# Briefing 2: Trade-Climate Interlinkages Approaches Taken in Nationally Determined Contributions (NDCs)

Freedom-Kai Phillips\*



## **Executive Summary**

Reconciling the trade-climate interface will be an important aspect of the post-Brexit agenda. A critical aspect of this will be the submission of a new Nationally Determined Contribution (NDC) under the Paris Agreement and ensuring there is a congruence between trade policy and enhanced ambition.

This paper outlines key approaches adopted in NDCs to advance a robust trade-climate relationship. Through an alignment of trade priorities in bilateral or regional trade agreements and climate actions, pathways may be leveraged to more effectively advance achievement of NDCs It belongs to a series of briefings – developed by the Centre for International Sustainable Development Law (CISDL) at the University of Cambridge – exploring how the UK can capitalise on its net zero emissions goal by 2050 through a progressive trade-climate agenda.

#### Introduction

International trade plays an important role in advancing climate ambition and achievement of Nationally Determined Contributions (NDCs). Crucially, NDCs and trade policy are interrelated parts of the climate agenda and must be mutually supportive. This is recognized by the inclusion of various trade-related aspects (both implicit and explicit) in 109 of the 184 NDCs submitted. Inclusion of trade-related aspects in NDCs are observed through: (i) general references to trade, including linkages with direct and indirect land-use changes, as well as timber products, (ii) enabling resilience through investment, (iii) prioritization of green economy and green growth, (iv) taxation aspects such as carbon tax or board tax adjustments, and (v) interlinkages with carbon sinks and sequestration.

Progressive NDCs are explicitly including modalities to enable carbon-conscious trade and investment as a precursor to climate action. Experiences demonstrate the formulation of an incubating environment for ratcheting up ambition and transitioning critical domestic industries such as agriculture, energy, transport, water, and infrastructure is an important factor to align central pillars of the NDC with trade liberalization. With the UK currently encompassed under the EU NDC, it is important to note that appropriate trade and investment channels are maintained to continue climate ambition in any post-Brexit scenario.

<sup>\*</sup> Freedom-Kai Phillips, BSc honors (E. Michigan), MA (Seton Hall), LLB (Dalhousie), LLM (Ottawa), is a researcher at the University of Cambridge, Operations Director and a Legal Research Fellow with the Centre for International Sustainable Development Law (CISDL), a Fellow with the Centre for International Governance Innovation (CIGI), and a member of the IUCN World Commission on Environmental Law. Mr. Phillips has most recently served as Senior Research Associate with the International Law Research Program (ILRP) at the Centre for International Governance Innovation (CIGI), and previously as Interim Director of the Centre for Law Technology and Society at the University of Ottawa Faculty of Law, and Legal Researcher for the Ramsar Convention Secretariat.

#### General References to Trade

Trade is a central consideration to foster climate action as a key contributor to economic growth and development as well as providing important pathways to incentivize climate-conscious conduct. In some jurisdictions, trade is seen as a catalyst to NDC action, such as Kenya which identifies the importance of creating an enabling environment to foster private sector investment,<sup>1</sup> and Egypt which looks to develop logistics centres for the storage and trade of gran to support food security in light of changing climatic conditions,<sup>2</sup> while others such as the Gambia note the need to increase trade flows and technical cooperation as underpinning adaptation efforts.<sup>3</sup> Others express the importance of sustainability practices as linked to NDC action. Morocco notes the goal to sustainably manage 95% of traded marine species,<sup>4</sup> and Nepal prioritizes a forest carbon trading and payment scheme.<sup>5</sup> Sustainable forest management and trade in forest products under the EU's FLEGT program were also identified by Lao and Guyana,<sup>6</sup> as well as Cambodia who also recognized the importance of minimizing negative externalities grounded in land use, land-use change, and forestry.<sup>7</sup>

## **Enabling Resilience Through Investment**

Extending beyond the green economy, some jurisdictions identify interlinkages with sustainable development policy with climate change as a destabilizing factor,<sup>8</sup> and resilience as playing an important role in the reduction of climate risk.<sup>9</sup> Fostering resilience by mobilizing investment in key domestic sectors and to support green transition activities is an important step in aligning trade priorities with the domestic NDC. Multiple jurisdictions have identified the need to foster investment in green technologies in key sectors such as agriculture, energy, water resources, waste, building, and transport infrastructure.<sup>10</sup> Through the creation of an enabling environment to formulate parallels across climate priorities and investment conduits, climate risks and impacts can be proactively mitigated. Investment priorities and domestic climate actions should be advanced through parameters in trade agreements that are mutually supportive of collective goals.

