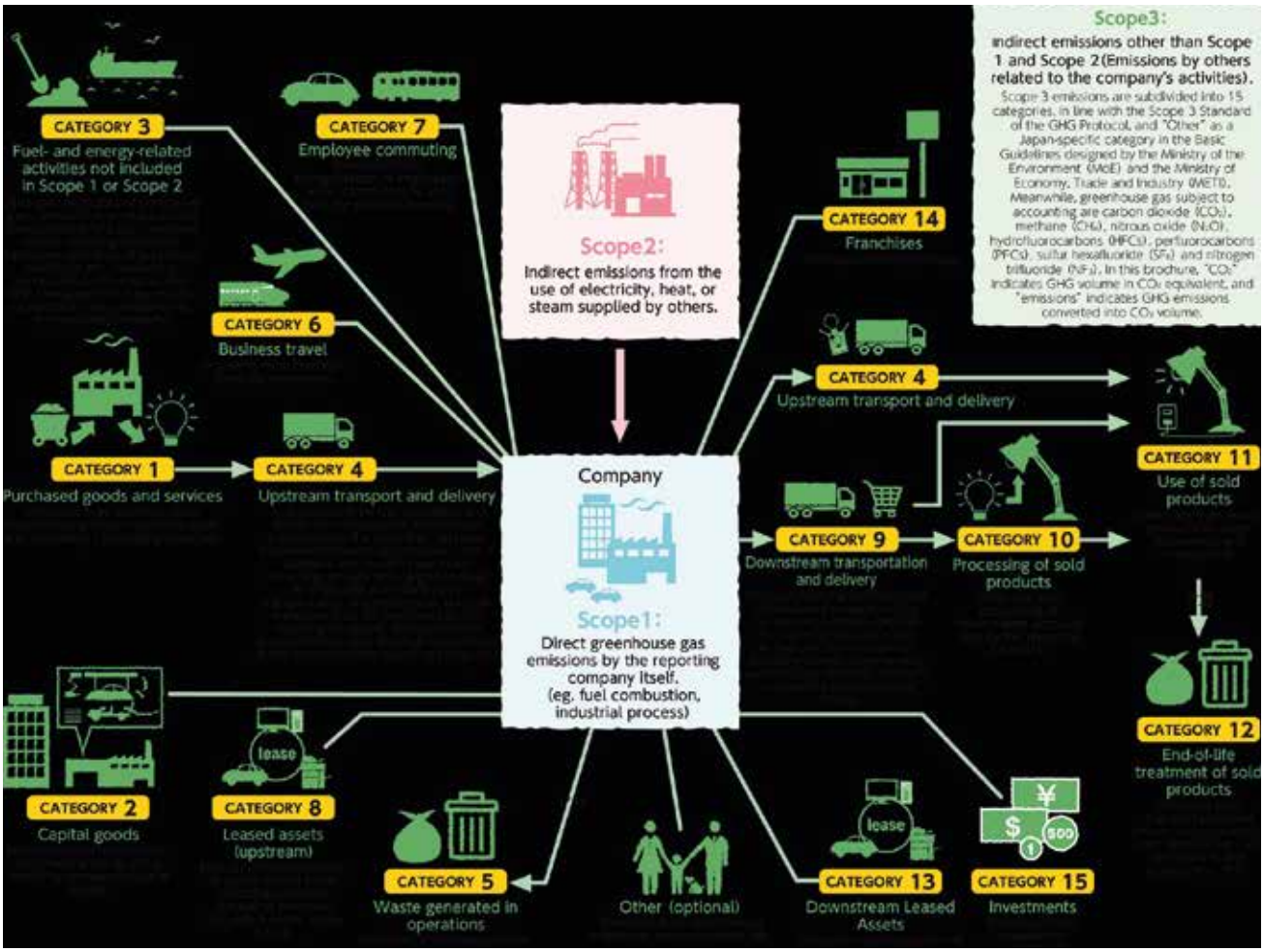


Note: Greenhouse gas emissions are given as global average values based on data across 38,700 commercially viable farms in 119 countries.
Data source: Poore and Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Science. Images sourced from the Noun Project. OurWorldInData.org - Research and data to make progress against the world's largest problems.

