

# A Just Transition for Hong Kong

**A sustainable future for all in a climate-vulnerable city**



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## A sustainable future for all in a climate-vulnerable city

Hong Kong is a city threatened by the impact of climate change, but also a city which recognises the pressing need to address a range of social issues including unaffordable housing, many cases of working poverty, and a wide disparity between the richest and the poorest of its citizens. There is a gap between the most secure and the most vulnerable in terms of climate risk as well as economic wellbeing.

Managed in the right way, the decarbonisation of the city, adaptation to climate change and building resilience to weather extremes can be planned and implemented in a way which simultaneously improves the wellbeing of all and protects the livelihoods of the most vulnerable. This approach is at the heart of what is known as a ‘just transition.’

### What is a Just Transition?

A just transition involves transition to a low carbon, climate-ready economy while ensuring that the economic and social wellbeing of workers and communities are protected and improved as part of the process. Climate action is planned and implemented in a way which brings benefits to all and leaves no-one marginalized.

The Paris Agreement notes that the climate deal should be “Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.”

At the heart of a Just Transition is the concept of “decent work and quality jobs” and the challenge of ensuring that a low carbon, healthy and climate resilient economy does not deprive sections of the workforce of employment opportunities. This is often termed a “just transition of the workforce.”

Trade unions and labour organizations accept that the transition to a greener system of production and consumption will lead to the replacement of some jobs with new ones. They emphasise the importance of employment planning, social protection, training and skills development to reduce the impact on livelihoods. They call for the participation of workers and their representative organizations to be placed at the heart of this process.

Ensuring social justice more broadly in the transition to a low-carbon economy includes not only the assurance of jobs, but also ensuring the access to and affordability of a range of essential goods and services, adequate social services as well as strengthened concepts of equal opportunities, inclusion and participation.

## Beyond Today's Politics

The ideas behind a just transition run deeper than narrow party political stances and ideologies.

The challenges of dealing with climate change cannot be allowed to collide with the tensions of socially unequal, divided societies in which the gap between those coping and those not able to cope

*Sustainable development is only possible with the active engagement of the world of work. Governments, employers and workers are not passive bystanders, but rather agents of change, who are able to develop new ways of working that safeguard the environment for present and future generations, eradicate poverty and promote social justice by fostering sustainable enterprises and creating decent work for all. (International Labour Organisation, 2015)*

continues to widen. If that were to happen, we would move towards a horrifyingly vicious cycle where environmental and social problems each stand in the way of progress on the other creating a downward spiral and a degenerating civilization.

If we do not combine action on climate with progress on social issues, we open the door to populist politicians offering concerned and confused voters attractive-sounding, short term and ultimately false solutions (or just external targets to blame). Politically we need forward-looking leadership to make it clear that action on climate change is designed to protect the health, safety and livelihoods of those living in vulnerable locations with vulnerable jobs; those who already feel a sense of being economically and socially left behind.

### **A Just Transition Unblocks Climate Agreement Sticking Points**

Many make the case that more comprehensive action on just transition could address one of the difficult issues that often obstructs the international climate negotiations: the concept of 'common but differentiated responsibilities.' This remains a constant point debate between developed and developing countries, often obstructing progress. If we incorporate concepts of justice, inclusion and economic wellbeing into climate action, this occurs both between countries as well as within each country, reducing the need to frame climate negotiations in terms of competing national interests and the division of the world into contending countries or negotiating blocs.

When green transition is seen as part of broader social progress, work on a low-carbon economy can gain greater acceptance and less suspicion from a public feeling economically marginalized by a range of issues that they feel have more immediate impact on their lives than climate action.

We can use the opportunities afforded by the move to a low-carbon society to address some of the social stresses in our society in a mutually reinforcing way. But this needs wise management. If the cost of dirty energy goes up, safety nets must protect those who can afford the least energy (and usually use the least). No society can create a situation where the rich continue to fuel their private jets while the poorest can no longer afford the bus fare to work.

Global Warming, in the words of the UN Secretary-General António Guterres: "poses an 'existential threat' to humanity." All people with a capacity to grasp scientific evidence and who possess an

imagination know that combatting climate change is going to become the principle focus for those who care about all aspects of social progress.

In the rapid transition to a low-carbon economy, one essential social goal has to be affordable access to energy as well as to goods and services requiring high inputs of energy such as transport and housing.

## Policy Areas for a Just Transition

Both the UNFCCC and the International Labour Organization propose the following key policy areas to ensure a just transition for labour:

**Macroeconomic and growth policies:** aligning growth with social and environmental objectives; promoting sustainable production and consumption.

**Industrial and sectoral policies:** industrial policies promoting a shift to low carbon methods and materials, particularly in key sectors more relevant for environmental sustainability and job creation such as agriculture, water management, sanitation, forestry, fisheries, energy, waste management, buildings and transport.

**Enterprise policies:** stimulating innovation and investment, especially for small and medium sized enterprises.

**Skills development policies:** a meeting of the world of work and the world of education. Training to build skills on low carbon processes and technologies.

