



Enhancing NDCs through Socially Beneficial Mitigation Actions

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Submitted by

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Key Points

- Emissions reductions need not be costly for countries to adopt. Numerous opportunities exist in all countries to reduce emissions while providing net social benefits.
- The Talanoa Dialogue could help catalyze greater ambition by highlighting these socially beneficial mitigation opportunities, and encouraging countries to prioritize them as they consider how to enhance their existing contributions in 2020.

Introduction

After years of technological, financial and policy innovation, climate solutions are now often cheaper and more effective than dirty alternatives, and can provide additional public benefits. As a result, a significant and ever-growing portion of the actions necessary to contain climate pollution will benefit the countries that take them, even before climate impacts are considered. We may talk about these as climate actions, but they are really just smart policies and sound investments. The climate benefits are added in for free.

The availability of a wide array of “socially beneficial” mitigation actions that can enhance a country’s prosperity and overall welfare is well-established in the literature and increasingly well-understood by both policy-makers and profit-seekers. Mitigation actions that are in a country’s interest for non-climate reasons should be among the most attractive options in all countries. Too often, though, countries have not taken advantage of these opportunities due to financial and regulatory barriers, or political resistance from powerful constituencies. The Talanoa Dialogue could facilitate urgently needed emissions reductions by considering these socially beneficial opportunities as a discrete category of solutions worthy of explicit attention and prioritization, and encouraging and assisting countries to seize them.

Part I of this submission illustrates the nature of these opportunities and briefly reviews some of the readily available options. Part II then argues that explicitly addressing these actions in the Talanoa Dialogue could facilitate greater ambition by easing both the global collective action problem and the serious domestic political challenges that may impede countries from strengthening their nationally determined contributions (NDCs) in line with their “highest possible ambition.” Part III highlights specific opportunities to encourage ambition by explicitly addressing socially beneficial actions in the Talanoa Dialogue.

Part I: Socially beneficial mitigation opportunities

Countries are not doing nearly enough to address the climate crisis. As the most recent IPCC report makes clear, extremely ambitious actions are urgently needed to have any chance of meeting the Paris Agreement’s goal of holding global temperature rise to “well below 2°C.” Still more urgency is needed to meet its much safer 1.5°C target.¹ One reason that action has been inadequate is that it is often assumed that climate solutions are expensive relative to dirty alternatives, and that the benefits of climate action accrue globally, while the costs fall on those that implement them.

This view is incorrect. In fact, when costs are properly accounted for, low-carbon options often provide greater economic and social returns than high-emitting ones, even without considering the global climate benefits. Many of these actions even provide positive financial returns to companies and their customers before any broader societal impacts are considered. As a result, a substantial and increasing portion of the actions needed to close the “gigatonne gap” do not impose incremental costs, and countries that aggressively work to reduce their emissions will be richer, healthier, cleaner, more secure, and more economically vibrant than if they muddled through with business as usual.

Thirty-five developed and developing countries have already begun to reduce their emissions while growing their economies, disproving the facile assumption that carbon pollution is somehow a necessary ingredient for prosperity and progress.² Going forward, the scale of the opportunity to improve social well-being through climate-friendly actions is staggering. In its recent *New Climate Economy* report, the blue-ribbon Global Commission on the Economy and Climate conservatively estimated that bold climate action could yield a direct economic gain of US\$26 trillion through 2030, while creating 65 million new low-carbon jobs and avoiding over 700,000 premature deaths from air pollution per year.³

Numerous opportunities to capture these benefits are readily available. Consider fossil fuel subsidies. According to the IMF, eliminating these subsidies could reduce carbon emissions from fossil fuels by more than 20 percent, while increasing public revenues by US\$2.9 trillion (3.6 percent of global GDP) per year, and reducing deaths related to fossil-fuel emissions by over

¹ IPCC, 2018. *Global Warming of 1.5 °C: Summary for Policymakers*, available at http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