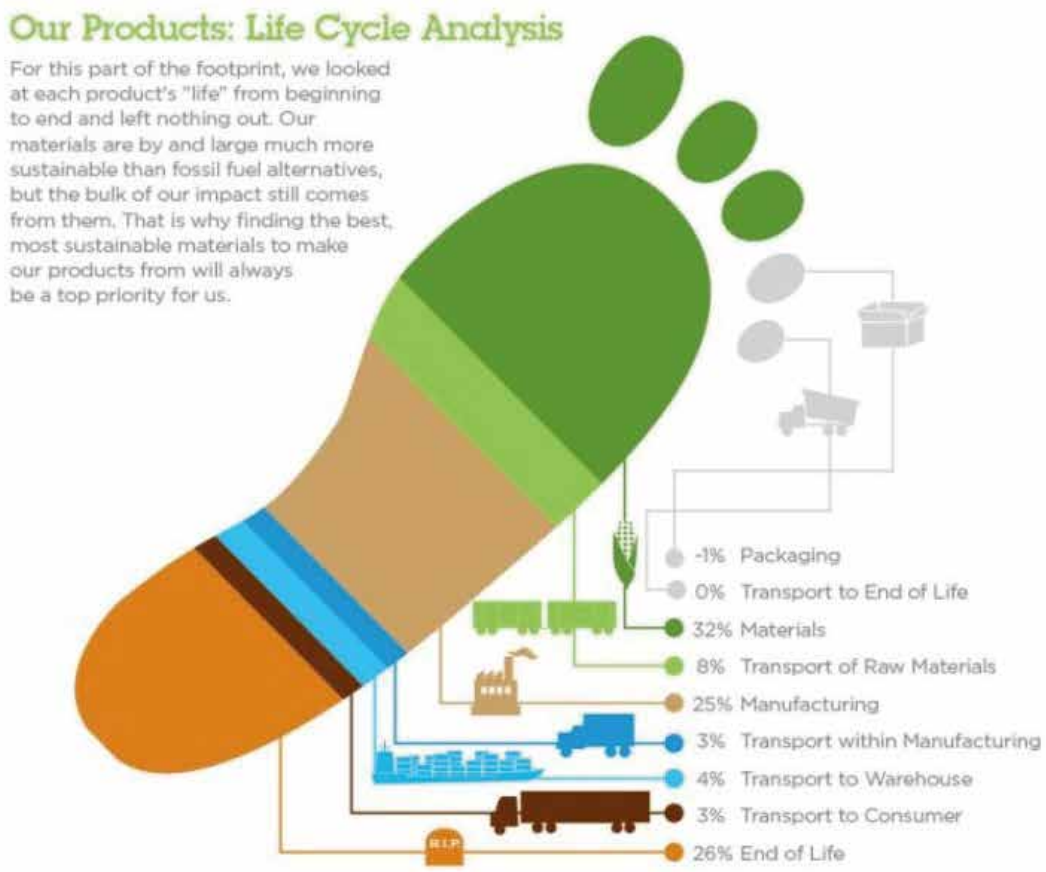
Scope of GHG Emissions



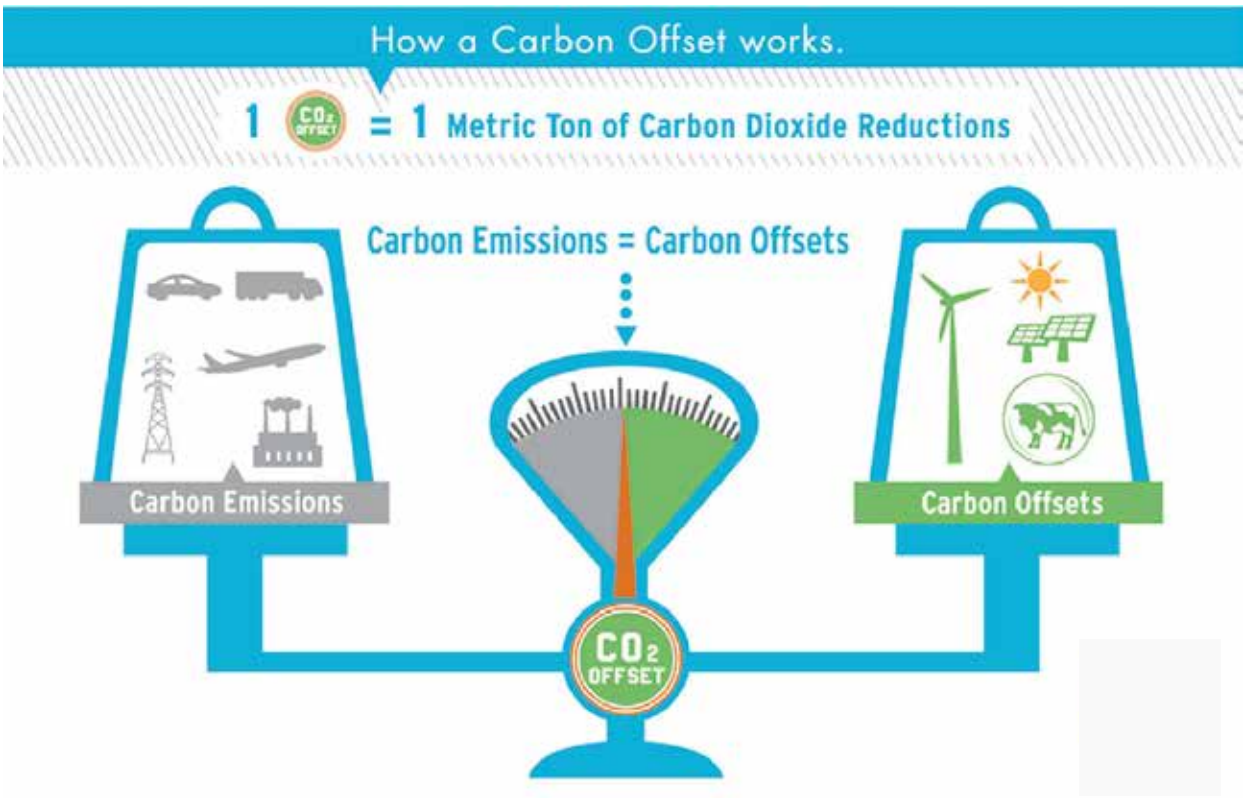
Organization Carbon Footprint Assessment