**Occupational safety and health policies:** ensuring green jobs are safe through the attention to the prevention of hazards and training on workplace safety.

**Social protection policies:** sufficient income support and health care for displaced workers during job transition and appropriate retirement provisions.

**Active labour market policies:** employment services actively addressing transitional issues, unemployment, possible public works and training subsidies. Learning lessons from earlier transitions related to technological change and globalization.

**Rights:** ensuring ILO standards continue to be applied and strengthened during the transition.

**Policy coherence:** stable policy signals and commitment by all government ministries.

**Social dialogue and tripartism policies:** active dialogue between employees, employers and government.

## Electricity and Fuel: It starts with energy

In many countries the key issues in the debate about a just transition covers the future of workers in the fossil fuel industry, such as coal miners and oil workers and those downstream in refineries and chemical plants. In Hong Kong, employment in these sectors is very small. The city imports its fuels and petrochemicals.

The other side of this equation involves energy and fuel prices. When fuel prices rise, it is often the poorer members of society that are most affected by the cost of travelling to work or getting their goods to market. Fuel prices are often the result of simply removing unfair and unwarranted fossil fuel subsidies rather than converting to renewable energy. Nonetheless, if this is not handled with care, the population begin to believe that there is a trade-off between being environmental and being prosperous. The use of the funds released from ending fossil fuel subsidies, or from rises in fuel taxes, must be used to ensure that ordinary members of society can continue to enjoy the services and goods that are dependent on the price of energy.



Hong Kong still uses fossil fuels in its power stations, but nobody is doubting that the energy sector has a bright future in a low carbon economy. The important issue is how electricity will be generated.

Solar panels at HK Electric's coal and gas-fired power station: One small step for mankind

The inevitable transition to renewable energy will continue to require many skilled workers in the power generation sector. As we build renewable capacity in Hong Kong, a range of jobs related to wind and solar power will grow, along with the need for skills in decentralised energy, energy storage and smart grids to optimise efficiency. Retraining will most likely be required for the hi-tech end of the clean energy revolution.

If Hong Kong decides to invest in renewable generation capacity in the mainland, job displacement will need to be taken into account and properly managed. Lost jobs are unlikely to exceed the potential for jobs in Hong Kong's own modernised power sector. If we develop skills in Hong Kong in areas such as offshore wind or smart electricity storage and distribution systems we can certainly export these technologies as well as the management skills that go with them, just as Hong Kong has so often done in the past.

Decentralisation of energy production can generate employment for design, manufacture, installation and maintenance. In countries such as Germany and the United States, the size of the environmental sector is already larger than the aerospace and defence industries (ETUC 2018. P.17). Much of this lies in the energy sector.

## **Making our buildings green, economical and liveable**

Along with renewable energy production, a low carbon economy will require wide ranging increases in the efficiency with which we consume energy. The great majority of energy in Hong Kong is consumed in buildings, so this is also where the greatest opportunities for a just transition lie.

In new buildings, opportunities exist for the achievement of radically higher efficiency levels. This starts at the construction stage, where the cutting-edge architecture and building companies are exploring lower carbon building materials, more locally-produced materials reducing transport emissions, more energy-efficient construction methods and methods for reducing waste. Cement production is currently responsible for about 8% of global CO<sub>2</sub> emissions, and some 18% of China's carbon emissions. New cement production methods are beginning to reduce the carbon footprint of this material as well as other construction materials such as steel.

With the creation of new buildings, exciting new designs are looking at greater thermal efficiency which will reduce energy lost in cooling or heating. Air conditioning accounts for the greatest energy use in Hong Kong's buildings. Many more efficient air conditioning systems are in the pipeline, but many buildings in Hong Kong don't even use the most efficient systems already on the market. There are a huge number of potential jobs available simply renewing our air conditioning systems once the government incentivises the installation of efficient air conditioning systems and regulates against equipment that wastes energy. Once this happens, owners and occupiers save on their electricity bills, jobs are created, and Hong Kong contributes more fully to the Paris Climate Agreement.

Some of the most interesting building cooling designs combine more efficient air conditioning with some natural convection and cooling, often incorporating trees and other foliage. This creates healthier indoor air quality, lower energy use, and a more psychologically pleasant working environment. With some nudging from the government, could not Hong Kong build some leadership in this field and also export this technology?

Retrofitting our ageing or inefficient building stock, particularly houses, may be one of Hong Kong's greatest employment opportunities in the coming decades, along with full regeneration of the oldest of our housing stock which may be unsuitable for renovation. This will bring social co-benefits in terms of more decent living standards for all citizens if this is designed into the process. A well-designed mix enabling building efficiency, good insulation and fresh air circulation will improve lives and save energy.

Decent housing brings multiple benefits. We can maintain this buoyant area of our economy while creating living and working spaces which are green, healthy and of a decent minimum size. Along with improved living conditions, urban regeneration can simultaneously contribute to our global environmental responsibilities as we raise building energy efficiency standards.

