Climate-Dynamics Limited

Module 5 Means of Implementation and Finance

Capacity-Building Workshop on Development of CDM Activities and NAMA for Public and Private Sector

Montclair Hotel, Nyanga, Zimbabwe

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Outline of the Presentation

- Status of the Clean Development Mechanism (CDM)
- Connecting to the Future
- Linking Ambition, Carbon Market, Climate Finance Initiatives
- Opportunities for Zimbabwe

Background…

- The carbon market, which CDM is part of, has so far been dominated by the Kyoto Protocol
  - …essentially the *international cap-and-trade system e.g. the EU ETS*

How does / did that work…

- Industrialized countries (Annex-I Parties) adopted absolute economy-wide emission targets and were issued emission units (*emissions were capped*)

- At end of a marked period (*commitment period*), countries presented an internationally recognized emission unit for each tonne of GHGs they emitted

- These emission units were also traded with each other i.e., between countries

What this meant for Developing countries …

- Annex-I also sourced emission units from CDM projects
  - As developing countries (non-Annex I Parties) do not have Kyoto commitments (*No cap in the economy*), the emission credits issued by CDM projects enlarged the pool of emission units available to Annex 1 Parties

Where are we now?

- Emission Reductions (CERs) are almost exhausted!! (*CERs are not the 'sought after commodity' they were until year 2012 i.e., end of the last commitment period*)

How did we reach here … *i.e., the no demand scenario*

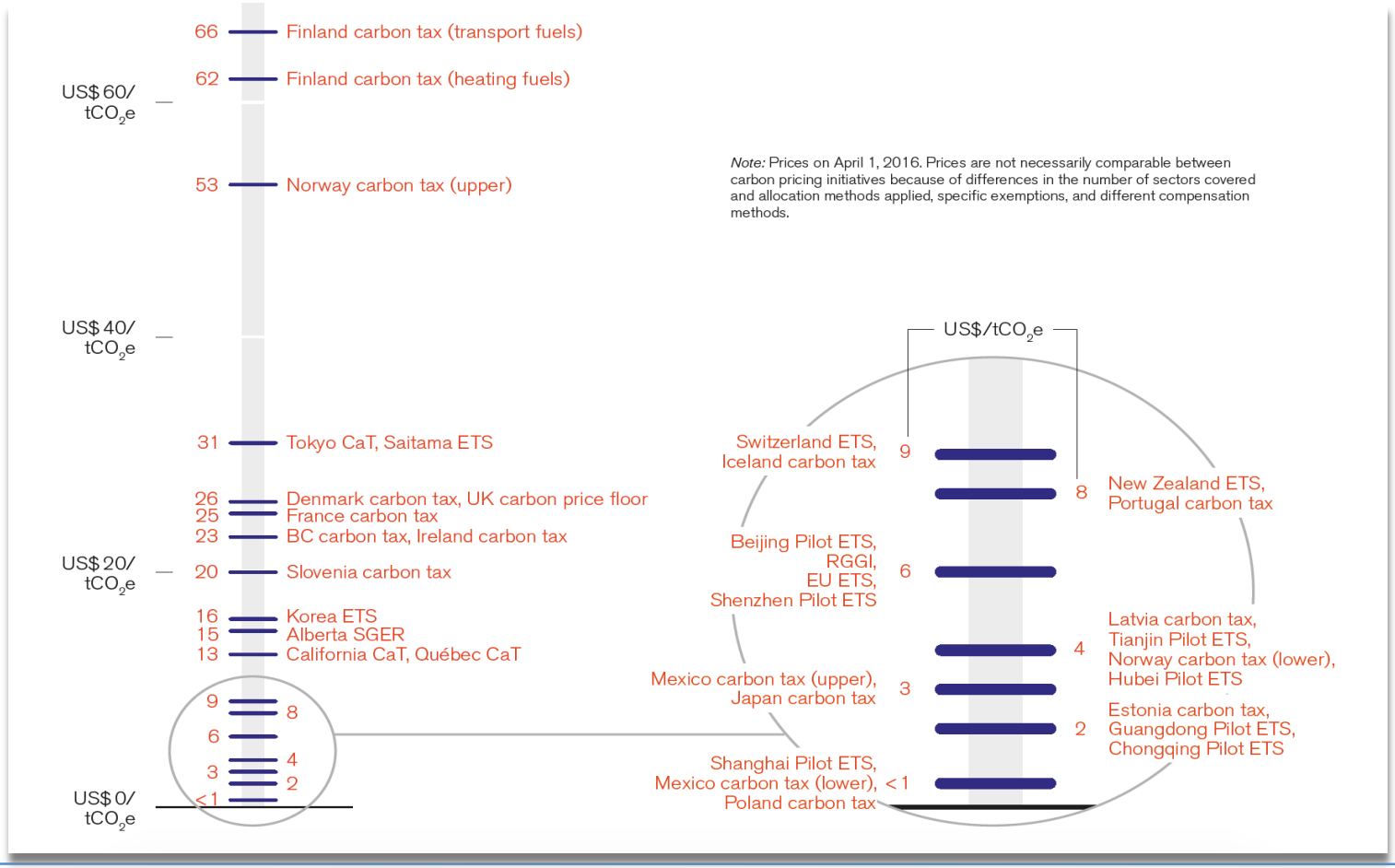
- European Union (EU), which was the biggest source of demand historically, has most likely already fulfilled its demand for international credits, the latest *Carbon Market Review* identifies:
  - *In 2015, EU ETS installations exchanged just under 23 million CERs for EUAs*
  - *This means that to date, EU ETS installations have used almost 1.5 GtCO2e of CERs and ERUs of the total 1.6 GtCO2e allowed*
  - *Remaining 0.1 GtCO2e of residual demand is likely to already be in the hands of EU ETS installations*
  - *No other substantial source of demand for CERs is available*
- Due to these conditions, half of the projects that had issued CERs by the end of 2012 ceased issuance beyond this date (*demand for CERs dried*)

