5/18/2018

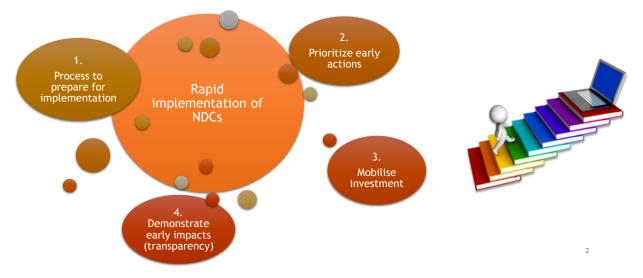
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Planning for implementation of Ghana's Nationally Determined Contributions (NDCs) to the United Nation Framework Convention on Climate change

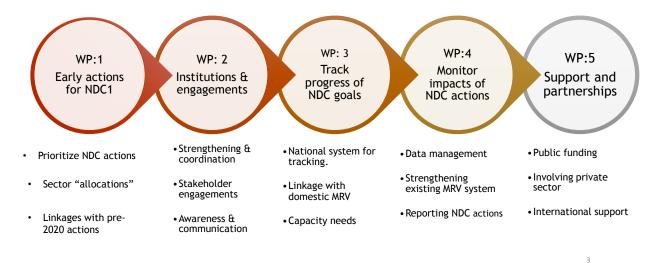
EPA, climate change unit

Next steps for NDCs implementation

(10-year agenda towards a future sustainable, resilient and low carbon Ghanaian society)



Building blocks for NDC implementation



Policy levers

- Universal sustainable development goals (Goal 13 on Climate Actions)
- GSGDA provides framework to bring all sectors and assemblies on board
- National climate change policy & master plan
- Nationally determined contributions (NDCs) 10 year climate action plan
- · Planning and budget guidelines recognizes climate change investments
- National energy policy, Renewable energy act, Biofuel strategy, SE4ALL Action Plan, LPG Promotion Strategy



International cooperation

- Our priority climate actions to contribute to attain 2 degree global goal.
- Ghana has put together 31 national actions to the United Nations our contributions.
- In December, 2015, Ghana and 190 countries agreed to a binding and universal Paris Agreement.
- Ghana including other 171 countries signed the Paris agreement in New York, in April, 2016.
- Adoption of universal SDGs gave a additional boost to climate actions.



Ground actions - demonstrating early results for take-off

- Ghana Climate Technology Innovation Centre
- Green climate fund NDA and NIE, initial projects prioritized
- Environmental Fiscal Reforms "Ghana Green Fund"???
- Forest investment plan (IFC \$10m private sector component)
- Emissions Reduction Programme Cocoa Redd+
- Scaling up Renewable Energy Programme Investment Plan
- National Gas infrastructure development (Atuabo, Tein and Sankofa)
- Developed NAMA Investment Guide with GIPC/PEF

Ground actions - demonstrating early results

- · Local business partnership for carbon market readiness platform
- Climate Change Data hub public access to information
- Cleaner Production Centre promote sustainable consumption in industry
- · Capacity for transparency of action, finance and GHG
- · Adaptation fund programme in the savannah landscape
- · Sustainable land and water management programme



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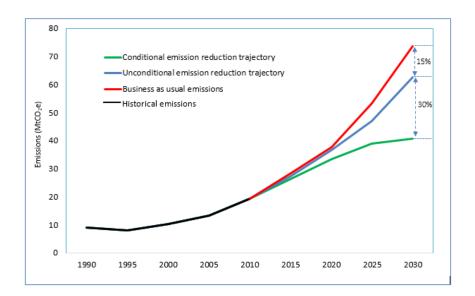
Summary of Ghana's NDCs - National climate action plan

- NDCs policy anchor:
 - National Climate Change Policy and the Low Carbon Development Strategy
 - National climate change policy
 - Ghana Shared Growth Development Agenda II GSGDA 2,
 - Anticipated 40-year socio-economic transformational plan
 - Universal sustainable development goals.
- Put forward mitigation and adaptation actions NDC.
- 20 mitigation and 11 adaptation programme of actions in 7 priority economic sectors.
- Implementation in the 10-year period (2020-2030) at the cost of \$ 22.6 billion (including existing public investments)

(I)NDC policy actions - "Investment areas"

Adaptation actions

| Sector | Strategic Area | INDC Policy Actions | No of Programme of Actions |
|--|--|--|-------------------------------|
| Agriculture and food security | Sustainable land use | Agriculture resilience building in climate vulnerable landscapes | 3 |
| Sustainable forest resource management | | Value addition-based utilization of forest resources | 2 |
| Resilient Infrastructure in built environment | Climate resilient strategic infrastructure | City-wide resilient infrastructure planning | 1 |
| | | Early warning and disaster prevention | 1 |
| Climate change and health | Equitable social development | Managing climate-induced health risk | 2 |
| Water resources | development | Integrated water resources management | 1 |
| Gender and the vulnerable | | Resilience for Gender and the Vulnerable | 1 |



