

BIO4AFRICA

Enabling Environment for *Enhanced Bioeconomy* : Policy recommendations from *Bio4Africa Project*

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African Agricultural Technology Foundation (AATF)

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BLP 2025

BIOENERGY FOR LOCAL PRODUCTION
CONFÉRENCE INTERNATIONALE

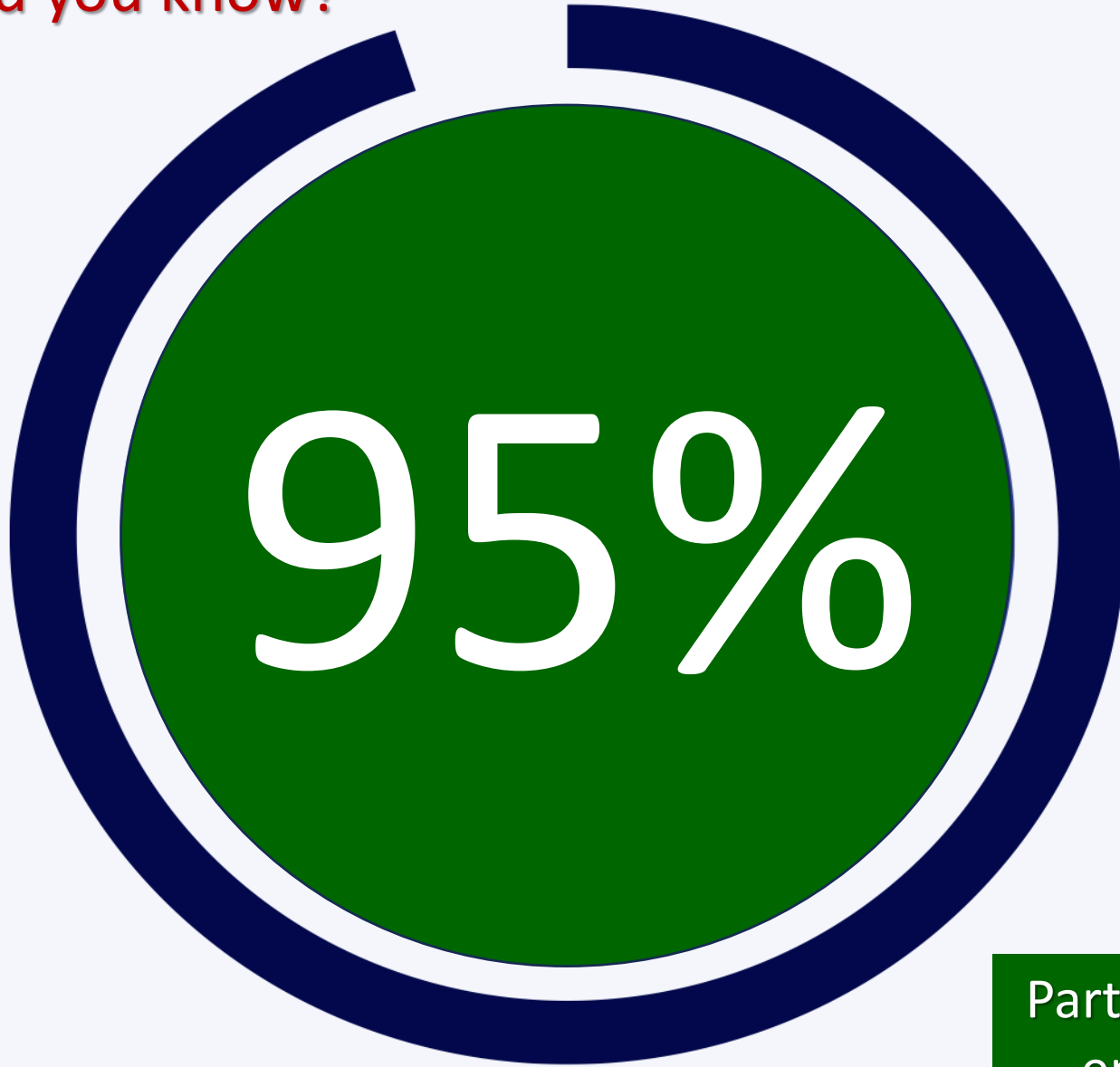
Du 28 au 30 janvier 2025

www.Bio4Africa.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101000762

Did you know?