Status of Carbon Market … *2016 facts*

- Observed carbon prices span a wide range from less than US$1/tCO2e to US$137/tCO2e
- About three quarters of the covered emissions are priced at less than US$10/tCO2e
- Total value of ETSs and carbon taxes in 2016 is just below US$50 billion, similar to the value reported in the State and Trends of Carbon Pricing 2015
- If the Chinese national ETS is implemented, early unofficial estimates suggest that the total value of ETSs and carbon taxes could potentially double to about US$100 billion

Prices in existing carbon pricing initiatives

(*source: Carbon Pricing Watch 2016*)



Any challenge is an opportunity in disguise…

- The CDM Executive Board is investigating ways to (a) broaden demand for CERs; and (b) participation in the CDM
- Some carbon pricing initiatives at the national level provide possibility of demand for CERs for e.g., in Korea, Mexico and South Africa, although the demand is currently limited to domestic CERs
- Paragraph 107 of the COP 21 decision encourages Parties to promote the voluntary cancellation of Kyoto credits

> Enhanced action prior to 2020. Paragraph 107. Urges host and purchasing Parties to report transparently on internationally transferred mitigation outcomes, including outcomes used to meet international pledges, and emission units issued under the Kyoto Protocol with a view to promoting environmental integrity and avoiding double counting

Where can CDM *or* even CDM-like instrument be a fit?

- Calibrate CDM to make it fit-for-purpose, for example:
  - Enhanced use of CDM for voluntary purposes
  - CDM as a tool for monitoring, reporting and verifying (MRV) project and programme outcomes
    - Simplified CDM methodologies for MRV
  - Linking with Climate finance
    - CDM as a instrument to channel climate finance and MRV of mitigation outcomes
  - Using/adjusting the CDM architectural and procedural framework as a stepping stone for future action
    - For purposes to build national capacity of institutions