² Carbon Brief, 2016. *The 35 Countries Cutting the Link Between Economic Growth and Emissions*, available at <https://www.carbonbrief.org/the-35-countries-cutting-the-link-between-economic-growth-and-emissions>

³ Global Commission on the Economy and Climate, 2018. *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*, available at <https://newclimateeconomy.report/>

50 percent. Overall, eliminating these subsidies would produce a net economic gain of at least US\$1.8 trillion per year (2.2 percent of global GDP), which “could be much larger if the fiscal gain is used for growth-enhancing tax cuts on labor and capital or badly needed investments in education, health, and infrastructure.” As a result, the IMF concluded that it is “generally in countries’ own interest to move ahead unilaterally” to eliminate these subsidies, and that the biggest subsidizers and emerging and low-income countries stood to gain the most.⁴

Or consider the problem of energy waste. The IEA estimates that more efficient lighting, buildings, industrial systems, and consumer appliances will account for almost half of the CO₂ emissions reductions needed in 2040 to keep temperature rise below 2°C, more than any other source of reductions.⁵ Much of these reductions can be achieved at a profit, as the energy savings will exceed the initial cost, often over short pay-back periods and with very attractive rates of return.⁶ In 2010, a high-level UN panel estimated that this savings could total \$250-325 billion a year by 2030.⁷ And efficiency improvements can deliver additional local benefits such as reducing price volatility risk, facilitating the deployment of distributed renewable energy and expanding and improving energy services for the poor.⁸ The financial returns and ancillary benefits of end-use efficiency programs are so dramatic that the World Bank has found that its efficiency programs have been its single most successful energy sector investment, both in terms of cheaply eliminating CO₂ emissions and producing local economic benefits,⁹ and India’s Planning Commission has recommended that energy efficiency options “should be the ‘first resource’ considered for fulfilling demand.”¹⁰

Additional opportunities to increase social welfare while reducing emissions abound throughout all countries’ economies. Generating energy from new renewables is already cheaper than producing it from existing coal plants in many regions, even before the staggering public health costs of coal pollution are factored in.¹¹ Restoring degraded forests and planting new ones can capture enormous amounts of carbon while generating local benefits that exceed their costs by 20-30 times.¹² Building more compact, better planned cities could save US\$17 trillion by

⁴ IMF, 2015. *IMF Survey: Counting the Cost of Energy Subsidies*, available at <https://www.imf.org/en/News/Articles/2015/09/28/04/53/sonew070215a>

⁵ IEA, 2017. *World Energy Outlook 2017*.

⁶ UN Secretary General’s Advisory Group on Energy and Climate Change, 2010. *Energy for a Sustainable Future*, available at <http://www.un.org/chinese/millenniumgoals/pdf/AGECCsummaryreport%5B1%5D.pdf>; Lovins, A. 2018 *How big is the energy efficiency resource?* Environ. Res. Lett. 13 090401, available at <http://iopscience.iop.org/article/10.1088/1748-9326/aad965/pdf>

⁷ UN Secretary General’s Advisory Group on Energy and Climate Change, 2010. *Energy for a Sustainable Future*.

⁸ Casillas, C. and Kammen, D. M. (2010) “The energy-poverty-climate nexus,” *Science*, 330, 1182 – 1182. UN Secretary General’s Advisory Group on Energy and Climate Change, 2010. *Energy for a Sustainable Future*;

⁹ World Bank Independent Evaluation Group, 2010. *Climate Change and the World Bank Group: Phase II--The Challenge of Low-Carbon Development*, at 81, avail. at <https://openknowledge.worldbank.org/handle/10986/2548>

¹⁰ Planning Commission, 2011. *Interim Report of the Expert Group on Low-Carbon Strategies for Inclusive Growth*, at 31, available at <https://www.recep.org/interim-report-expert-group-low-carbon-strategies-inclusive-growth>

¹¹ IRENA, 2018. *Renewable Power Generation Costs in 2017*, available at: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Jan/IRENA_2017_Power_Costs_2018.pdf.