## Fostering Green Growth

A broad range of NDCs prioritize low carbon developmental pathways as a strategic imperative. Recognizing the need to transition their economy, Ethiopia stresses that adaptation to climate change is to be mainstreamed

<sup>&</sup>lt;sup>1</sup> Kenya, "Kenya's Intended Nationally Determined Contribution (INDC)" (23 July 2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya\_NDC\_20150723.pdf>.

<sup>&</sup>lt;sup>2</sup> Egypt, "Egypt, Intended Nationally Determined Contribution" (2015) online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Egypt%20First/Egyptian%20INDC.pdf>

<sup>&</sup>lt;sup>3</sup> Gambia, "Intended Nationally Determined Contributions (INDCs)" (2015), online:

 $<sup>&</sup>lt;\!www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Gambia\%20First/The\%20INDC\%20OF\%20THE\%20GAMBIA.pdf>.$ 

<sup>&</sup>lt;sup>4</sup> Morocco, "Morocco, Nationally Determined Contribution under the UNFCCC" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Morocco%20First/Morocco%20First%20NDC-English.pdf>.

<sup>&</sup>lt;sup>5</sup> Nepal, "Nepal, Nationally Determined Contributions" (October 2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nepal%20First/Nepal%20First%20NDC.pdf>.

<sup>&</sup>lt;sup>6</sup> Lao, "Intended Nationally Determined Contributions (INDCs)" (September 2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Lao%20People%27s%20Democratic%20Republic%20First/Lao%20PDR%20First%20NDC.pdf>; Guyana, "Revised Intended Nationally Determined Contribution" (2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Guyana%20First/Guyana%27s%20revised%20NDC%20-%20Final.pdf>

<sup>&</sup>lt;sup>7</sup> Cambodia, "Cambodia's Intended Nationally Determined Contribution" (2017) online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Cambodia%20First/Cambodia%27s%20INDC%20to%20the%20UNFCCC.pdf>.

<sup>&</sup>lt;sup>8</sup> Barbados, "Intended Nationally Determined Contribution" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Barbados%20First/Barbados%20INDC%20FINAL%20September%20%2028,%202015.pdf>.

<sup>&</sup>lt;sup>9</sup> Mozambique, "Intended Nationally Determined Contribution (INDC) of Mozambique to the UNFCCC" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Mozambique%20First/MOZ\_INDC\_Final\_Version.pdf>; Tajikistan, "Intended Nationally Determined Contribution (INDC) to the UNFCCC of Tajikistan" (2017), online:

<sup>&</sup>lt; www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Tajikistan%20First/INDC-TJK%20final%20ENG.pdf >.

<sup>&</sup>lt;sup>10</sup> See: Gambia (agriculture, energy, water resources, waste management), Tajikistan (agriculture, irrigation, water systems, energy, transport, housing), United Arab Emirates (building), Malaysia (technology), Korea (building), Bhutan (technology, building, energy), Singapore (building, technology), Kazakhstan (energy), India (transport), Sri Lanka (building, livestock), China (building, energy, transport, agriculture), Marshall Islands (energy), Belize (technology).

into all developmental activities, to reduce vulnerability and foster economic growth grounded in their Green Economy Strategy.<sup>11</sup> Formulation of a policy instrument to advance the green economy can be found in NDCs of several developing and emerging economy jurisdictions.<sup>12</sup> Others note their NDC to be achieved in line with principles of the green economy which are compatible with social and economic development goals,<sup>13</sup> as a catalyst to an "inclusive and just transition,"<sup>14</sup> to respond to challenges of sustainability, poverty, and inclusive growth through the creation of decent work, and protection of natural resources,<sup>15</sup> and as a component of a low emission economic development pathway.<sup>16</sup>

Another innovative approach is the use of bilateral agreements in advancing achievement of NDCs which ultimately is underdeveloped and the limited experience showing potential for further exploration. Cabo Verde, through a 2015 Joint Declaration with the EU, Luxembourg, Spain, Portugal, and Austria, created a bilateral policy dialogue and framework for technical assistance to further domestic capacity for energy efficiency and energy sourcing.<sup>17</sup> Guinea, in an effort to develop more robust data on meteorological patterns, and natural resource governance (marine and terrestrial ecosystems) to monitor progress on NDC efforts, aim to enhance access through bilateral agreements with some regional-scale organizations.<sup>18</sup> Other jurisdictions look to bilateral arrangements with donor bodies, other Parties, UN agencies, or other stakeholders, as a means to build domestic capacity and mobilize finances to support domestic climate efforts.<sup>19</sup>