## **Transport – Legs and Wheels**

Town planning 101: More roads = more cars = more traffic jams = more emissions. This may be an oversimplification, but where do the opportunities lie for a just transition in transport? For Hong Kong, the opportunities for infrastructure development in transport have the potential for the creation

of a large number of jobs. If we are to become serious about electrification of the surface vehicle fleet, then we need a new electric vehicle charging infrastructure, with plug-in stations throughout the territory. This may require extension of three-phase electricity supply to new areas: so some more new jobs for those power company workers no longer pushing coal into furnaces in our power stations.

Shared car and electric bicycle systems require docking stations as well as re-charging stations. This offers more pioneer infrastructure work. Shared electric car systems have already arrived in Singapore and are planned for Shenzhen. Hong Kong cannot lag behind for long. We know that the shared asset economy is an important path to future sustainability as well as a growing part of the new economy. There are lots of jobs in IT, maintenance, logistics related to efficient and affordable assets-sharing business.

If cycling is to become a serious transport option, we need infrastructure development for bicycles along commuter routes, not just in Hong Kong's recreational areas. A cycle highway along the entire front of Hong Kong Island and around the Kowloon peninsula are obvious starting points. Folding bike-friendly facilities on trains and buses should also be a component.



Fuel price rise policy must not enable the wealthy to continue to fly private jets if ordinary people can no longer afford the bus fare to work

## Electronic Road Pricing

We can build on Hong Kong's strength in public transport by creating new pedestrianised areas and further restricting private vehicles from the areas where people work, shop and socialise. Electronic Road Pricing and pedestrianisation can work hand in hand to create pleasant and walkable business and retail districts.

We can plan sustainable and smart systems when it comes to goods deliveries. The anarchy of goods delivery in the crowded downtown areas of Hong Kong can be replaced with smart systems which organize delivery times, create pedestrian-priority areas with very low speed limits, and electrify not only large delivery vehicles but also the smaller vans and handcarts which Hong Kong often relies upon for the final 100 metres of delivery of goods.

## No More Rubbish



Hong Kong is a city that manufactures, grows and mines almost none of the products we consume. What we use up arrives on ships, planes, trucks and trains from beyond our borders. This may spare us from accepting an honest picture of our carbon footprint as consumptive human beings, but it adds extra special responsibilities and opportunities when it comes to the methods by which we dispose of our waste. We know what we buy in, so we can pay attention to what we throw out.

Our government recognises the problem and is moving surely, but perhaps too slowly, to reduce our waste and to recycle more and process waste better. But despite a lot of talk about a circular economy, Hong Kong has huge unrealised potential for reducing, reusing and recycling.

We understand the potential for recovering good things from organic waste including biogas, fuel from waste oil and fertiliser. Early moves we are making on this can become the universal norm for our restaurants, our hotels and our Jockey Club stables.

We can create new industries recycling, or sorting and shipping all forms of Hong Kong's waste. This has to be the future. No sustainability plan for Hong Kong can contemplate creating more vast, irredeemable landfills which combine rich organic waste, toxic metals from batteries, e-waste and plastics. Landfills will remain persistent monuments to our own profligate short-sightedness. How would we explain to future generations such a necropolis of waste as they walk through a city mindful that the sins of their ancestors lie beneath their feet? This is not the legacy that any sane society



Government support for recycling is not a subsidy. Externalising the cost of landfills and passing the problem on to future generations is the most shameful subsidy.