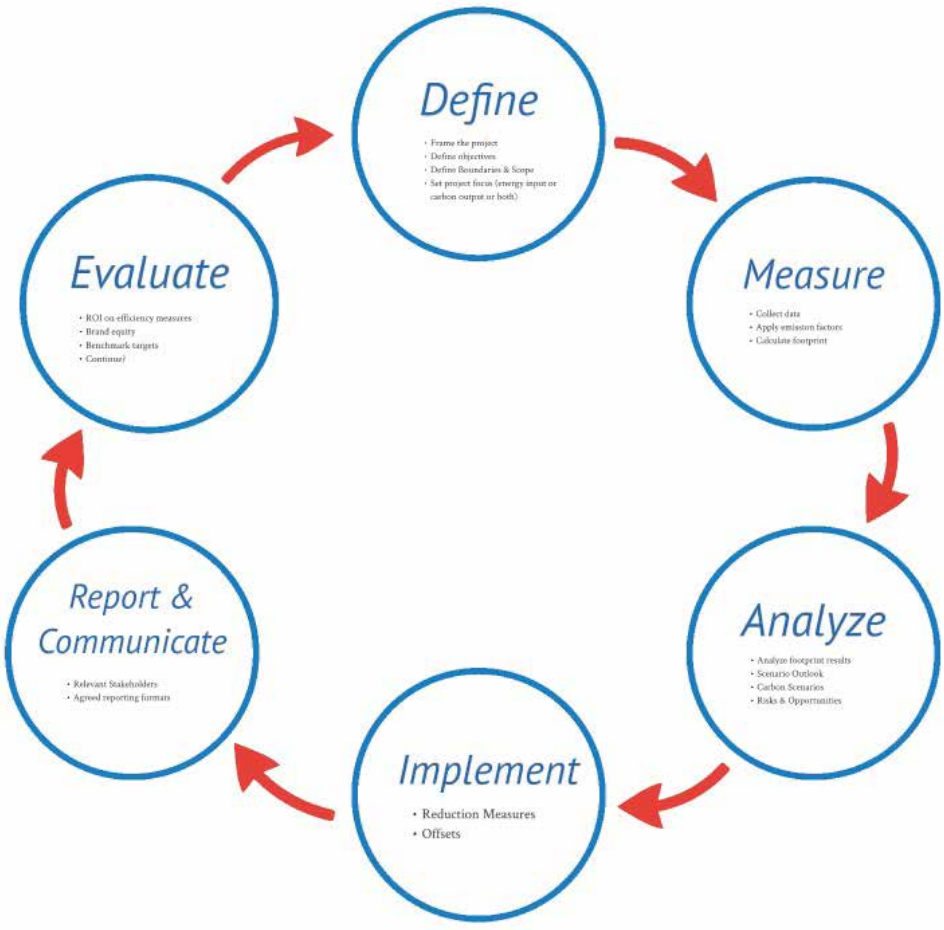
Product Carbon Footprint Assessment



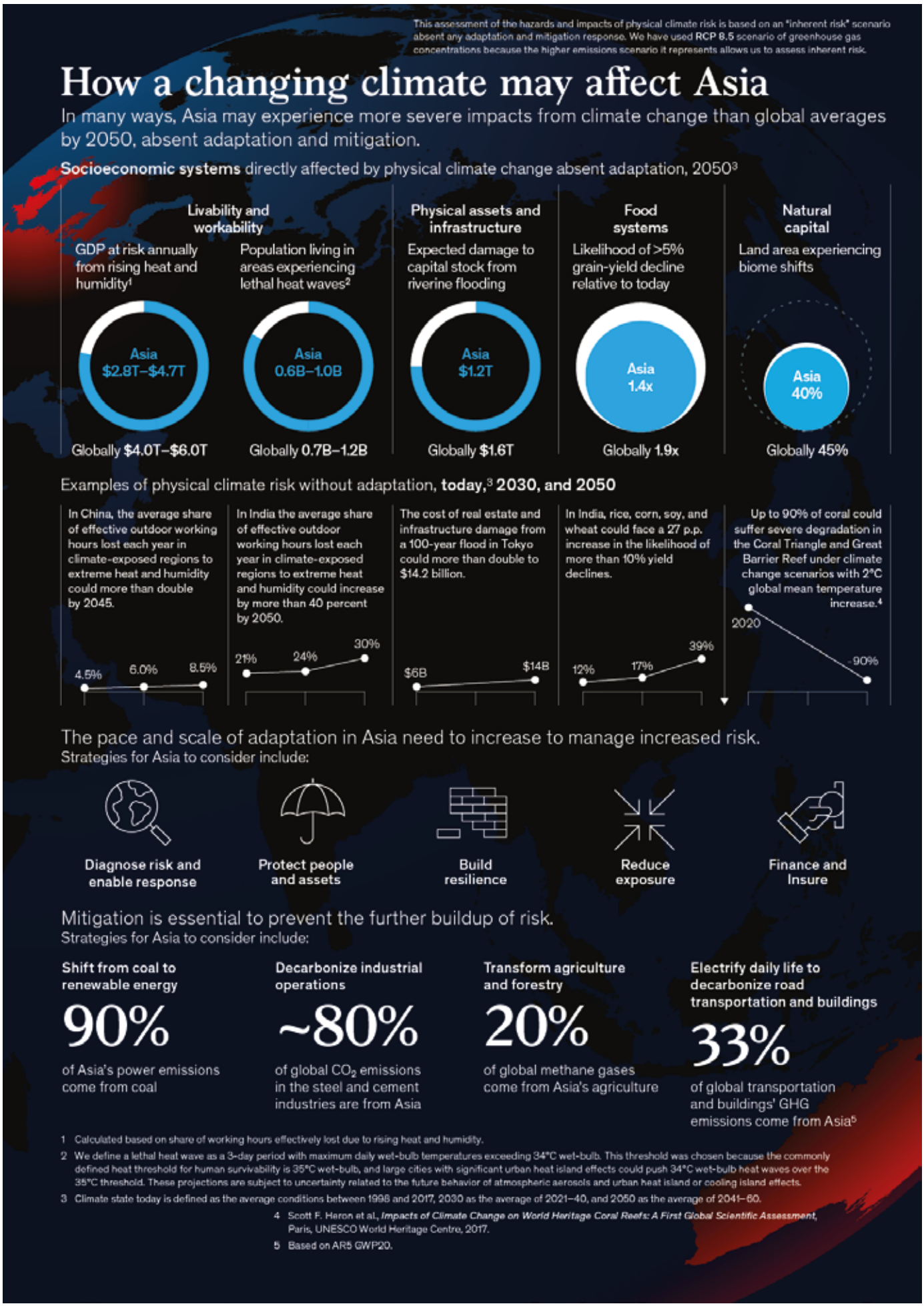
Carbon Offset Accounting Model



Organization Carbon Management Approach

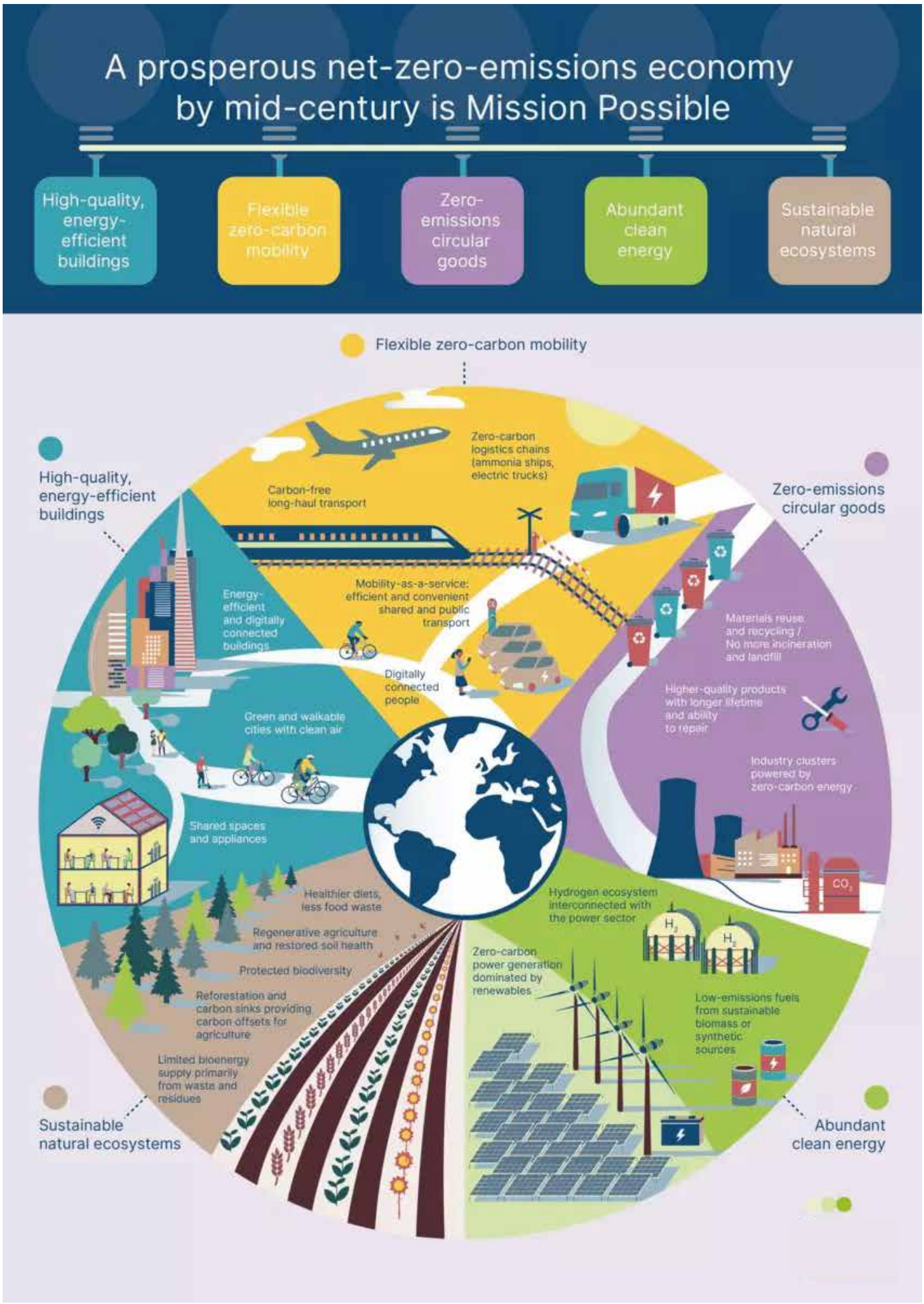


Impact of Climate Change on Asia



Source: Mckinsey Global Institute

The Net-Zero-Carbon Economic Model



Source: The World Economic Forum

PROGRAM

DAY ONE: 8 JUNE 2021, TUESDAY (GMT+8)

Opening Ceremony

2:00PM	**INTRODUCTORY REMARKS** **Datuk Dr. Abdul Aziz S.A. Kadir, Chairman, Confexhub Group**
2:05PM	**SPECIAL ADDRESS**
2:10PM	**INAUGURAL ADDRESS AND LAUNCH OF GLOBAL NET-ZERO ACTION 2021 CONFERENCE AND EXHIBITION**

Plenary Session

2:35PM	**Plenary Address 1: The Paris Agreement on Carbon Reduction and Its Impacts on Organizations**
3:00PM	**Plenary Address 2: Anthropogenic Emissions of Greenhouse Gases: Current Trends and Forecast**
3:25PM	**Plenary Address 3: The Growth of the Carbon Markets in Asia – Trends and Opportunities**
3:50PM	**Plenary Address 4: Cap-and-Trade Systems vs. Carbon Tax: Towards a Universal Uniform System for Carbon Pricing**
4:15PM	Open Forum: Questions and Answers
4:30PM	End of Session

*This Program is subjected to change and for updated program, Program @ 24 February 2021

PROGRAM

DAY TWO: 9 JUNE 2021, WEDNESDAY (GMT+8)

Session 1 : Regulate: Standards and Policies

There is an increasing recognition amongst the business community for a need of collective action by industries and government to fight climate change and promote environmental sustainability due to its global systemic risk to humanity. This session will discuss how limiting global warming will require transformative policies, lowering operation cost and increase employability with adoption of low carbon standards across business operations, and harnessing new economic sources of income through carbon sequestration projects.