#### **Carbon Taxation and Financial Instruments**

Preferential taxation regimes or tax reform to enhance investment flows relating to green technologies have been used by some jurisdictions to buttress broader efforts towards NDCs achievement. India has prioritized the use of climate-focused fiscal instruments including cutting fossil fuel subsidies, increasing applicable taxes, and creating specialized programs to advance climate ambition. In particular, the carbon tax for use of coal was increased by 300%, subsidies on fossil fuels were reduced by 26%, a tax-free bond for renewable energy projects was introduced, and incentives for forest conservation were increased by 7.5%.<sup>20</sup> China has also noted the importance of developing preferential taxation policies to promote renewable energy promotion, enhance grid access, and advance procurement of renewable energy technologies, as well as introducing a credit mechanism to allow for financial institutions to issue asset-specialized products for green assets.<sup>21</sup> The Solomon Islands, drawing on lessons learned from other small island developing states have applied innovative financing

<sup>11</sup> Ethiopia, "Intended Nationally Determined Contribution (INDC) of the Federal Democratic Republic of Ethiopia" (2017), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ethiopia%20First/INDC-Ethiopia-100615.pdf>.

<sup>&</sup>lt;sup>12</sup> See: Burundi, Djibouti, Myanmar, Rwanda, Vietnam, Jordan, Morocco, Colombia, Fiji, United Arab Emirates, Malaysia, Mongolia, Korea, Bhutan, Singapore, Costa Rica, Cambodia, China, Eswatini, Nepal, Lesotho, and Kazakhstan.

<sup>13</sup> Armenia, "Intended Nationally Determined Contribution of the Republic of Armenia" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Armenia%20First/INDC-Armenia.pdf>; Burkina Faso, "Intended Nationally Determined Contribution of Burkina Faso" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Burkina%20Faso%20First/INDC%20Burkina\_ENG.%20version\_finale.pdf>.

<sup>&</sup>lt;sup>14</sup> South Africa, "South Africa's Intended Nationally Determined Contribution (INDC)" (2015), online:

 $<sup>&</sup>lt;\!www4.unfccc.int/sites/ndcstaging/PublishedDocuments/South\%20Africa\%20First/South\%20Africa.pdf>.$ 

<sup>&</sup>lt;sup>15</sup> Togo, "Intended Nationally Determined Contribution within the UNFCCC" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Togo%20First/INDC%20Togo\_english%20version.pdf>; Uganda, "Uganda, Intended Nationally Determined Contribution" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Uganda%20First/INDC%20Uganda%20final%20%2014%20October%20%202015.pdf>.

<sup>&</sup>lt;sup>16</sup> Guyana NDC, (n 6); Sierra Leone, "Sierra Leone, "Intended Nationally Determined Contribution" (2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Sierra%20Leone%20First/SIERRA%20LEONE%20INDC.pdf>; Zimbabwe,

<sup>&</sup>quot;Zimbabwe's Intended Nationally Determined Contribution submitted to UNFCCC" (2017), online:

 $<sup>&</sup>lt;\!www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Zimbabwe\%20First/Zimbabwe\%20First\%20NDC.pdf >.$ 

<sup>&</sup>lt;sup>17</sup> Cabo Verde, "Intended Nationally Determined Contribution of Cabo Verde" (2017), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Cabo%20Verde%20First/Cabo\_Verde\_INDC\_.pdf>

<sup>&</sup>lt;sup>18</sup> Guinea, "Intended Nationally Determined Contribution under the UNFCCC" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Guinea%20First/INDC\_Guinea\_english\_version%20UNFCCc.pdf>.

<sup>19</sup> See: Algeria, Guyana, Grenada, and Antigua & Barbuda.

<sup>&</sup>lt;sup>20</sup> India, "India's Intended Nationally Determined Contribution (INDC)" (2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf>.

<sup>&</sup>lt;sup>21</sup> China, "China's Intended Nationally Determined Contribution (INDC)" (2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/China%20First/China%27s%20First%20NDC%20Submission.pdf>.

approaches including setting aside the value-added tax from fuel purchases, charging a carbon levy, and charging fees for climate-related research undertaken within the country to fund the establishment of a national climate change fund to support adaptation and mitigation efforts.<sup>22</sup> Other jurisdictions have prioritized review and reform of the tax framework to promote green technology, promote energy savings, and increase conservation activities.<sup>23</sup>