## Key Just Transition issues for the people of Hong Kong

Subject	Climate Issue	Social issue	Just transition
Energy	<ul style="list-style-type: none"> <li>• Transition to renewables</li> <li>• Rapid phase out of fossil fuels</li> <li>• End fossil fuel subsidies</li> </ul>	<ul style="list-style-type: none"> <li>• Jobs lost in fossil fuel value chain;</li> <li>• Renewable energy purchased from mainland</li> </ul>	<ul style="list-style-type: none"> <li>• Training in high-tech, high-skilled jobs in wind, solar, smart grids &amp; energy storage;</li> <li>• Social protection for effected workforce</li> <li>• Dividend from ending fossil fuel subsidies used for jobs in renewables and social protection</li> </ul>
Energy		<ul style="list-style-type: none"> <li>• Energy prices</li> </ul>	<ul style="list-style-type: none"> <li>• Energy price protection for essential services e.g. public transport, home heating and cooling</li> <li>• Progressive pricing of energy</li> </ul>
Energy use in buildings	<ul style="list-style-type: none"> <li>• Energy efficiency for materials, construction &amp; operation of buildings</li> </ul>	<ul style="list-style-type: none"> <li>• Housing costs in Hong Kong</li> </ul>	<ul style="list-style-type: none"> <li>• Construction &amp; retrofitting jobs;</li> <li>• Energy audit, inspection &amp; certification jobs</li> <li>• New skilled jobs in low-energy air conditioning, lighting &amp; lift systems;</li> <li>• Low-energy, affordable, healthy social housing projects</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Electrification;</li> <li>• Rapid phase out of diesel &amp; petrol vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of replacement of commercial diesel &amp; petrol vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Subsidies for commercial diesel &amp; petrol vehicle replacement</li> <li>• Jobs building &amp; operating vehicle recharging &amp; sharing infrastructure;</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Pedestrianisation &amp; road pricing in centres</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of goods delivery</li> </ul>	<ul style="list-style-type: none"> <li>• Exemptions, times &amp; zones for permitted commercial delivery;</li> <li>• Electric goods vans &amp; carts</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Reduced emissions from aviation &amp; shipping</li> <li>• Accurate carbon tax on imported goods</li> </ul>	<ul style="list-style-type: none"> <li>• Higher costs of imported goods</li> </ul>	<ul style="list-style-type: none"> <li>• More locally-produced products</li> <li>• Increased rail goods transport</li> <li>•</li> </ul>
Waste	<ul style="list-style-type: none"> <li>• Waste reduction;</li> <li>• Waste charging</li> <li>• Recycling;</li> </ul>	<ul style="list-style-type: none"> <li>• Demand on consumer behaviour;</li> <li>• Increase cost of living</li> </ul>	<ul style="list-style-type: none"> <li>• Collection, sorting &amp; recycling jobs;</li> <li>• Jobs in waste-to-energy; biogas &amp; biofuel plants</li> </ul>

	<ul style="list-style-type: none"> <li>• Waste to energy plants</li> <li>• Biogas &amp; biofuel plants</li> </ul>		<ul style="list-style-type: none"> <li>• Circular economy production, repair and refurbishing jobs</li> <li>• Improved corporate reporting on ESG issues</li> </ul>
Water	<ul style="list-style-type: none"> <li>• Conservation of water supply</li> <li>• Quality of water supply</li> <li>• Waste water treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of water &amp; water treatment</li> <li>• Continuity of supply</li> </ul>	<ul style="list-style-type: none"> <li>• Contingencies &amp; planning</li> <li>• Smart metering systems</li> <li>• Low waste infrastructure improvement</li> </ul>
Tourism	<ul style="list-style-type: none"> <li>• Reduce use of resources and emission from travel &amp; tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Jobs in tourism (hospitality, transport, retail)</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable tourism with jobs in this sector</li> <li>• Eco-tourism with more jobs in this area</li> </ul>
Conservation	<ul style="list-style-type: none"> <li>• Maintain biodiversity; Combat species loss</li> </ul>	<ul style="list-style-type: none"> <li>• Livelihoods; land rights</li> <li>• Job losses in fisheries</li> </ul>	<ul style="list-style-type: none"> <li>• Jobs in conservation &amp; protection</li> </ul>
Climate adaptation; Health & safety	<ul style="list-style-type: none"> <li>• Reduce air pollution; protection against weather extremes (floods; heat; wind)</li> </ul>	<ul style="list-style-type: none"> <li>• Access to health care;</li> <li>• Occupational health &amp; safety</li> </ul>	<ul style="list-style-type: none"> <li>• Disaster risk planning &amp; reduction;</li> <li>• Improved housing conditions</li> <li>• Green &amp; public spaces</li> <li>• Clear regulations on working in heat</li> </ul>
Planning	<ul style="list-style-type: none"> <li>• Informed debate on climate action;</li> </ul>	<ul style="list-style-type: none"> <li>• Participation &amp; stakeholder dialog;</li> </ul>	<ul style="list-style-type: none"> <li>• Representation and inclusion, especially of women, on planning &amp; climate action bodies</li> <li>• Incentivisation of green investment from finance sector</li> </ul>

# Benchmarking climate action and social justice – The Sustainable Development Goals

To measure whether Hong Kong's climate action plans are carried out in a way which simultaneously ensures a just transition and comprehensive social progress, we can assess climate plans against the full range of the Sustainable Development Goals (SDGs). These seventeen targets set a clear agenda to address the most pressing social and environmental challenges of our times. They were agreed to by the world's governments in 2015 – including the national government in Beijing – under the title Agenda 2030. If Agenda 2030 is achieved, we will be well down the road towards a just, safe and sustainable future for all.

We can check against each one to see what Hong Kong could do to ensure that we build a future that combines climate progress with social development in a way that brings a just transition.



## **No Poverty:** End poverty in all its forms everywhere

We know that current measures of poverty indicate a large number of people below the poverty line in Hong Kong. Better jobs and affordable housing are two key strategies reducing poverty in the city. As we have outlined above, the transition to a green future offers opportunities in both jobs and housing if it is planned and managed well. New jobs emerge as the infrastructure and the economy are greened and rejuvenated. Urban regeneration can create healthier and more energy efficient housing for all.

