Talanoa Dialogue: opening meeting of the political phase COP24, Katowice, Poland, Tuesday 11 December 2018

Statement by IPCC Chair Hoesung Lee

In these remarks I will concentrate on the third Talanoa Dialogue question: How do we get there?

The IPCC Special Report on Global Warming of 1.5°C, prepared in response to an invitation from parties at COP21 in 2015, when you adopted the Paris Agreement, sets out the risks of climate change and the desirability of limiting global warming to 1.5°C above pre-industrial levels rather than 2°C.

There are clear benefits in limiting warming to 1.5°C.

The report sets out a map for keeping warming to 1.5°C, in its chapters on mitigation and strengthening and implementing the global response.

We have assessed the scientific literature to find realistic options so that policymakers can take action towards a sustainable future. The report shows that not just action, but urgent action is needed. The latest scientific and socio-economic knowledge shows that limiting global warming to 1.5°C is not impossible, but would require unprecedented transitions in all aspects of society.

We are currently not on track to limit warming to 1.5°C.

We still have a small window of action to limit warming to 1.5°C, but each year matters.

The IPCC report shows that limiting global warming to 1.5°C above pre-industrial levels implies reducing emissions of carbon dioxide by about 45 percent by 2030 – 12 years from now – compared with 2010 levels.

Limiting global warming to 1.5°C also means that global emissions of carbon dioxide would need to reach "net zero" around 2050.

This means that any remaining emissions would need to be balanced by removing carbon dioxide from the air.

How could this be achieved?

Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings) and industrial systems.

These systems transitions are unprecedented in terms of scale.

They involve the use of a wide range of technologies, behavioural changes and a significant increase of investment in low-carbon options.

In energy systems they would mean a steep reduction in the use of coal, falling to close to zero percent of electricity, with renewables projected to supply 70-85 percent of electricity in 2050.

Even then we would need to remove carbon dioxide from the atmosphere. Methods for doing this include planting trees, bioenergy combined with carbon dioxide capture and storage, and changed land management.

To avoid warming of more than 1.5° C in the middle of the century followed by largescale carbon dioxide removal, CO₂ emissions will need to decline substantially before 2030.

We are moving in the right direction in many areas, but we need to do more and faster.

This requires greater collective ambition.

Our report shows that there are multiple pathways to limit warming to 1.5°C. Each pathway, each option, has potential synergies and trade-offs with other dimensions of sustainability.

Our report shows the possibility, by paying specific attention to those most vulnerable to climate change, and to response options, to maximize synergies and build ethical, fair and just transitions.

The sooner emissions fall, the more options we keep on the table. Doing more now reduces reliance on unproven and risky techniques to remove carbon dioxide from the atmosphere. Doing less now would commit people today to the known risks of overshooting 1.5°C, with severe risks of irreversible loss of ecosystems and shocks to the basic needs of the most fragile human societies.

In some regions, adaptation capacities may be overwhelmed even at 1.5°C of global warming.

Sustainable development supports, and often enables, the fundamental societal and systems transitions and transformations that help limit global warming to 1.5°C. Such changes facilitate the pursuit of climate-resilient pathways that achieve ambitious mitigation and adaptation, in conjunction with poverty eradication and efforts to reduce inequalities.

Let me close with some policy-relevant comments.

There is no single recipe for success: each country must do what is right for its circumstances.

But we all know the direction we are travelling in is away from reliance on fossil fuels. Building coal and other fossil fuel power stations now commits governments to using that infrastructure for decades, running counter to our collective ambition.

Or it risks wasting that investment by creating stranded assets.

Transformations of this kind affect people.

Linking climate policy with efforts to retrain workers affected by the move away from high-carbon sectors will address social dislocation.

And we need to take a fresh look at the economics of climate policy.

We are talking about accelerating transformation to divert investment from fossil fuel infrastructure to renewables and to a new inclusive, resilient economy.

Our report shows clearly that energy efficiency, <u>adopting</u> healthy diets and making sustainable consumption choices can help enable the stabilization of global warming at 1.5°C while improving wellbeing for all.

The scale of the challenge need not daunt us.

We talk of the need for unprecedented transformation.

The last 30 years have also seen unprecedented technological change.

The combination of technological change and wise climate policy will be powerful.

Three years ago you invited the IPCC to prepare a report for you about warming of 1.5°C.

Since then the IPCC has made a tremendous collective effort, assessing more than 6,000 scientific publications to bring you the best scientific knowledge on the subject.

With this report the scientific community tells you that limiting warming to 1.5°C is not impossible but the window for doing this is now.

Let me repeat:

- Every bit of warming matters
- Every year matters
- Every choice matters

The scientific community has delivered. Now it's up to governments to take the necessary action. Thank you.