¹² Global Commission on the Economy and Climate, 2018. *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*; Hawken, P. ed., 2017. *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*.

2050, while improving access to jobs and housing.¹³ Reducing food waste, restoring farmlands and shifting to more sustainable agricultural practices will improve food security, create millions of jobs, and generate trillions of dollars in surplus benefits, while providing as much as a third of the necessary emissions reductions.¹⁴ The list goes on.

While it is clear that more and more emissions reductions can be achieved at net social benefit, three caveats are warranted. First, socially beneficial actions will not be sufficient to meet the well-below 2°C or 1.5°C objectives.¹⁵ Additional actions with net social costs will also be necessary. Still, those goals will surely be out of reach without capturing as many of these opportunities as possible, as quickly as possible. Second, the fact that these opportunities offer significant local benefits does not imply that they will happen automatically, or even that they will be easy to capture. Upfront costs, mismatched incentives, unpriced externalities and other regulatory and market barriers may impede progress on achieving these synergies, and entrenched interests will oppose reform. Smart policy interventions, innovative financing and political resolve will therefore be needed to overcome these barriers. Third, even where climate actions can deliver substantial net social benefits, the costs may fall disproportionately on groups that are least able to bear them. In some cases, the transition will involve difficult distributional impacts and even wrenching social dislocations. But actions that generate substantial social surpluses could better position countries to equitably manage these transitions. For example, savings on fossil fuel subsidies and health care costs from reduced pollution can be reinvested to curb the transition impacts on workers and communities. While all countries will need to implement smart policies and invest wisely to ensure a fair transition, poor countries can least afford not to capture and redeploy these transition dividends.

Part II: Promoting ambition by highlighting socially beneficial opportunities

The availability of so many high-impact, socially beneficial mitigation options upends the conventional wisdom that climate change is a classic collective action problem, in which too little is done because the costs are born by those who act while the benefits are shared by all. It is better seen as only a *partial* collective action problem, since some significant part of the solution will come from self-interested actions. This understanding opens promising new avenues for the Paris regime to generate much needed ambition. By focusing particular attention on accelerating the implementation of those climate solutions that do not entail incremental social costs, the regime could alleviate the global free rider problem and help countries avoid the profound domestic political challenges they face in trying to implement higher cost solutions.¹⁶

¹³ Global Commission on the Economy and Climate, 2018. *Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times*.

¹⁴ Griscom, B.W., 2017. Natural climate solutions. Proceedings of the National Academy of Sciences of the United States of America, available at <http://www.pnas.org/content/early/2017/10/11/1710465114>. Hawken, P. ed., 2017. *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*.

¹⁵ IPCC, 2018. *Global Warming of 1.5 °C: Summary for Policymakers*, available at http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

¹⁶ Keohane, R. 2015. *The Global Politics of Climate Change: The Challenge of Political Science*, available at <http://depts.washington.edu/envirpol/wp-content/uploads/2014/07/Keohane2015.pdf>

First, perhaps the most immediate challenge in the implementation of the Agreement is to encourage countries to enhance their initial NDCs to help get back on track towards meeting the Agreement's collective temperature targets. Obviously, countries are more likely to do this through actions that conserve public resources or improve the welfare of their citizens than through those that entail additional social costs. Socially beneficial actions are not inhibited by an incentive to free ride on the efforts of others. Early momentum can therefore be created by encouraging countries to update their NDCs to include additional mitigation actions that also advance their economic, public health and development priorities.

Second, explicit recognition of socially beneficial opportunities would expand countries' understanding of what is achievable. As a general rule, trade-offs with other public policy objectives will limit what countries perceive that they can contribute, while synergies will expand it. Spotlighting the synergies can therefore raise expectations about what actions all countries should take. Moreover, because countries have self-interested incentives to adopt these socially beneficial opportunities, highlighting them should promote constructive conversations among countries about how to craft policies and overcome barriers to implement them.