Mitigation actions - headline emission targets

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Mitigation actions

| Sectors | INDC Policy Actions | No. of Programme of Actions |
|-----------|--|--------------------------------|
| Energy | Scale up renewable energy penetration by 10% by 2030 | 5 |
| | Promote clean rural households lighting | 1 |
| | Expand the adoption of market-based cleaner cooking solutions | 2 |
| | Double energy efficiency improvement to 20% in power plants | 1 |
| Transport | Scale up sustainable mass transportation | 1 |
| AFOLU | Promote Sustainable utilization of forest resources through REDD+ | 5 |
| Waste | Adopt alternative urban solid waste management | 3 |
| Industry | Double energy efficiency improvement to 20% in industrial facilities | 1 |
| | Green Cooling Africa Initiative | 1 12 |

Mobilization of funds - sources

| No | Sources | Indicative Amounts (\$) (Billion) | % of total investments | | | |
|-----------------------|-----------------------------|--------------------------------------|---------------------------|--|--|--|
| Dome | Domestic sources | | | | | |
| 1 | National Budget | 0.61 | 6.2 | | | |
| 2 | Commercial facilities | 1.4 | 14.3 | | | |
| International sources | | | | | | |
| 3 | Green Climate Fund | 2.9 | 29.6 | | | |
| 4 | Other multilateral funds | 0.5 | 5.1 | | | |
| 5 | Bilateral agreements | 1.1 | 11.2 | | | |
| 6 | Private capital investment | 1.7 | 17.3 | | | |
| 7 | International carbon market | 1.6 | 16.3 | | | |
| Total | | 9.81 | 100 | | | |

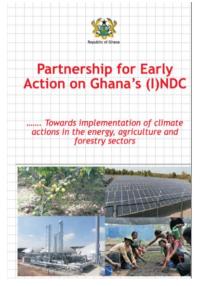
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Preparation for implementation (next steps)

- Ratification of Paris Agreement by Parliament (Ratification cabinet memo approved).
- Outreach and high-level engagement (Regional roadshow engagement of regional authorities).
- Develop and outdoor implementation plan for NDCs.
- Submission of first NDCs (locked in for 5 years)
- Mobilise funds to support climate action (Linkages between first generation Green climate Fund projects to NDCs priority actions).

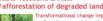
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Priority actions for partnerships - early implementation



Priority IV: Double 10,000ha annual reforestation/afforestation of degraded lands





Transformational change impacts
Contribute to achieve the 45%
emission reduction goal,
Contribute to achieve the national
afforestation target of 20,000ha per

Strengthen governance systems in the forestry sector. Boost ecotourism.

Sustainable development impacts ✓ Improvement in ecosystem services ✓ Create est. 29,000 jobs per annum ✓ Enhance food security (e.g. produces 370 metric tons of staple food per annum). ✓ Enhance

 Enhance carbon stocks. GHG emission impacts - 160ktCO2e/yr indicative investment cost - US\$1.75b

ed to be taker

- Established the National Plantation Development Fund managed by the Ministry of Lands and Natural Resources,
- Five main plantation models are being practiced. These are Modified Taungya System (MTS), Government Plantation Development Programme (FOP), Community Forest Management Project (FAPP), Private Commercial Plantation Developers and Expanded Plantation Programme,
- Annual investment in all five models estimated at US\$ 52 million,

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3. Priority areas for early action

Priority I: Scale-up rooftop solar systems to 200,000 households



Transformational change impacts
✓ Attainment of at least 10% RE target for every new thermal generation

- every new thermal generation Contribute to achieve the 45% emission reduction gola. Technological change (e.g. CFL to LED buils). Industrialization (e.g. energy productive zones through PPI) Diversification of power supply mix (e.g. increase share of clean energy in energy supply mix. Sustainable development impacts V Health benefits (e.g. improvement in health care delivery). Job Creation (est. at 1,600 jobs per month)

month) GHG emission impacts - 0.83ktCOze/yr Indicative investment cost - US\$136.3m

Steps taken or envisaged to be taken

- 1 President Mahama announced the comprehensive rooftop solar programme in the 2015 state of the nation address,
- ✓ Financing mechanism for rooftop solar programme identified,
- ✓ Institutional structures for the rooftop programme established (Energy Commission responsible),
- ✓ Public advertisement on the rooftop procedures published.

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Thank you