Meeting our Climate Challenge: A United Nations Perspective
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Statement by
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Ladies and gentlemen,

There is no better place than the World Affairs Council to ask the question: how are the world affairs doing at the mega level? I am afraid they are not rosy.

Let us start with the fact that the global population is growing at a blistering pace. By 2050, the UN projects a population that exceeds 9 billion people, with another billion added by the year 2100. This will create great strain on the earth, the commodities we use, the ecosystems we inhabit and, of course, the climate.

Using today's carbon intensive technologies, we are already pushing the limits of what the natural environment can withstand – our planetary boundaries. As our population grows, we must make new choices to meet our energy, food and water needs.

We simply cannot rely on contaminating fossil fuels, agricultural practices that assume abundance where it has traditionally existed or a continual supply of water. Climate change amplifies and multiplies the stress we face in all these areas. There is no doubt that addressing climate change is the greatest challenge humanity has ever faced.

Meeting the climate challenge requires a complex framework that facilitates action at multiple levels of governance, while creating a stable platform for private investment. This is certainly true. However, today I offer a different perspective.

Today, I posit that meeting our climate challenge is ultimately a choice, because our choices today will inevitably produce the world we live in tomorrow. So, when I say that meeting our climate challenge is ultimately a choice, I mean that we are making a choice between two different tomorrows:

The first choice is a choice to keep moving down the unsustainable path that we are on. The danger with this choice is that it does not even seem like a choice, it seems like just doing what has always been done. It feels like "business as usual", but leads to a frightening world of circumstances unusual.

If we continue to delay greenhouse gas emission reduction strategies, we will experience an average temperature rise of 4 degrees Celsius, or more than 7 degrees Fahrenheit average, because some arid areas will experience temperature rise that is greater than that average.

In the Mediterranean, the Middle East, the tropics, and the Southwest of the US, this results in summers marked by extreme heat – up to 16 degrees Fahrenheit hotter than what we currently experience.

This level of heat produces heat waves, extreme weather, drought, forest fires and harvest loss. And, human-built and natural systems simply cannot adapt to this level of heat. Imagine Phoenix, Arizona as a ghost town because the power grid is assaulted by intense dust storms and strained to the breaking point by air conditioning. That is, if the drought doesn't make electricity generation from the Colorado River impossible first.

And, what does this warmer world – this choice – mean for San Francisco, the City by the Bay? Projections by the California Climate Change Center put sea level rise somewhere between two and a half feet and four and a half feet by the year 2100.

This rise, combined with increased storm surges due to extreme weather cycles, poses a flooding risk to more than a quarter million people, more than $60 billion in shoreline development and necessary infrastructure, such as the airport.

Silicon Valley, a major engine of San Francisco's economy – and frankly, the economy of the world – is already vulnerable, protected from tidal waters by levees. These levees will not be sufficient to keep the bay out if predicted sea level rise and storm surges occur.

The bottom line is that no place is immune, we are all vulnerable. In fact, recent studies show 80% of Americans are already affected by climate change. From intense heat of desert regions, to farmlands hit hard by drought, to cities that face costly adaptation challenges.

There is a high human and financial cost to the choice of inaction. It is not a choice we can afford. Dear friends, we have another choice.

In our capacities as decision makers we can choose to transform the world into a place that is not just habitable, but an exciting place to live. This choice relies on investment, innovation and enterprise. Fortunately, some of that is already underway.

Consider that the Unites States added 3.3 gigawatts of new solar power in 2012, a total that represents more capacity than the three previous years combined. The US also added 13 GW of wind power in 2012. This means that 49% of all new energy generation in 2012 was renewable!

In some other countries, renewable energy is cheaper to install than new fossil fuel generation, a development that is allowing several small islands states in the Pacific to be powered completely by renewables.

Those are incremental changes in the energy sector. Now think of a world transformed. Think of a world where any surface – the façade of buildings, the roofs of cars, the tops of canals and reservoirs – can be purposed to harness solar energy. Where the waste we generate is either fully recycled or used to make energy we need, with no leftover waste.