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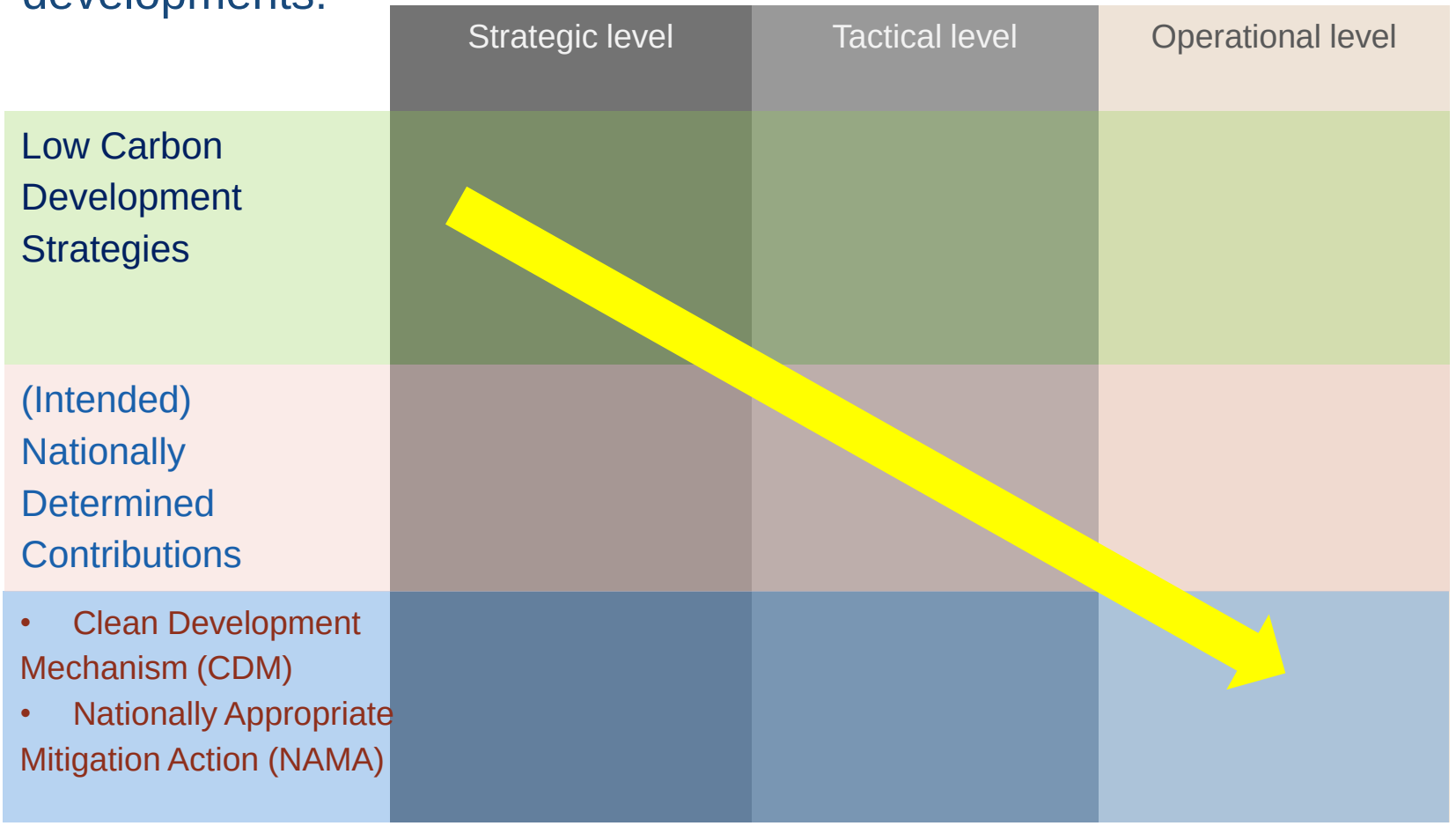
Connecting to the Future…

- LCD, NDC, NAMA, CDM within the landscape of current developments:



Connecting to the Future… – *Intended Nationally Determined Contributions (INDCs)*

❑ ***What are INDCs?***

- INDCs are the primary means for governments to communicate internationally the steps they will take to address climate change in their own countries
- Are a country's national plan paired with a global framework under the **Paris Agreement** that drives collective action towards a zero-carbon, climate resilient future
- Reflect each country's ambition for reducing emissions, taking into account its domestic circumstances and capabilities

Important milestones (*Climate-Dynamics Limited*)

Year 2015	*2016*	*2017*	*2018*	*2019*	*2020*	*Post-2020*
NDC Preparation and submission: - NDC planning - Institution building - Resource and investment planning			**Facilitative Dialogue**	NDC preparation and/or revision	NDC up to: - 2025 - 2030 - 2035	NDC implementation
*Year 2020**	*2021*	*2022*	*2023*	*2024*	*2025*	*...*
NDC implementation: - Monitoring of implementation - Reporting of NDC activities - Capacity development			**Global stocktake****	NDC preparation and/or revision	New NDC (for NDC with 2025 end date) up to: - 2030	