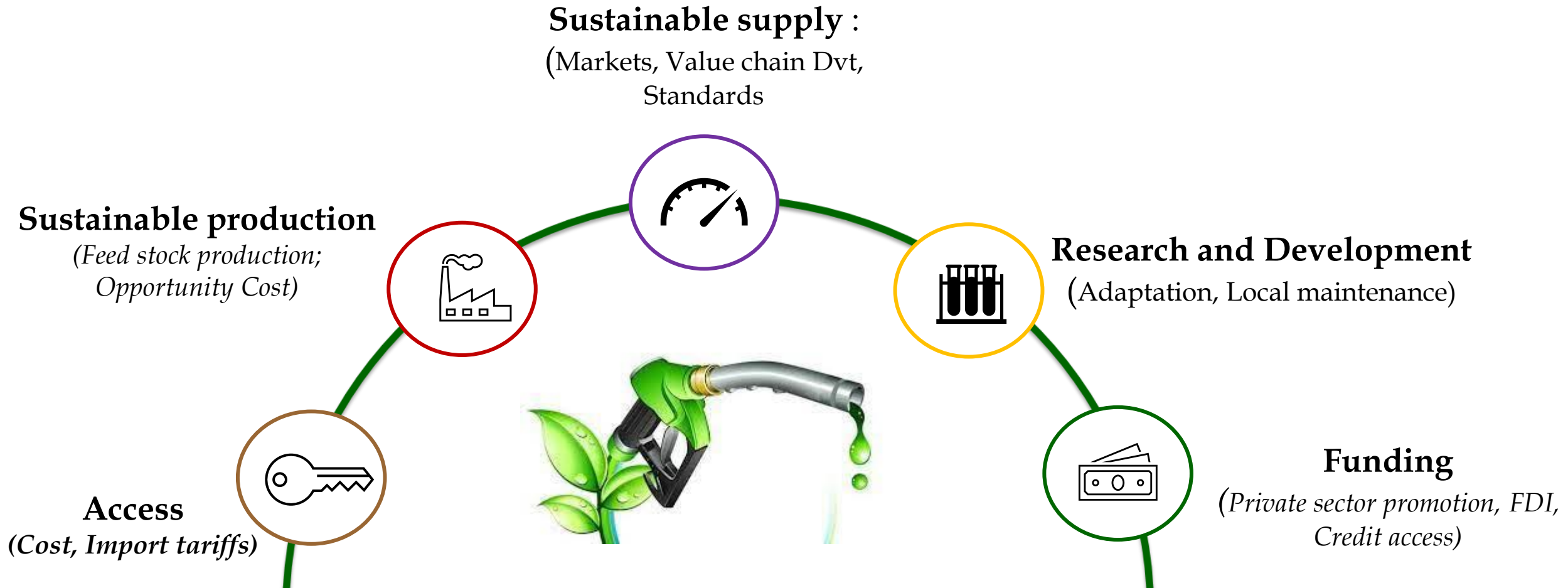


***of all new products
created each year
fail***

Source: Professional Programs

Part of this failure can be attributed to lack of an
enabling policy and regulatory Environment

Why Creating an enabling environment for the Deployment, Commercialization and Adoption of Bio-based Technologies and products is important to avert failures....



3

Important Questions



What cost effective and comprehensive strategies can we apply to identify policy challenges?

What are the key policy challenges limiting the development and deployment of Biobased solutions in target countries in Africa?

What are the recommendations to address these challenges and how do we catalyze actions on these?