In transportation, electric cars are proving themselves in the market, and both Europe and the US are taking strides to roll out electric car charging stations. Mayor Bloomberg of NY recently announced that 20% of New York City public parking spots will have charging capability by 2019. And, airlines are changing their take off, flight and landing practices in order to minimize fuel costs and decrease emissions.

Those are incremental changes in the transportation sector. Now think of a world transformed. Think of a world moved by revolutionary transportation concepts. Driverless cars communicate with each other and the roadway itself to maximize efficiency of roadway capacity and fuel. Electric cars are charged through inductive power transfer by the road surface they are driving on. Biofuels made from algae provide a low-carbon alternative for shipping goods and flying planes.

As housing markets pick up, green buildings are today already increasingly in demand. New buildings that are made of green materials and built to high efficiency standards are more affordable to construct, hold their value longer and offer lower operating costs. Innovative retrofits to existing buildings include efficient and intelligent building concepts such as LED lighting and smart thermostats that learn to use patterns and adapt to save both money and energy.

Those are incremental changes in the built environment. Now think of a world transformed. Today more than 70% of emissions are generated by cities. Imagine a world in which our cities – where the population is set to grow the most – are not only LEED-certified buildings, but structures capable of learning and making decisions and capable of producing energy and food. Think of cities full of solar façades and wind turbines, algae façades that produce biofuels and buildings that support water collection and urban agriculture. Think of ourselves as "planting" cities instead of only building them.

While much of what we can achieve by making low-carbon choices seems like science fiction, I assure you it is rapidly becoming science fact.

Many of these advancements in energy, transportation and building are either already here or just around the corner. This exciting opportunity is upon us and we have the choice to make it real.

Certainly, the benefits are clear:

- We avoid a world where inaction results in catastrophic temperature rise.
- We increase national security, food security, water security and energy security.
- We create a sustainable, low-carbon growth model that adds value in terms of economic stability, public health and job creation.
- We safeguard the environment and natural resources for future generations.

In the face of this opportunity you may rightly ask, what is being done at the global level to address climate change?

At the international level, governments have agreed to a second commitment period for the Kyoto Protocol, preserving the only legally binding and international emissions reduction agreement. And, governments are working towards a new, universal agreement in 2015, which will go into effect from 2020, while looking at ways to raise ambition before then.

At the national level, GLOBE International recently reported that, as of 2012, 32 of 33 major economies have enacted or are working on significant climate and energy-related legislation, with much substantive progress on legislative activity on climate change happening in emerging economies. In fact, 56 developing countries have joined developed countries in emission reduction commitments. And, carbon markets are emerging across the globe, including a market here in California.

In the private sector, businesses are increasingly recognizing the risk and opportunity associated with climate change. Six of the largest institutional investors are currently taking climate change into account as they analyse risk. Investment into renewable energy topped 1 trillion dollars in 2011, and the industry added more than 1.5 million jobs to the world economy in 2012.

All good news, but not enough. We need accelerated impetus, which is where all of you come in.

We are not powerless even in the face of planetary boundaries. Our power lies in our human ingenuity, our ability to recognize potential problems and address those problems, and our choice.

We have the capital, we have the technologies. We have the tools to create global sustainable development – we simply need to choose to use these tools, to choose to transform the world in which we live, to transform the world of today into the tomorrow we want. This choice belongs to each of us.

At the individual level, we each can choose to do our part to move the world closer to the tipping point that makes low-carbon the new normal. We can do this through the decisions we make as consumers and investors, as policymakers and philanthropists, and as students and teachers. Each one of you has the power to choose.

Our time does not call for the weak of heart. Our time calls for strength of will, strength of mind, strength of choice. We can either live in a world of intense heat, or a world of cool technology. The choice is yours.

So my friends, tomorrow morning – when you as a policy maker, as a business executive, as a philanthropist, as an academic – make your first choice of the day, what will it be?

A choice for business as usual? Or a courageous, conscious choice for the future I know you want? The answer is in your hands.

Thank you.

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