1:30PM	**Paper 1: Aligning Policies and Drivers for a Low-Carbon Economy**
1:55PM	**Paper 2: Carbon Footprint Standards and Implementation: Why Should You Care?**
2:20PM	**Paper 3: Navigating United Nations SDG 13 – Quantify Risk, Explore Opportunities**
2:45PM	**Paper 4: REDD+ Strategies and SFM in Asia and the Pacific: Updates and Opportunities**
3:10PM	**Open Forum: Questions and Answers**
3:30PM	**End of Session**

Session 2 : Manage: Set Targets and Formulate Climate Strategies

The Paris Agreement, governments of the world have agreed to limit the rise of global temperatures to well below 2°C. This is further elaborated in the UN SDG Goal 13 for economies to "Take urgent action to combat climate change and its impacts". To fully implement the pledged policy measures, a consorted effort by all actors including the private sector is required to close this gap. Companies and Industries can reduce anthropogenic carbon emissions and become adopter of low GHG emission practices within the corporate value chain by instituting set targets and strategies in the supply chain as a whole. This session will provide clarity on how to build and begin setting target, and using data and public policies to align with corporate sustainability strategy.

3:35PM	**Paper 6: Formulating a Climate Strategy that Your Organization Needs**
4:00PM	**Paper 7: Integrating Green and Lean for Sustainable Optimum Productivity**
4:25PM	**Paper 8: Using Levelized Cost of Energy in Decision Making Process**
4:50PM	Open Forum: Questions and Answers
5:10PM	End of Session
5:30PM–7:30PM	**WORKSHOP – CARBON ACCOUNTING**

*This Program is subjected to change and for updated program, Program @ 24 February 2021

PROGRAM

DAY THREE: 10 JUNE 2021, THURSDAY (GMT+8)

Session 3 : Measure: Low Carbon, Carbon Capture, Utilization and Storage Technologies

For the first time in human history, concentration of carbon dioxide in the atmosphere has exceeded the 400 parts per million (ppm) from the previous average of 200ppm to 250ppm. To pursue efforts to limit the increase to 1.5°C as per the PA's goal, emerging technologies in low carbon, carbon capture, utilization and storage are being developed and deployed across organizations and industries. The session makes a number of recommendations for companies, industries and governments on technologies that are essential in tackling climate change, generating 'negative emissions' in every spectrum, be it, in the supply-chain, built-environment, logistic and waste.

1:30PM	**Paper 10: Emerging Technologies in Advancing Carbon Capture, Utilization and Storage**
1:55PM	**Paper 11: Innovative Technologies for Transforming Carbon into New Products**
2:20PM	**Paper 12: The Future Banks on Energy-Storage System for Low Carbon Economy**
2:45PM	**Paper 13: Hydrogen Technology: The New Kid on The Block of Low Carbon Alternative**
3:10PM	Open Forum: Questions and Answers
3:30PM	End of Session

Session 4 : Monetize: Carbon Pricing, Trading and Financing

Industry and government are increasingly relying on carbon credits to offset GHG emissions in support of climate goals. However, the complexities of global trade raise questions about how best to address the way entities are fairly compensate for their environmental impact on others. Pricing carbon, specifically through a carbon tax or a cap-and-trade system are mechanisms to address these equity issues and reduce global carbon emissions. Article 6 of the Paris Agreement allows entities with low emissions to sell their exceeding allowance to larger emitters. The Article 6 will also create new channels for climate finance. This session seeks to provide initial guidelines on the technical features and advantages and risks of the price discovery models, carbon trading options, carbon tax systems and climate finance scheme for green projects.

3:35PM	**Paper 15: Carbon Pricing and Markets: Strategy and Mechanism for Future Demands**
4:00PM	**Paper 16: The Potential of Carbon Trading Using the Cap-and-Trade Systems**
4:25PM	**Paper 17: The Role of Green Climate Fund in Financing Low-Emission and Climate-Resilient Development Projects**
4:50PM	Open Forum: Questions and Answers
5:10PM	End of Session
5:30PM – 7:30PM	**WORKSHOP – GOING NET-ZERO**

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PROGRAM

DAY FOUR: 11 JUNE 2021, FRIDAY (GMT+8)

Session 5 : Report: Emission Audit And Monitoring

The sustainability challenges of today are unprecedented. Reporting is one of the most powerful means available for companies that are committed to the sustainability agenda to win over sceptical stakeholders. Reporting gives companies and governments an opportunity to show how in their thinking and actions they are dealing with the social, economic and environmental challenges ahead. The session makes a number of recommendations for companies and governments that are responsible for developing guidelines and frameworks for sustainability reporting in the future.

1:30PM	**Paper 19: Global Trends in Sustainability Reporting Regulation and Policy**
1:55PM	**Paper 20: Climate Change and Mandatory Carbon Reporting: Impacts on Business Process and Performance**
2:20PM	**Paper 21: The Greenhouse Gas Protocol 101: All You Need to Know (or More)**
2:45PM	**Paper 22: Carbon Footprint Audit and Process: Preparing Your Business for Tomorrow**
3:10PM	**Paper 23: Prioritizing Resources and Investment through Lifecycle Sustainability Assessment**
3:35PM	Open Forum: Questions and Answers
3:50PM	CONFERENCE ENDS
4:00PM – 7:00PM	**WORKSHOP – CARBON TRADING SIMULATION**

*This Program is subjected to change and for updated program, Program @ 24 February 2021

Post Conference Workshops:

1. Carbon Accounting Workshop

Carbon footprinting – also known as carbon accounting or carbon inventory can be competed at the national / country level or for organisations, projects or products and services, groups of people or per person. The measurement method differs between each of these types. In this workshop, we will focus on how to estimate a carbon footprint of an organisation (e.g. a business or a facility within a business).