* *Entry into force of Paris Agreement*

** *collective progress every 5 years (mitigation/adaptation/finance/technology/capacity/transparency)*

Article 6 of the Paris Agreement

- Article 6.2 Cooperative Approaches regulates the exchange of Internationally Transferrable Mitigation Outcomes (ITMOs)

What the Article 6.2 says:

- Voluntary
- Use of ITMOs between participating Parties to demonstrate achievement of their NDC
- Promote sustainable development and environmental integrity

What it could mean:

- Link to emission trading schemes
- Facilitate use of crediting mechanisms

Article 6 of the Paris Agreement

- Mechanisms under Article 6.4 (*and not so subtle similarities to the CDM architecture*)

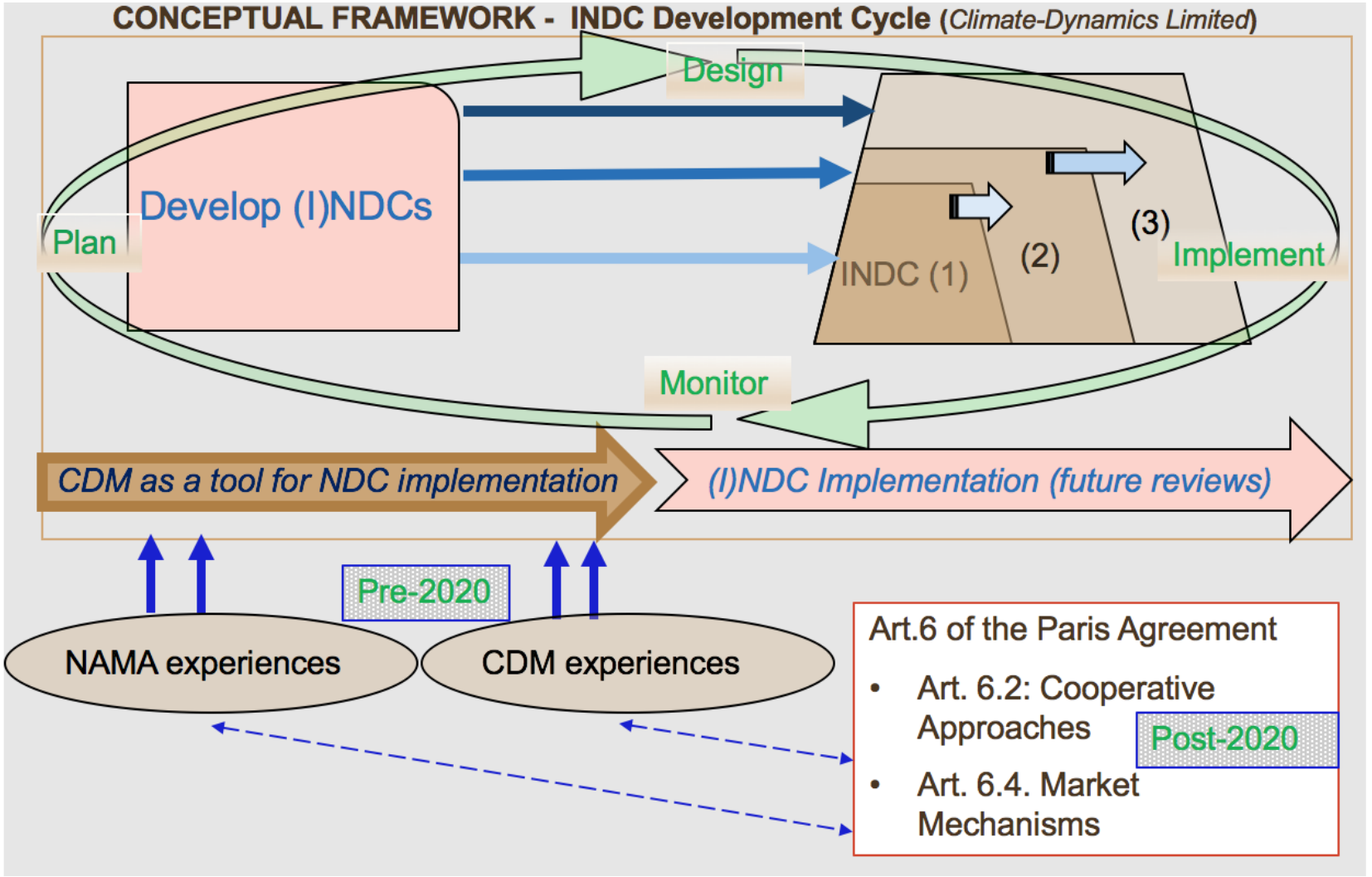
Emission reductions from the mechanism are to be:

- Additional
- Real, measurable and have a long-term mitigation benefit
- Specific to scope of activities
- Verified and certified by designated operational entities

What it could mean:

- Mechanism may not be limited to emission reductions only used for achievement of NDCs (either of the host or another Party) and could potentially be used for other purposes, such as MRV of climate finance!!

Potential Inter-linkages between Paris Agreement and Carbon Markets



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INDCs and ambition… *Governments see the need for a massive amount of financial resources for their INDC implementation*

- Conditionality of INDCs
  - 79% of all submitted INDCs include conditional components
  - About one fifth of all submitted INDCS include only a conditional component and do not specify unconditional targets
  - Conditional components of INDCs mostly refer to the provision of support through finance including capacity building and/or technology transfer

- More than 90 of all submitted INDCs include proposals for emission trading systems (ETSs), carbon taxes and other carbon pricing initiatives

Carbon Markets, Financial Support & INDCs

- Financial support
  - Vast majority of countries that submitted INDCs with conditional aspects refer to the need for financial support in order to be able to implement their planned actions
  - 57% of all conditional INDCs make a direct reference to quantified financial needs

- Financing needed to fully implement all the submitted NDCs (*indicative study result by Germanwatch*)
  - Total financing needs referred to in both unconditional and conditional parts of INDCs amount to more than USD 4.4 trillion
  - Estimated annual financing needs amount to approximately USD 349 billion

Carbon Markets, Financial Support & INDCs

- Market mechanisms …*as part of the NDC financing strategy*
  - Almost 80 developing countries refer to international market mechanisms in their INDC
  - Market mechanisms have the potential to mobilize considerable amounts of finance, and as a source of financial support

What may this mean…

- Use of current UNFCCC architecture under the existing market mechanisms e.g. CDM
- Parts of the CDM portfolio can be readily transformed into or positioned for the Article 6 market mechanism

Financing strategies for NDCs can therefore be seen as a contribution to the objective contained in Article 2.1 (c) of the PA of "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."

Considering the vast climate financial flows required to fully implement the global climate agenda

… *where does the CDM experience be a fit for developing countries*

- CDM can contribute to global mitigation efforts, including linking the CDM with NDCs and positioning the mechanism as an MRV tool to enable credible and transparent results-based climate finance

  - Potential for harnessing synergies between the CDM's measurement, reporting and verification (MRV) framework and climate finance is emerging.
  - CDM's MRV standards can support the GCF/other financial institutions in demonstrating the mitigation impact of its interventions

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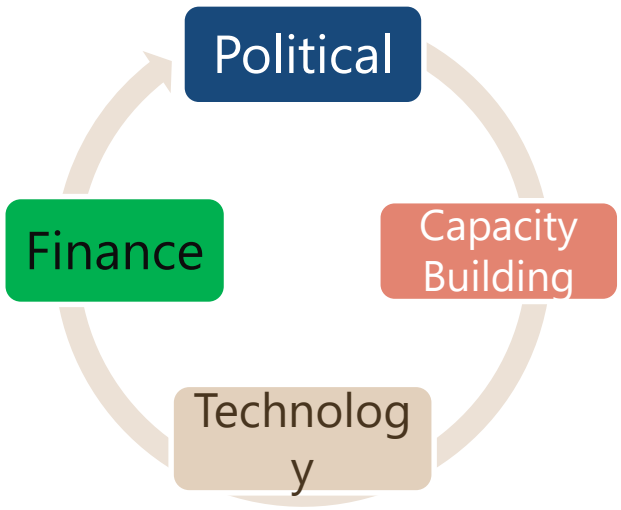
Story so far…

- Reforms of CDM have enabled greater access by African countries
- CDM is alive and kicking in Africa
- Experience gathered to operationalize the CDM in Africa should be retained in the post-Paris policy architecture