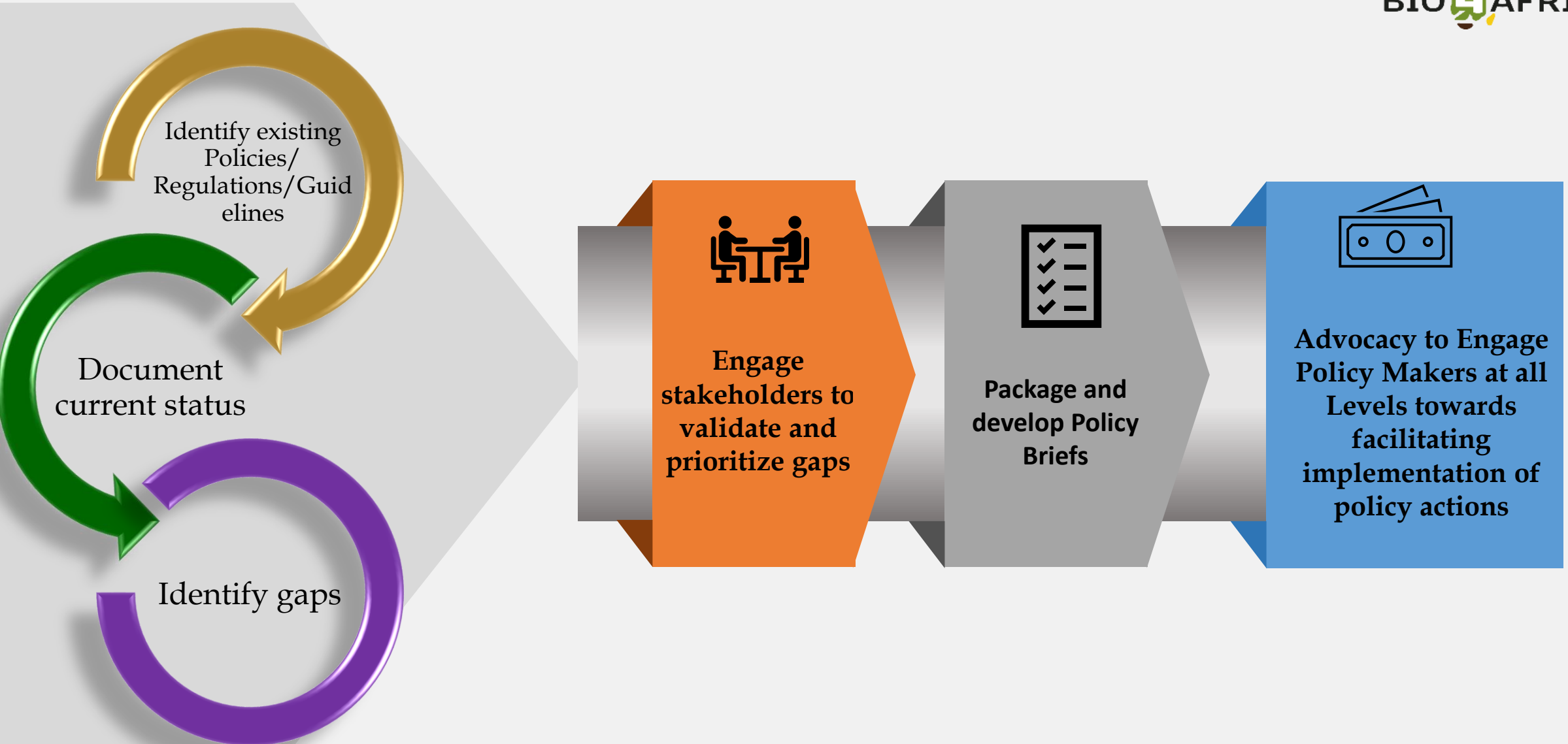


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OUR Approach

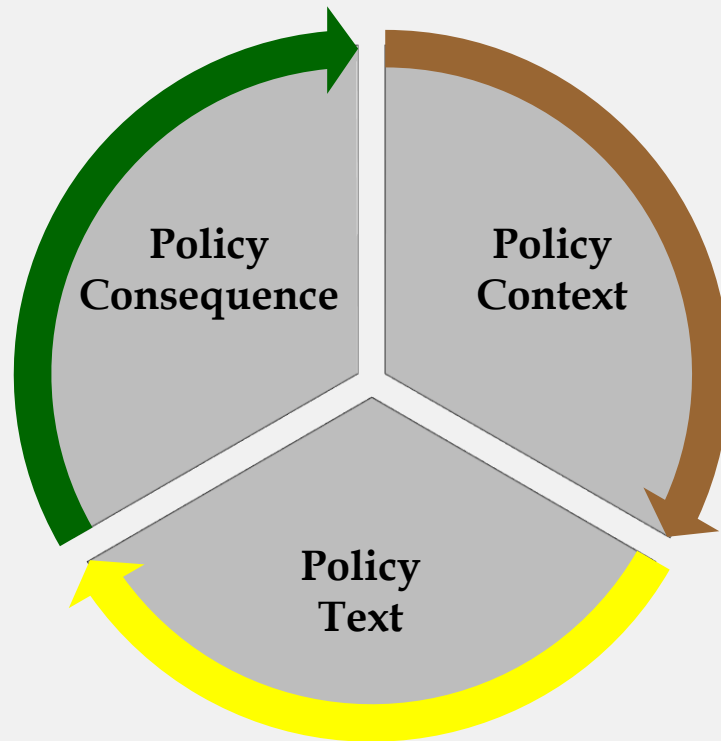


Critical steps in facilitating an enabling environment

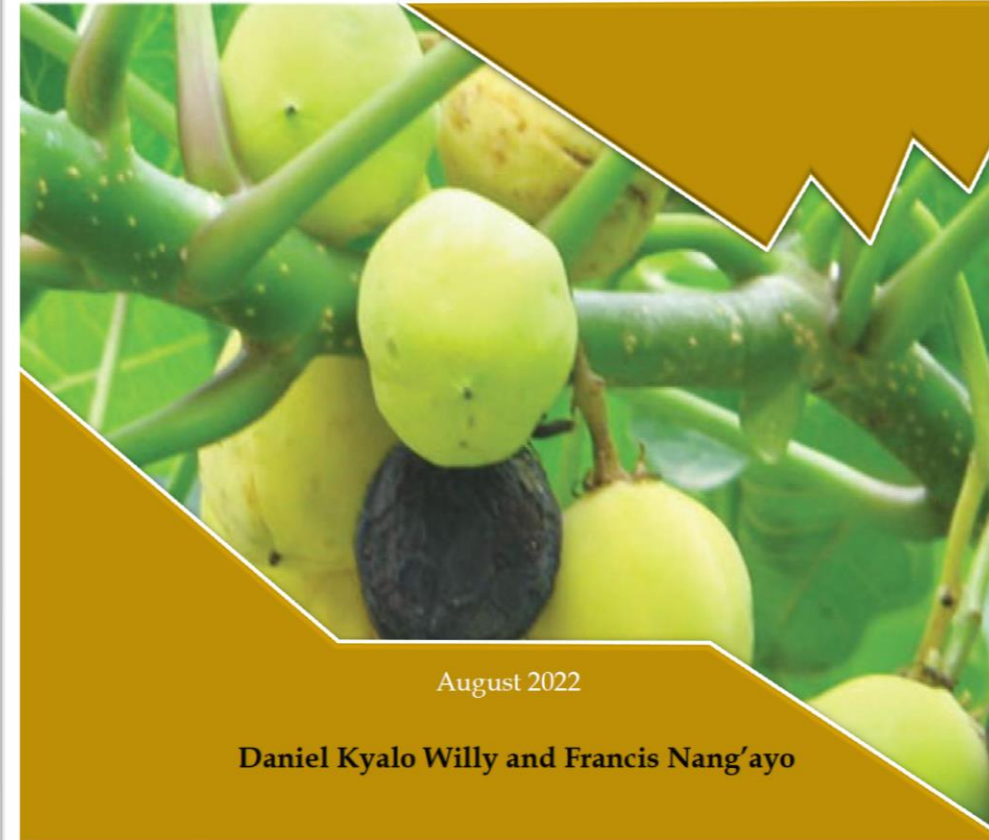


1. Analysis of Policy Documents

- *National Strategies, Policies, Laws, Acts of Parliament and Regulations relevant for Bio-economy*
- *Regional Strategies on Bio-economy*



The Bio-Economy Policy and Regulatory Environment: A Review of the Current Status in selected Countries in Africa