What You Will Learn in This Intensive Workshop

- Applying key concepts related to carbon accounting including an understanding on carbon footprint, Scope 1, 2 and 3 emissions and which greenhouse gas emissions to measure
- Determine which emissions factors to be used and concepts of organisational boundary and 'operational control' (i.e. who owns the emissions)
- Skill to estimate the carbon footprint of a product by conducting product life cycle analysis and how to bound the scope of analysis
- Complete a series of examples and practical exercises that are similar to doing carbon footprinting in practice
- Differentiate product carbon footprint with carbon stored in forests and soils
- Review methods for measuring carbon in forests and soils with practical exercises
- Understand the concept of REDD+, plantations and climate smart agriculture feature in carbon offset methodologies through understanding how carbon in soil is estimated

2. Going Net Zero Workshop

What do we do after knowing how to estimate carbon footprint? This workshop will introduce options to reduce carbon emission and path your way towards net zero.

What You Will Learn in This Intensive Workshop

- Conducting 'Abatement Activities' by carrying out methods to assess and compare activities within the organisation to reduce emissions
- Compare the relative merits of abatement activities using a marginal abatement cost curve
- Compile a marginal abatement cost curve and assess the pros and cons of using them
- Learn about carbon offsets, carbon offset methodologies, method in developing a carbon offset project and how organisations can acquire and use carbon offsets to go net zero
- Look at the process of becoming net zero, focussing on how we ensure that we follow the correct procedures so we are correctly perceived by our stakeholders to be reducing our emissions with integrity

3. Carbon Trading Simulation Workshop

In this workshop participants will learn all about carbon trading by taking part in a very special online carbon trading simulation. In this simulated carbon market, virtual companies from different industrial sectors manage carbon portfolios where they can reduce emissions using abatements (including efficiency improvements, process changes, fuel switches, or emissions controls) that are relevant to their particular sectors.

What You Will Learn in This Intensive Workshop

- Manage virtual companies that are faced with an ETS-related compliance mandate to reduce emissions at the lowest possible cost
- Participate in government-sponsored allowance auctions, exchanges, or OTC markets in the carbon trading simulated market. Two different products are traded – government issued allowances and private sector-created offsets. Both abatements and market-related options have different capital requirements and returns. Each simulation runs over the course of two to six or more virtual years. The actual duration ranges from 90 minutes to six weeks
- Evaluate individual performance in comparison to their colleagues, and as part of a system in the carbon trading market
- Gain a better understand on the unique characteristics, risks, and opportunities that are the hallmarks of carbon markets
- Understand that environmental and economic outcomes are a function of design choices emissions with integrity
- As Policymakers, they learn how the choices that they make – about both program design and administration – can affect the performance of the ETS
- Industry carbon managers will learn how to deploy a variety of strategies – involving production changes, the use of abatements, and trading – to satisfy ETS obligations.
- Investors can learn how their portfolio companies might be affected by exposure to a variety of ETS designs and the practical decisions that those companies will have to make.

Post Conference Workshops:

Trainers

Dr Paul Dargusch, Chair of the Tropical Carbon Farming Innovation Hub

Dr Paul Dargusch currently serves as Chair of the Tropical Carbon Farming Innovation Hub and as a tenured Associate Professor at The University of Queensland (UQ). He has more than 20 years' professional experience across consulting, academia and the private sector in the field of carbon and energy management. From 2016 to 2018 Paul served as the Deputy Head of UQ's School of Earth and Environmental Sciences; Australia's top ranked University for environmental science (and in the top five globally). He has published more than 100 papers on carbon and energy management in leading peer-reviewed journals including in Science and Nature Climate Change. He is the current lead-lecturer of Carbon and Energy Management, a course offered at undergraduate and postgraduate levels at UQ to more than 200 students per year. From 2007 to 2016, Paul served as the Director of the UQ Carbon Lab, and from 2011 to 2015, he concurrently served as Academic Director of the International Energy Centre. He has led a number of high-level consultancy projects for various Governments and large corporations, providing advice on carbon and energy management and carbon offset project development around the world. He has completed projects for Government agencies in China, Indonesia, the UAE, Vietnam, Papua New Guinea and Australia; some of the world's largest corporations; and leading development agencies, such as the World Bank, the UNDP, GIZ, and the FAO of the UN. Prior to joining UQ, from 1996 to 2007 Paul held various senior roles in the resources sector; including as a Forester with North Ltd and as a Special Projects Manager with Japanese trading house Itochu Corporation.