In Hong Kong we have a problem with 'working poverty' where people with full time jobs still cannot achieve a living wage. New jobs in the green economy are less likely to be of such a low standard that they receive less than a living wage.

This SDG also addresses the issue of the effective coverage of social protection available to all. In climate action we need to ensure protection of those transitioning from one job to another, and decent pensions for those ending their working life early. Social protection is another central plank of the just transition.

This SDG also covers protection from disasters, good disaster risk reduction strategies, and the building of resilience for poor people and those in vulnerable situations; all of which are key elements of climate adaptation.



## **Zero Hunger.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

While undernourishment is mercifully not a major issue in our society, malnutrition remains a problem. Malnutrition can consist of either poor nutrition or an excessive diet. We see warning signs of this in the rising number of overweight young people in the city. There are many areas of overlap between healthier diets and more environmental food consumption habits. Diets heavier in fruits and vegetables are better for health and better for the environment. Fruit and vegetables grown closer to Hong Kong are fresher and have a lower carbon footprint.

Hong Kong consumes above-average amounts of meat. We know that red meat consumption puts massive demand on agricultural land and water and emits high levels of greenhouse gasses. A Hong Kong University study found that if we include the carbon footprint of imported meat and dairy this

adds an average of 7.8 tCO<sub>2</sub>e to the carbon footprint of each person in Hong Kong, more than doubling our emissions. More modest consumption of meat, particularly red meat, is also better for health.

Our desire for ever larger amounts of meat gobbles up land (for grazing animals themselves, but also for growing animal feed rather than human food). Such land could far more efficiently be growing the food we can eat directly to increase global food supply, or could be forested to preserve wildlife and absorb more greenhouse gasses.

We know that soft-drink taxes have reduced consumption of sugar in the markets where they have been tried. There is now discussion of a meat tax related to carbon emissions. Is this fanciful? Tobacco tax was once condemned as a dreadful infringement on our freedom of choice, but acceptance of the health benefits and social consensus prevailed.



**Good Health and Wellbeing.** Ensure healthy lives and promote well-being for all at all ages

A just transition will ensure that health care is available to all, and stands ready to protect people from the health risks related to climate change.

This report has already explained the co-benefits of a low-carbon society in terms of cleaner air, healthier housing and better diets. Wellbeing includes protection from extreme heat and diseases related to hotter weather. Where prevention fails, good medical treatment is also a measure of success.

SDG three discusses reduced incidence of 'neglected tropical diseases' while reports on climate change and health warn of a hitherto unseen tropical diseases spreading to new areas. Efforts to address this risk among more vulnerable groups (rural workers, those in poor housing conditions) will certainly become a component of a just transition.

Some studies also point to higher rates of cardiovascular diseases related to heat levels and air pollution. A just transition should address air quality in the workplace (indoors or outdoors) and health measures for workers exposed to heat and fumes.

Good health includes addressing issues of mental illness, suicide threats and drug use. A just transition should be able to prevent negative psychological impact of dislocation in a changing economy and the mental stresses associated with longer periods of extreme heat.

Another issue covered by this SDG concerns deaths from traffic accidents. Any move towards a smarter and cleaner transport system should also aim to be a safer, pedestrian and cycle-friendly transport system. It is hoped that greener and smarter transport technology also contains innovations in safety systems.

Climate action to stabilise water supplies and quality also has health implications.



**Quality Education.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

The links between education and climate action are multiple. The SDGs advocate that education for all should emphasise information about environmental and social issues. There are many co-benefits to the greening of Hong Kong and better education. Once environmental concerns are embraced by society, we all learn about inter-dependency with others within and beyond our borders. We learn how to moderate short-term self-interest of a kind which imperils long-term wellbeing, and we learn that

there are many aspects related to the quality of life and the building of a better society that extend beyond personal economic gain or conspicuous consumption. All these are elements of quality education.

The ILO guidelines on a just transition propose that training and education, especially for young entrants to the workforce, including a broad understanding of issues related to climate change. The ILO also points to the need for education campaigns to foster a culture of eco-entrepreneurship. The UN proposes that “skills development and employment policies linked to broader development plans need to incorporate education for environmental awareness with coherent skills strategies to prepare workers, in particular young people, for the future sustainable world of work.”



### **Gender Equality.** Achieve gender equality and empower all women and girls

There exists a wealth of information on the relationship between gender equality and climate action. As with all issues regarding social benefits and vulnerabilities, women and men are not identically affected. The Paris Agreement says that when taking action to address climate change, governments should respect, promote and consider gender equality and the empowerment of women. There will be no just transition regarding employment, livelihoods and wellbeing if the widely-recognised issues of gender disparity are not addressed within both environmental and labour policies.

Ensuring an inclusive transition is essential: women, for example, will play a critical role in delivering the promise of this new growth era.

New Climate Economy (2018).

For Hong Kong, this means fair representation of women on climate action decision-making bodies. It also means dialogue and engagement with women’s groups and equal opportunities organizations as stakeholders in climate action in the city to ensure that gender perspectives are fully incorporated into plans, and that particular risks and opportunities for women are taken into account during planning and implementation.