What does this mean…

- Time period before the new climate agreement becomes effective is critical for Africa
- Communicate the key experiences and lessons learnt from CDM so that new rules are certain and adequate for its circumstances

Capacity building and Institutional Arrangements



❑ **Overarching Political Ambition**

- Enabling environment for investment

❑ **Capacity Building**

- Role of DNA strengthened to perform outreach activities (liaise with donors & investors)
- Establish public private dialogue & promotion of public-private partnerships
- Guidance and staff capacity to facilitate CDM PoAs/Project/other NDC linked opportunities

❑ **Technology**

- Established National Technical coordination entity
- MRV system in place, operational and well maintained
- NDC progress and results regularly reported

❑ **Finance**

- Promoting public finance mechanisms to catalyze private investment flows
- Effective allocation of funds
- Promoting investment opportunities

Invested CDM infrastructure to facilitate INDC goals

- CDM Infrastructure already in place:
  - A well established designation national authority to approve CDM projects
  - One CDM activity registered evidencing that the procedural frameworks are operational
    - Zimbabwe is part of the standardized baseline submitted by the South African Power Pool (SAPP)
    - 18 prior considerations submitted out of which 11 are submitted in this year
- With lessons from experience with CDM – elements of the CDM can serve as key building blocks for market mechanisms in the new climate regime

Clean energy initiatives under consideration

- Energy Efficiency, both supply and demand side
- Promotion of liquefied petroleum gas (LPG) as an alternative to grid electricity (*which would mean increased imports*)
- Construction of bio-digesters in all provinces
- Increased capacity of Mini-hydro
- Use of solar energy

Zimbabwe intends to leverage on its resources including carbon credits or sell of emission reductions units through international and regional carbon markets and/or carbon pricing mechanisms to mobilise more resources for managing climate change

A glimpse into the Zimbabwean power sector…

Sector	Status in 2011
Power	Generation capacity is half (about 1,000 MW) of previous capacity

Source: Infrastructure and Growth in Zimbabwe: An Action Plan for Strengthened Recovery; 2011, African Development Bank

- Electricity consumption per capita of 944 kWh in 2000 dropped to 666 kWh in 2012 and is projected to be around 1,271 kWh in 2030
- Future energy consumption would therefore increase!!!
- Needs a comprehensive plan to invest and implement clean energy projects to deliver on projected demand

In conclusion…

- CDM infrastructure can help implement affordable alternative energy sources for Zimbabwe to meet sustainable development goals e.g.:
  - Combining the use of market mechanisms with NDC goals to move away from a fossil-fuel locked future
  - Directing climate finance flows towards identified mitigation activities
- Credits generated from mechanisms can seek bilateral or multilateral procurement initiatives that focus on African countries, such as:
  - European Parliament's existing carbon offsetting scheme (CDM credits)
  - UN Office for Project Services (UNOPS) seeks credits CDM projects to offset emissions of the UN system
  - Go Climate Neutral Now initiative of the UNFCCC Secretariat
  - BMUB/KfW 'Foundation Future of the Carbon Market' supports POA via start-up finance
  - Swedish Programme for International Climate Change Mitigation

End of presentation…

Thank You For Your Attention

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Benefits of renewable energies

- Investment in renewable energies would help improve the balance of payments of African countries as they reduce costs for imported fossil fuels e.g., reduced LPG imports with installation of solar mini-grids/off grids

- Investment in renewable increase competitiveness of industries as they replace expensive fossil fuel based technology

- Renewable energy also contribute to technology transfer from industrialized to less industrialized countries, and help green the economy

ARTICLE 6 of the Paris Agreement

- Article 6.4 Cooperative Approaches regulates the exchange of Internationally Transferrable Mitigation Outcomes (ITMOs)
  - Guidance under Art 6.2 on how a Party can engage and use ITMOs between participating Parties to demonstrate achievement of their NDC
  - Use of ITMOs by Parties to demonstrate achievement of an NDC can be seen as part of the accounting rules for NDCs and subject to these principles
  - Implications for different forms and types of NDCs for the creation and use of ITMOs

- SBSTA 44 (Bonn, June 2016) initiated the process related to the guidance under Art 6.2 that will provide for how a Party can use ITMOs between participating Parties to demonstrate achievement of their NDC