Josh Margolis, Environmental Markets Practitioner

Josh Margolis is the CarbonSim administrator and a long-time environmental markets practitioner. He has provided environmental market simulation, brokerage, advisory, and capacity building services to stakeholders involved in voluntary and compliance-focused emissions and environmental trading systems in China, Korea, Japan, Thailand, Viet Nam, Laos, Malaysia, Myanmar, Australia, Mexico, Chile, Brazil, Lithuania, Latvia, Spain, the UK, Kazakhstan, Canada and the US. He has delivered carbon market simulations at more than a dozen universities in the US, Colombia, Mexico, Australia, and the Netherlands and co-authored a World Bank Technical Note on carbon market simulations. Josh also serves as a commercial advisor to Emergent Forest Finance Accelerator, an entity that is seeking to use jurisdictional REDD+ to reverse deforestation using climate finance. Before joining EDF, Josh ran or was a principal in environmental credit brokerage and consulting for a number of organizations. Josh is a co-inventor of a number of patents that provide for the neutralization and offsetting of equities. He graduated from Duke University.

Participants who attend all three workshops (also referred to as modules) and receive a mark of 50% or greater on each of the quizzes associated with each module, will be eligible to receive a Certificate in Carbon Management issued by the Tropical Carbon Farming Innovation Hub Ltd.

Sponsorship Package in a Glance

Increase your organisation's visibility with key Decision makers before, during and after the event.

	Titanium	Platinum	Gold	Silver	Conference Sponsor
Logo on Conference Collateral	✓	✓	✓	✓	✓
Logo on A& P Material	✓	✓	✓	✓	✓
Logo on Digital Backdrop	✓	✓	✓	✓	✓
Speaking Slot during Conference	✓	✓	✓		✓
10-second Corporate Video via Live Broadcast on Conference Day	✓	✓			
Running Ticker during Live Broadcast	✓	✓	✓		
Panellist in 'Expert Insight @ Live' Forum	✓	✓			
10-second Corporate Video via Live Broadcast on 'Expert Insight @ Live' Forum	✓	✓			
Booth @ Virtual Expo (Valid for 12 months)*	Premium	Premium	Premium	Sponsor	Exhibitor
Conference Log-in	5	4	3	2	3
Leaderboard Ads on Conference Website	✓	✓			
Banner on Conference Mobile App	✓	✓			
Logo & Profile on Conference Website	✓	✓	✓	✓	✓
Logo & Profile on Conference Mobile App	✓	✓	✓	✓	✓
Logo & Profile on Digital Program Book	✓	✓	✓	✓	✓
Web banner on www.confexhub.com (6 months)	✓	✓			
Logo & Recognition via Conference Social Media Platforms	✓	✓	✓	✓	✓
Business Matching Meetings	5	5	3	3	2

*Exhibition Package in A Glance

	Premium	Sponsor	Exhibitor
Booth @ Virtual Expo (Valid for 12 months)*	1st tier	2nd tier	3rd tier
Logo on Virtual Expo Homepage as 'Premium Sponsor'	✓		
Conference Log-in	2	1	1
Dedicated Company Info Page	✓	✓	✓
Logo on Company Info Page	✓	✓	✓
Video Presentation on Company Info Page	✓	✓	
Images on Company Info page	8	6	4
Logo & Profile on Conference Website	✓	✓	✓
Logo & Profile on Conference Mobile App	✓	✓	✓
Logo & Recognition via Conference Social Media Platforms	✓	✓	✓

Contact us now to discuss customised sponsorship packages that will maximise your business opportunities

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Who Should Sponsor / Exhibit:

Technology and solution providers for the field of

- Alternative Energy
- Anaerobic Digestion
- Bio-Based Solution
- Biochar Solution
- Carbon Capture and Sequestration
- Carbon Capture and Utilization
- Carbon Management & Reporting Consultant
- Carbon Storage and Recycling Technology
- Carbon Trading
- CCUS value chain members
- Certification Provider
- Chemical Absorption Technology
- CO2 Recylcing
- Emissions Monitoring and Reduction
- Energy Advisor
- Energy Efficiency
- Energy Management
- Energy storage companies
- Environmental Engineering
- Environmental Protection
- Environmental, Health & Safety and Sustainability Consulting Firm
- Environment-Friendly Products and SMART Technologies
- Hydrogen producers
- Ionic Liquid Solution
- Membrane-based Solution
- Mineralization Solution
- Sustainable Reporting Consultancy

Cambodia Indonesia Laos Malaysia Myanmar Philippines Singapore Thailand Vietnam

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