### **Clean Water and Sanitation.** Ensure availability and sustainable management of water and sanitation for all

SDG six is inextricably linked to environmental and climate change issues. The science tells us that climate change will put great pressure of water supplies because of changing weather patterns and hotter weather. Any climate action plan must take account of essential water supplies with contingency plans. Hong Kong has some past experience of water rationing and we should learn from this. We should ensure drinking water for all and plan to ensure we do not have poorer people fighting over standpipes while the rich install illegal storage tanks in their houses.

Waste water treatment is another aspect of this SDG. As we come to appreciate the value of water more, jobs engaged in water efficiency, water treatment and recycling should grow, along with jobs creating a more water-secure and water-efficient infrastructure.

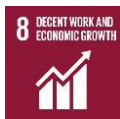
Sewage treatment systems must be climate proof to prevent health disasters during floods or periods of water shortage. The design of sewage systems, including pumping partially-treated sewage out to sea, should be re-examined in light of climate change impacts on sea temperature and tides.



**Affordable and Clean Energy.** Ensure access to affordable, reliable, sustainable and modern energy for all

We have discussed job transition in the fossil fuel and energy generation earlier in this report. Access to energy for all is not a significant issue in Hong Kong. There are places, however, where decentralized or off-grid energy supplies may make sense, at least as a backup.

The other side of the just transition in energy concerns ways to ensure that energy remains affordable for all. Socially as well as politically, energy democracy must consider both production and consumption. If we strip away wasteful and polluting fossil fuel subsidies, including an end to the externalised health and clean-up costs of the resulting emissions, we must make sure that some of the money saved is used to protect the more vulnerable from substantial increases in energy prices. A highly progressive form of energy pricing or taxation on energy consumption should ensure that everyone in society can meet their basic energy needs while those who choose to use much more energy than average pay a much higher price for their excess use.



**Decent Work and Economic Growth.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Decent work lies at the heart of the concept of a just transition. As we outlined above, this concept goes beyond wage levels alone to ensure quality jobs, employment planning, training and skills development as well as social protection.

Future 'growth' may not consist of the endless expansion of society's consumption and disposal of goods. While ensuring provision of essential goods and services to all, including those who presently struggle to achieve these basic needs, growth may incorporate aspects of the circular economy and more asset-sharing systems. Economic growth must of course continue in terms of the system's capacity to provide jobs and wages (or a universal minimum income) for all.

Increases in productivity afforded by adoption of new technologies and infrastructure can be designed in a way that enables shorter working hours combined with better distribution of available work rather than job losses for some and long hours for others.

Giving voice to workers as stakeholders in climate change action is an essential part of a just transition. Compliance with ILO standards of freedom of association and collective bargaining is a prerequisite for workers to have a realistic voice in broader issues such as climate change strategies.

This SDG makes clear that more efficient resource consumption is part of the formula for economic growth, including seeking ways to de-link growth from resource consumption and greenhouse gas

*Over the last decade, we have seen amazing technological and market progress driving the shift to a new climate economy. We are seeing real results in terms of new jobs, economic savings, competitiveness and market opportunities, and improved wellbeing for people worldwide. . . bold action could yield a direct economic gain of US\$26 trillion through to 2030 compared with business-as-usual.*

New Climate Economy (2018).

emissions. This SDG sees tourism as a growth area, but notes that sustainable tourism is the goal. If

Hong Kong is to expand the role of tourism in our economy, we must be aware of the environmental, as well as social, costs of intensive tourism.

Unlocking the inclusive growth story of the 21st century, a report from New Climate Economy, finds that taking ambitious climate action could “generate over 65 million new low carbon jobs in 2030, equivalent to today’s entire workforces of the UK and Egypt combined.”



**Industry, Innovation and infrastructure.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

The installation, retrofitting and regeneration of energy-efficient and climate-ready infrastructure is one of the key elements of climate action, and also holds massive potential for the creation of high-skilled, high-tech, sustainable jobs.

Climate action will require the refinement of existing technologies in many areas such as energy generation, efficient machinery, electrification of transport and the recovery of materials and energy from waste. Opportunities will also open up in high tech, IT and the knowledge economy.

Beyond this, the field is wide open for entirely new, green technologies which radically change the way we utilize energy, or which can reduce the greenhouse gasses in the atmosphere through removal. The greatest area for innovation this century will be (and must be) in green technologies.

A largely service-centred city like Hong Kong with strong finance institutions and good systems of knowledge transfer is well set to upgrade its research and development industries related to environmental technology. Government can catalyse this with imaginative funding programmes.

Local, and smaller-scale businesses are a component of this SDG. Promoted in the right way, these could be lower-carbon than larger, global businesses as well as promoting more local employment.

Affordable and equitable access to low carbon infrastructure is essential for a just transition to broaden rather than narrow benefits. In Hong Kong this particularly relates to transport systems.