## Interlinkages with Carbon Sinks and Sequestration

How the NDC positions the economy for wider alterations is an important indicator underpinning the achievement of climate-related targets. Costa Rica took significant steps to decarbonize its economy setting the aspirational target of becoming carbon neutral by 2021 through the application of a multilevel planning process, conservation-focused developmental policy, and deep decarbonization of energy supply.<sup>24</sup> Norway similarly set an ambitious target (40% reduction of emissions by 2030) coupled with an emphasis on low emission technology, carbon capture and storage, renewable energy deployment, and utilization of environmentally friendly shipping.<sup>25</sup> New Zealand while also setting an ambitious target (30% reduction of emissions by 2030) emphasizes the role international market mechanisms will play yet underlining the need for emission units produced or purchased to provide for environmental integrity, protect against double-counting, and support transparency in accounting and good governance.<sup>26</sup> Similarly, Switzerland in recognizing the role of market mechanisms stressed the need for commonality of the rules applied, utilization of credits based only on high environmental standards, application of sound methodological criteria in line with domestic legislation, and again avoidance of double counting.<sup>27</sup>

Canada placed a price on carbon of \$10 CAD per tonne in 2018, which increases steadily up to \$50 CAD per tonne by 2022. Complementary mitigation actions are also outlined including modernization of energy systems, grids, and transmission lines, a transition to low-carbon fuel and electric transportation, and development of net-zero building codes.<sup>28</sup> Chile as well placed a \$5 USD tax on carbon, with other jurisdictions like South Africa similarly exploring the use of carbon tax and company-level carbon budgets to advance climate ambition.<sup>29</sup>

# Progressive Elements in NDCs

Intersections of the trade and climate agenda can be traced across a broad range of NDCs. Establishing clear priorities for trade in green technologies, creating an enabling environment for carbon-conscious investment, developing policy instruments that prioritize green growth, and installing tax regimes that are responsive to the goals of advancing the climate agenda are found in progressive NDCs. In addition to laying the groundwork for use of market mechanisms while reinforcing the need for high environmental integrity and a prohibition on double-counting, countries are placing a price on carbon – through a levy, tax, cap-and-trade system, or carbon

<sup>&</sup>lt;sup>22</sup> Solomon Islands, "Intended Nationally Determined Contribution (INDC)" (2016), online:

<sup>&</sup>lt; www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Solomon%20Islands%20First/SOLOMON%20ISLANDS%20INDC.pdf >.

<sup>&</sup>lt;sup>23</sup> See: Namibia and Mongolia.

<sup>&</sup>lt;sup>24</sup> Costa Rica, Intended Nationally Determined Contribution under the UNFCCC" (2015), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Costa%20Rica%20First/INDC%20Costa%20Rica%20Version%202%200%20final%20ENG.pdf>.

<sup>&</sup>lt;sup>25</sup> Norway, "Intended Nationally Determined Contribution under the UNFCCC" (2016), online:

 $<sup>&</sup>lt;\!www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/NorwayINDC.pdf > .$ 

<sup>&</sup>lt;sup>26</sup> New Zealand, "Submission under the Paris Agreement: New Zealand's Nationally Determined Contribution" (2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/New%20Zealand%20First/New%20Zealand%20First%20NDC.pdf>.

<sup>&</sup>lt;sup>27</sup> Switzerland, Switzerland's Intended Nationally Determined Contribution and Clarifying Information" (2016), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Switzerland%20First/15%2002%2027\_INDC%20Contribution%20of%20Switzerland.pdf</p>

<sup>&</sup>lt;sup>28</sup> Canada, "Canada's Nationally Determined Contribution to the UNFCCC (Revised)" (2017), online:

<sup>&</sup>lt;www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Canada%20First/Canada%20First%20NDC-Revised%20submission%202017-05-11.pdf>.

<sup>&</sup>lt;sup>29</sup> South Africa NDC, (n 14); Chile, "Intended Nationally Determined Contribution of Chile Towards the Agreement of Paris 2015" (2016), online: <www.4.unfccc.int/sites/ndcstaging/PublishedDocuments/Chile%20First/INDC%20Chile%20english%20version.pdf>.

budget – to advance climate ambition. Complementary carbon-conscious developmental planning, the setting of ambitious domestic targets, and ecosystem friendly and inclusive planning processes have also been identified. Utilization of bilateral agreements for capacity building, mobilization of climate finance, sharing of technology, and access to data are under-explored and suggest additional promising applications. These approaches demonstrate a long-term commitment to climate action, provide legal certainty, and initiate an ongoing transformation towards the green economy.

Options for future NDC developments in the UK should focus on establishing clear climate targets, preparing the economy for protracted domestic change, creating a framework to incentivize climate-conscious development while removing perverse incentives, and driving innovation, investment, and action in green technologies informed by a climate-centric development policy. Importantly, a new NDC needs to align with the previous EU climate targets if not ratchet up ambition. Trade plays a central role in achieving ambition, with the NDC and trade provisions developed synergistically. The development of a nurturing domestic environment is required to provide a basis for a progressive trade agenda to take root.