A LOOK INTO
CARBON OFFSETS – IS AFRICA READY?
As countries commit to reach net zero by 2050, carbon offsets will play a huge role in emissions reductions. How?

When the Australian Prime Minister Scott Morrison made an implied commitment in a speech in February at the National Press Club that ‘net zero by 2050 was likely to become government policy’, the Australian carbon offset price spiked three days later and closed 3 per cent higher, at a 12-month high of $17.15 a tonne, according to carbon market analyst RepuTex. By September, the spot price had increased to $26 a tonne. Clearly, the words of the Minister triggered an investment splurge in carbon credits (Carbon credits are generated by projects that reduce, remove, or capture emissions from the atmosphere, like tree planting or replacing fossil-fuel generators with renewable energy).

Imagine trading in the absence of something you do not want...welcome to the world of carbon offsets. While general offsets trade in tangible commodities, carbon offsets involve paying someone else to reduce your emissions to enable you remain carbon-neutral and maintain an acceptable carbon footprint. Broadly, it refers to a reduction in greenhouse gas emissions (GHG) or an increase in carbon storage (e.g., tree planting), used to compensate for emissions that occur elsewhere.

How does it work? Company A pays Company B a certain fee per ton of ‘avoided emissions’ which allows Company B (the offset provider) to channel the money paid by Company A into an activity or technology that keeps greenhouse gases out of the atmosphere. But one major concern is whether Company A as the offset buyer is getting the value of what he paid for, how can the value be ascertained and determined considering that the commodity is one that is absent in the real sense?

Offsets are either regulated or voluntary. Regulated offsets are operated within the compliance framework for cutting emissions under the auspice of the
Clean Development Mechanism (CDM), which is an offshoot of the Kyoto Protocol, whereby signatories agreed to cap greenhouse gas emissions generated by participating countries. Within the CDM, offsets (otherwise known as ‘certified emission reductions’ or CERs) count towards compliance with the legally binding emission reduction targets within the Kyoto protocol. Companies bound by the Kyoto Protocol can purchase offsets from projects in developing countries, considering the low carbon footprint across the region. Offset projects are varied in nature, ranging from landfills that capture methane to renewable energy installations such as wind farms.

However, four conditions have been posited for such projects to be considered viable:

(i) They must be ‘additional’, in the sense that they must come from activities that would not happen in the absence of an offset incentive, i.e. are such projects already required by regulation and would thus proceed even without offset funding or will such offset purchased contribute nothing to further emissions reductions in light of the fact that no additionality was implemented based on the intention to sell offsets (essentially, has the technology been in place well in advance of any likely intention to sell offsets?).

(ii) They must be ‘quantifiable’, in the sense that they must measurably reduce emissions.

(iii) They must be ‘permanent’, in the sense that the GHG kept out of the atmosphere would not be released later.

(iv) They must be ‘real’, in the sense that they can be verified by third-party inspectors.

On the other end of the spectrum is what is termed as ‘voluntary offsets’ which are nonregulated ‘over-the-counter’ markets accessible by any person,
business or group seeking to minimize their carbon footprint. Voluntary offsets
do not count towards compliance with mandated emissions reductions, like
those required by the Kyoto Protocol.

Offsets typically support projects that reduce the emission of greenhouse
gases in the short- or long-term. A common project type is renewable energy,
such as wind farms, biomass energy, biogas digesters, or hydroelectric dams.
Others include energy efficiency projects like efficient cookstoves, the
destruction of industrial pollutants or agricultural by-products, destruction of
landfill methane, and forestry projects. Some of the most popular carbon offset
projects (from a corporate perspective) are energy efficiency and wind turbine
projects.

According to Terrapass, Emission reduction projects reduce the amount of
greenhouse gases in the atmosphere in one of three ways:

1. By capturing and destroying a greenhouse gas that would otherwise be
   emitted into the atmosphere. An example of this is a methane gas
   capture project at a landfill.
2. By producing energy using a clean, renewable resource that eliminates
   the need to produce that same energy from fossil fuels, the burning of
   which releases greenhouse gas into the atmosphere. An example of this
   is wind power.
3. By capturing and storing (or “sequestering”) greenhouse gases to
   prevent their release into the atmosphere. An example of this is a project
   that promotes the healthy growth and maintenance of forests.

Some projects include more than one of these activities at the same time. For
example, gas capture projects at landfills not only prevent the release of
methane gas into the atmosphere, but they also use the captured methane to
generate electricity that would otherwise be generated by burning fossil fuels
such as coal or natural gas.
The risks and concerns associated with carbon offsets include: lack of ‘additionality’, fraud as it relates to double-counting whereby developers sell multiple offsets for a single project, lack of regulatory control and accountability for the ‘over-the-counter’ offset market although market-based standards are deployed, etc.

Although it has been acknowledged that offsets alleviate the burden and support with the ability of stakeholders to deal with climate change, the workability of offsets beyond global regulatory obligations is dependent on individual state policies, thorough due diligence, certification standards, etc. In addition, the viability of offsets has been questioned by numerous schools of thought positing a preference for Carbon Tax.

In the words of Alison Reeve, deputy director of the energy and climate program at the Grattan Institute, ‘offsetting should not be a substitute for avoiding cutting emissions, but it has a place when dealing with emissions-heavy industries, like cement production’.

Another view from the Institute for Applied Ecology is that ‘Offsetting has tried, and it has failed- to pursue this as a solution now is nothing more than greenwashing and would blow a huge hole in the Paris agreement’.

But based on the Carbon Offset Guide, Carbon offsetting is possible because climate change is a non-localized problem. Greenhouse gases mix throughout the atmosphere, so reducing them anywhere contributes to overall climate protection.

**Can Africa benefit from the climate mitigation structures and measures?**

Africa accounts for only 2% of the trading in the global carbon market with South Africa and North Africa enjoying the larger share benefits of the projects under the CDM.
The African Development Bank (AfDB) in the Carbon Markets and Africa Quick Facts, recognised climate change as a driver for change to attain the realisation of new value for businesses and institutions in Africa for the benefit of local economies and people. Countries that emit greenhouse gases whether directly or indirectly can take action to reduce the emissions and pay for the costs partly by generating emissions reduction credits that are tradable assets. For small-scale activities such as decentralised waste management by SMEs, it is posited that carbon credits can provide additional revenue streams far into the future, thus augmenting the viability and sustainability of the business models.

A study revealed that the annual and cumulative investment in registered CDM projects in Africa amounted to 4496 across years 2004-2012, thus revealing clear signs that the African carbon market is starting to take off, with over $4.5 billion invested in registered African CDM projects.

In South Africa, the introduction of a carbon tax has revived keen interest in the offset market. Nevertheless, the right projects must be invested and delivered at scale. Furthermore, regulatory systems will need to be put in place and the region will need to come up with its climate and carbon finance strategy.

Africa requires US$52-68 billion per year by 2030 to meet the climate change challenge. These investments will either come through innovative models within the CDM framework backed by donor support, otherwise, the reality remains that the investments may have to come from existing investments in fossil fuels through cleaner mechanisms, particularly natural gas which has been posited to be the cleanest of all the fossil fuels.

At COP26, it has been reported that one of the most complex tasks facing negotiators is how to agree on a market-based mechanism that will allow countries to use international carbon credits to meet their emissions reduction goals in the Paris agreement.

The jury is out to decide not just the fate of Africa, but the fate of the world.