**Reduced inequalities.** Reduce inequalities within and among countries.

A Just Transition is all about ensuring that sections of society don’t lose their livelihoods, their standard of living, or their standing in society during the move to a low carbon economy. The policy areas above regarding national, sector and enterprise development go some way to ensuring this, along with social protection and active labour market policies.

With an ageing population, Hong Kong will need to create new levels of sophistication and inclusion in social provision and protection for retired people. This includes pension protection for those in sectors affected by the transition to a low carbon economy or whose retirement is threatened in any way by stranded assets.

This SDG uses the proportion of people living below 50 per cent of the median income as an indicator. This metric is also Hong Kong’s unofficial poverty line and would be an indicator of how justly we are managing the transition to a climate-smart city. At present, Hong Kong does not measure up very well on poverty levels with a poverty rate close to 15%.

SDG 10 points out that migration and mobility are elements of equality. For Hong Kong, attention should be paid to climate impacts and climate action impacts on our migrant worker and ethnic

minority communities. Climate mitigation or adaptation plans should take account of groups which have limited rights and social facilities.

The labour share of GDP, including wages and social protection transfers, is a measure for this SDG. The movement of this indicator during the transition to a low-carbon economy could be a key performance indicator of Hong Kong's just transition.



### **Sustainable Cities and Communities:** Make cities and human settlements inclusive, safe, resilient and sustainable

A Hong Kong with a plan to achieve carbon neutrality by 2050 will be well on the way to achieving the goal of a safe, resilient and sustainable city. To achieve this in a just manner, the process will have to embrace the SDG calls for inclusivity.

One indicator of inclusivity within this SDG calls for “direct participation structure of civil society in urban planning and management that operate[s] regularly and democratically.” This relates directly to a just transition for climate change mitigation and especially adaptation. It is of obvious relevance to Hong Kong given recent suggestions of a lack of transparency on the selection or even composition of members of ‘consultative’ bodies and stakeholder groups related to housing and land policy.

SDG 11 calls for ‘access for all to adequate, safe and affordable housing.’ Adequate and safe housing certainly has to take account of readiness of the built environment for climate-related weather extremes. Housing statistics on average housing conditions figures here, especially related to indoor ventilation and temperature. Statistics on minimum space per individual in housing would also bear relevance.

Another element of this SDG seeks adequate, safe and affordable public transport systems. Access to and utilization levels of public transport is a valuable indicator of sustainable cities and comprehensive climate action.

In addition to housing and transport, this SDG envisions other components of an inclusive, safe, resilient and sustainable city that can all be linked to effective climate action:

- Waste management (discussed earlier in this report).
- Disaster risk reduction planning “including water-related disasters, with a focus on protecting the poor and people in vulnerable situations” as well as resilience plans.
- Mean levels of particulate matter in the atmosphere.
- Conservation and protection of cultural and natural heritage
- Safe, inclusive and accessible green and public spaces



### **Responsible Consumption and Production:** Ensure sustainable consumption and production patterns

As discussed under the concept of economic growth above, we can achieve a buoyant economy providing for all in a way which is less wasteful of resources. Smart use of products, a more circular economy and sophisticated asset-sharing systems can provide quality goods and services for all, lowering our individual carbon footprints while also creating jobs.

A key area for reducing waste, identified in this SDG, is food waste. Pollution and the production of hazardous wastes is also covered here.



Another aspect involves the proportion of companies publishing sustainability reports. A just transition would point to a time when all registered businesses, not just those listed on the stock exchange, produce details of their environmental and social performance.

This SDG suggests measurement of ‘material footprint per capita’ with clear co-benefits related to climate change mitigation.

Provision of information to all on ‘sustainable development and lifestyles in harmony with nature’ are seen as a target of this SDG.

Sustainable tourism strategies, including agreed monitoring and evaluation tools, are mentioned here. This clearly carries relevance to Hong Kong’s own climate mitigation and adaptation strategy.

This SDG also calls for an end to fossil fuel subsidies and market distortions related to fossil fuels “in a manner that protects the poor and the affected communities.”



**Climate Action:** Take urgent action to combat climate change and its impacts

Hong Kong’s climate change action plan should obviously be explicitly working towards achievement of this SDG. This SDG covers the transition to a low carbon economy, along with adaptation to the effects of climate change.

The SDG emphasises adaptation and resilience, the protection of lives, education on climate change as well as the provision of climate finance

Indicators include estimates of deaths attributable to disasters as well as the effectiveness of disaster risk reduction strategies. Such indicators have relevance to relative vulnerability of differing occupational and income groups.



**Life Below Water:** Conserve and sustainably use the oceans, seas and marine resources for sustainable development

A climate action plan would seek to protect both Hong Kong’s coastline as well as marine life and fish stocks. A just transition would ensure that those whose livelihoods depend on marine fisheries was taken into account in environmental and conservation measures.

