**Barometer of climate ambition**

BY ALI TAUQEER SHEIK H 2021-10-28

PAKISTAN has just submitted its updated Nationally Determined Contributions to the UN`s climate change secretariat, making some clear and ambitious commitments. Pakistan`s NDC is perhaps one of the most action-oriented NDCs offering specific actions in some sectors while giving direction of the journey in several others. It has offered to reduce emissions with four high priority actions: First, by 2030, 60 per cent of all energy produced in the country will be generated from renewable energy (R E) resources. Second, by 2030, 30pc of all new vehicles sold in Pakistan in various categories will be electric vehicles (EVs). Third, Pakistan will shelve plans for two new coal-fired power plants in favour of hydroelectric power and no new imported coal power plants will be installed, and fourth, Pakistan will invest in nature-based solutions (NbS) through the largest-ever afforestation programme in the country`s history, the Ten Billion Tree Tsunami Programme. The TBTTP is estimated to annually cost $800 million, and this cost will be met nationally, as unconditional contribution.  
  
These four commitments will result in an esti.  
  
mated saving of around 22 MtCO2e (metric tons of carbon dioxide equivalent) on account of stabilising the energy mix 40-60 in favour of R E, 24 MtCO2e on account of the introduction of EVs, and 1.7MtCO2e on account of two shelved coal power plants. As far as the tree plantation campaign goes, Pakistan`s total emissions as per 2018 are 489.87 MtCO2e and TBTTP alone will sequester around 500MtCO2e by 2040, if implemented fully. These are important targets for a country that is hardly known for its continuity of policies and that is gearing up for national elections.  
  
Additionally, Pakistan seeks a saving of approximately 70MtCO2e by 2030 in industrial production and production use, known as IPPU, as well as in agriculture and food production but without committing to specified targets of greenhouse gas reduction in these or other sectoral policies and action plans. This is primarily because Pakistan`s development planning has still not become climate-smart, aspiring climate resilience through climate adaption. The National Adaptation Plan, or NAP, and its provincial implementation plans have not been developed.  
  
Pakistan has declined to commit to net-zero emis-sions targets by arguing that the energy transition alone would require $101 billion by 2030 and an additional $65bn by 2040 on account of completing the in-progress RE projects, additional hydropower, transmission and phasing out coal and replacing it with hydropower. To date, 59 countries, representing 54pc of global GHG emissions, have communicated net-zero emissions targets including the US and China, the world`s two largest emitters. Though the UK presidency of COP26 has made achieving net-zero emission targets a top priority for COP26 and encouraged commitments for net-zero emissions, even such ambitious announcements often defer real actions to a distant future date.  
  
If followed with high-level national commitment, the just released NDC by Pakistan may be an exception to this global trend but this will require planning, resource commitment, and more importantly non-partisan political support. Going beyond the headlines, it is essential that Pakistan undertake serious planning, climate governance reforms, and actions to meet four high-level commitments. Let`s review them one by one: RE: Will the government redefine RE now, and will it entail an approval from the Council of Common Interests to hammer out provincial interests? It is unclear if the Indicative Generation Capacity Expansion Plan 2021-30 has been approved fully or partially. The Alternative Renewable Energy Policy, approved by this government in 2019, however, still does not include hydropower in its definition of RE. Will the policy vehemently championed by the Alternative Energy Development Board be revised or abandoned altogether to give policy support to NDC commitments? EVs: The plans for developing infrastructure for EV recharging are still unclear and unannounced.  
  
Would they be based on solar and other renewables, or would they fuel the new car industry from fossil fuels? Promoting hybrid vehicles will only hinder the growth of the EV industry. The full potential of EV in emissions reduction can only be realised if Pakistan develops plans to replace the existing fleet by a certain year, promotes mass transit systems and incentivises the private sector and consumer investments.  
  
Coal: Coal consumption has tripled, and imports have also increased up to five-fold over the last five years, primarily for industrial purposes and led bythe cement industry that accounts for more than 65pc of industrial coal consumption. Coal import and consumption have both been on the increase.  
  
Abandoning two planned plants may help reduce future emissions, but the uninhibited growth in coal use will clearly offset potential gains, particularly since the Sindh government has now announced the start of phase three of Thar coal. Such contradictory polices will only weaken Pakistan`s international credibility.  
  
Afforestation: The NbS are central to Pakistan`s adaptation policy, and will certainly benefit from third-party validation of investments and results, particularly from the agreed upon and publicly available methodologies and baseline datasets to ensure that the quality of Pakistan`s data is not doubted. It is yet to be established if tree plantation alone can help restore degraded and overexploited ecosystems.  
  
While Pakistan`s NDC in several ways marks the seriousness of its climate vulnerability and seriousness, going forward Pakistan will need to plan its implementation at three levels: Policies: Cross-referencing climate change in national and provincial sectoral policies and action plans willneed fundamentalimprovements. Several policies will need to be refreshed or revised, or developed where they do not exist, in order to fully align them with Pakistan`s climate change needs and contributions.  
  
Budgetary processes: Preparatory and approval systems dealing with the life cycle of projects and schemes need to be climate-smart in order to fully embed adaptation and mitigation indicators. With backstopping and technical support from the climate change ministry, the Planning Commission can lead the process together with its provincial counterparts.  
  
Scientific/technical capacities: While Pakistan has established a robust National GHG Inventory Management System, capacity needs to be also developed for agricultural, health and economic costing purposes at the national and provincial levels in order to ensure that NDC implementation is decentralised and driven by the provinces. The writer is an expert on climate change and development.