Finally, explicit attention to socially beneficial opportunities at the international level could help break through the destructive dynamics in domestic politics that have long frustrated global ambition. Opponents of climate action in developed countries claim that it will cost jobs and impede growth, opponents of climate action in developing countries claim it will impede sustainable development and hurt the poor, and then opponents in both point to inaction by the other as a further excuse not to act. Highlighting socially beneficial opportunities would help expose this spiral of cynicism, and show that the critical dividing line in climate politics today is not between developed and developing countries, but between those in all countries who want solve the problem and those who do not.

So far, however, there has been little effort to distinguish mitigation actions that provide net social benefits from those that entail social costs. The Talanoa Dialogue has largely treated them as one and the same, as if all mitigation actions entail significant social costs to the countries that adopt them. As a result, it has not specifically explored ways to accelerate the uptake of socially beneficial actions under the Agreement.

Part III. Talanoa Dialogue and NDC Enhancement

The most pressing challenge of the Paris Agreement is to persuade countries to commit to cutting their emissions deeply enough to return to a credible pathway towards meeting the Agreement's temperature goals. The Talanoa Dialogue could help close this gap by helping to create an expectation that countries will try to take those actions that are in their interests for non-climate reasons as part of their contribution to the global effort.

Many countries first came forward with their "intended" NDCs in 2015, before the Paris Agreement was finalized. Those pledges were necessarily based on then-current assessments of the costs and benefits of the available policy, technology and investment options. Since then, socially beneficial opportunities have expanded well beyond expectations in many high-impact sectors, as innovation has raced forward, costs have plummeted, and supporting policies and

financial instruments have been refined. As a result, all but the most farsighted countries' NDCs are likely be out of date, in that they no longer reflect the country's own understanding of its "highest ambition" in light its capabilities and national circumstances. Many countries could revise their NDCs to cut additional emissions and generate additional social benefits, even while holding expenditures constant at the levels envisioned in 2015.

Many participants in the Talanoa Dialogue have discussed mitigation options that can generate significant social benefits. But they have not identified these actions as qualitatively different from those with net costs, nor have they focused attention on socially beneficial actions as a discrete category of mitigation opportunities that should be prioritized.¹⁷ The Dialogue could do much more to catalyze greater ambition by highlighting the scale and range of socially beneficial mitigation opportunities, and encouraging countries to consider them as a leading source of new actions as they explore how to enhance their existing commitments in 2020.

Conclusion

Because the Paris Agreement gives countries broad discretion to set their own emission reduction goals, it relies heavily on national self-interest to generate ambition. But progress under the Paris Agreement has been hindered by the erroneous assumption that mitigation actions are inevitably costly to the countries that pursue them. This casts climate change as a collective action problem, and puts emissions reductions in conflict with other critical economic, development and public welfare priorities. It also empowers those who stand to benefit from delay and inaction. The reality, though, is quite different. Far from acting as a brake on growth, development, and social welfare, reducing emissions can accelerate them. And climate actions that provide these net social benefits should be particularly attractive to countries, since they are in countries' self-interest. The global climate benefits, in essence, are free.

Although these socially beneficial climate actions are plentiful in all countries and indispensable to the Paris Agreement's success, the Talanoa Dialogue has not identified them as a priority, or made any effort to encourage countries to capture them. The Talanoa Dialogue could catalyze much needed ambition by focusing attention on these socially beneficial opportunities and creating an expectation that countries will do what they can to capture them. After all, if the shortfall in ambition can't be closed through self-interested actions, it is hard to see where else that ambition will come from.

¹⁷ *Summary of the Talanoa Dialogue at the May Sessions*, https://img1.wsimg.com/blobby/go/9fc76f74-a749-4eec-9a06-5907e013dbc9/downloads/1cgc07t0q_77988.pdf; *Overview of Inputs to the Talanoa Dialogue*, https://img1.wsimg.com/blobby/go/9fc76f74-a749-4eec-9a06-5907e013dbc9/downloads/1chvcu8fl_151909.pdf