Hong Kong already has a trawler ban in Hong Kong waters and restricted entry for new fishing operations. The city abides by an annual moratorium on sea fishing along the Chinese coast designed to protect fish stocks, which this SDG recommends. These measures are designed to both protect marine life and to ensure that those who draw their livelihoods from fishing don’t descend into poverty as fish stocks dwindle.

This SDG calls for investment in marine research and technology which should form part of the research agenda in Hong Kong’s climate action plans.

Management of marine resources should include ways to ensure the affordable, healthy and sustainable supplies of seafood in Hong Kong. This includes reduced marine pollution from plastic, marine acidification, pollution from excessively rich nutrients (fertilizer runoff into the sea).

Protection of small-scale fishers against large-scale factory fishing is also an element of marine management related to the conservation dimensions of climate change management.



**Life on Land:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

There is work to be done preserving and protecting the natural heritage and biodiversity of Hong Kong. Of value in itself, it is also of economic value given that Hong Kong people and visitors appreciate the recreational value of natural surroundings. Conservation of parks, forests, hillsides and coastal areas as well as urban green spaces are all areas with potential for quality job creation.

This SDG includes protection of biodiversity; work against invasive species; and action against trafficking in illegal plant and animal products.



**Peace, Justice and Strong Institutions:** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

No just transition will occur without effective institutions in which the public have sufficient trust to ensure impartial implementation of policies. Conversely, climate policies will not succeed unless the population believes they are designed and introduced in a fair manner by a clean government that does not bend to special interests. This SDG notes that one key to building trusted institutions is to “ensure responsive, representative decision-making at all levels.”

This SDG targets issues of the quality of public services, human rights and transparency in government. These are all issues highlighted in the Paris Climate Agreement.

For Hong Kong, financial institutions may play a major role in providing the funds to progress to a low-carbon economy. Greater capacity and understanding is required regarding the assessment and management of green finance. The potential for Hong Kong’s role in green finance extends beyond the Hong Kong’s borders. More evenly-distributed gains from a greening of Hong Kong’s finance sector would contribute to a just transition.



**Partnerships for the Goals:** Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development. We cannot see through a green transition in Hong Kong without involvement of business, the finance sector, community groups, international NGOs, local representatives and the SAR government. This collective and synergistic effort naturally requires a range of avenues for stakeholder engagement to ensure that groups with different perspectives join together to work out the most effective strategies for cooperation towards the common goal of climate action.

This seldom happens spontaneously. Governments, whether local or national, have an essential role to play by using their influence to bring different parties to the table, to set agendas, to reduce risks and in many other ways to foster partnerships for the long-term common good. Business asks government for stable, fair, transparent and predictable policies, even where these require business to change. Ordinary people also want policies that avoid shocks, unequal opportunities and uncertainty as they manage their private lives.

A just transition, and climate action more generally, should not be a minority interest shunted into a single government department. The ILO notes we should “integrate provisions for a just transition into the agendas of line ministries, rather than assigning them to only one ministry”

The SDGs see effective taxation as a precursor to domestic resource mobilization for sustainable development. Support for the “development, transfer, dissemination and diffusion of environmentally sound technologies” is another element of partnership, along with capacity building.

### **Planning a Just Transition Framework**

The UNFCCC suggests a Just Transition process should address the following issues:

1. Understanding the employment impact of mitigation policies; including involving the right ministries and departments
2. Early assessment of the impacts; assessing information availability
3. Consultation and social dialog; effective participation and use of the results
4. Training and skills development: needs assessment, ensuring adequate resources
5. Social protection and security; needs of affected workers; assessment of adequacy of protection.
6. Post assessment of the effects: gaging the effectiveness of the transition; capturing the lessons learned and modifying future plans

Finance, technology and capacity building all form major sections of the implementation plan for the achievement of the Paris Climate Agreement.

The final element of Agenda 2030 concerns data, monitoring and accountability. Climate action plans under the Paris Agreement also call for transparent and accountable monitoring, reporting and verification. Knowing what to measure and measuring what we know apply to both environmental and social action.

## **Conclusion**

We believe the great majority of politicians, officials and business leaders in Hong Kong would support the idea that the economic opportunities brought by the creation of a greener Hong Kong should be planned in ways that not only safeguard the environment for present and future generations but simultaneously eradicate poverty and promote social justice, and therefore contribute to building a more united and purposeful society.

Through all the 17 SDGs, their 169 targets and their indicators, we find guidance and alignment with effective climate action planning combining environmental action with social measures to enable a just transition. The national government in Beijing has signed on to both Agenda 2030 and the Paris Climate Agreement.

Managed well, the challenge of establishing adequate provision of goods and services in a rapidly decarbonising society will at the same time contribute to the key goal of a just transition: the maintenance and growth of decent work and quality jobs. We all accept that the green transition requires massive mobilisation of resources, investment in infrastructure and the re-design of our economic systems. There is much work to be done. Work creates jobs, and jobs lie at the heart of a just transition for all in Hong Kong.

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