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2. Policy Dialogue



Four locations where the policy dialogue events were hosted



Over **60 senior** policy stakeholders in attendance



Over 20 Public and Private Institutions represented




Gender and Youth representation ensured



3. Final products: Policy Briefs





POLICY BRIEF

30th May 2024 Bio4Africa Policy Brief No.004/2024 Ghana

Enhancing supply of lowcost livestock feeds through Biobased solutions in Ghana: What Policymakers need to know

By Daniel Kyalo Willy and Francis Nangayo



Summary

- Ghana's livestock sector continues to face challenges of high cost of feeds and low productivity.
- The country can potentially tap into biobased solutions to facilitate low cost feed productions.
- The Bio4Africa project is promoting livestock feed production using a green biorefinery, biogas production from crop residues such as maize and sorghum stover, and production of fish pellets from crop residues.
- Stakeholders in the bioeconomy face challenges related to taxation, limited enforcement of quality standards, limited private sector incentives, land tenure biased against youth and women, limited funding for local research and development for biobased solutions.
- This brief proposes some policy options to deal with these challenges and enhance development and commercialization of biobased solutions.

<https://www.bio4africa.eu/>



Note d'orientation

30 Mai 2024 Note d'orientation Bio4Africa n° 002/2024 Sénégal

Grâce aux solutions pour l'énergie propre, les communautés rurales du Sénégal peuvent envisager un avenir plus radieux : Il est temps d'agir


Daniel Kyalo Willy et Francis Nangayo



Résumé

- En Sénégal, près de 40 % de l'énergie primaire provient de la biomasse, qui, pour la plupart, n'est pas renouvelable.
- L'accessibilité à l'énergie est un défi majeur pour les communautés rurales.
- Le projet Bio4Africa soutient la production de biogaz à partir de résidus de culture tels que les tiges de maïs et de sorgho.
- La production de biogaz à partir de déchets agricoles est une technologie qui utilise un équipement spécial pour compresser plusieurs types de déchets de biomasse afin de produire des briquettes de combustible.
- Toutefois, les efforts de développement et de commercialisation de ces technologies se heurtent à plusieurs obstacles : recherche et développement, régimes fiscaux trop onéreux, manque de coordination, capacités insuffisantes, application des normes et régimes fonciers discriminatoires.
- Ce document présente des options politiques pour faire face à ces défis.

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POLICY BRIEF

30th May 2024 Bio4Africa Policy Brief No.003/2024 Uganda

Elimination of Policy Bottlenecks will Boost Utilization of Bioproducts for Better Incomes and Cleaner Environment

By Daniel Kyalo Willy and Francis Nangayo




Summary

- Uganda has a potential to tap into economic and environmental benefits through enhanced production and marketing of biobased products.
- Some of the products that the Bio4Africa project is promoting in Uganda include high quality processed cattle, fish poultry and pig feeds from grass and crop residues.
- The key issues that have been identified for prioritization to boost the development of the biobased sector in Uganda include delays in the realization of the National Bioeconomy Policy and its associated regulations, low awareness of the biobased products and disincentives for the private sector to invest in the sector.
- This brief recommends policy options to address these challenges to boost the development and commercialization of biobased products.

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Four Policy Briefs, comprehensive content:

- Bioeconomy benefits
- The biobased technologies under focus
- Key policy challenges
- Recommendations




Note d'orientation

30 Mai 2024 Note d'orientation Bio4Africa n° 001/2024 Côte d'Ivoire

Transformation de tonnes de déchets en produits utilisables et en revenus grâce aux innovations : Espoirs pour les communautés rurales

Daniel Kyalo Willy et Francis Nangayo



Contexte

Le secteur agricole représente 22 % du produit intérieur brut et plus de 75 % des exportations de la Côte d'Ivoire [1]. Pourtant, selon la Banque mondiale, le fossé entre les villes et les campagnes continue de se creuser et la pauvreté rurale n'a enregistré qu'une réduction très modeste au cours des dernières décennies. La production annuelle de déchets agricoles est estimée à 17 millions de tonnes. Si ces déchets ne sont pas correctement traités, ils peuvent poser un problème environnemental de par la pollution qui en découle dans les communautés rurales et urbaines. Certains de ces déchets sont toutefois transformables en produits commercialisables, contribuant ainsi à créer une nouvelle source de revenus dans les zones rurales. Comme d'autres pays en développement, la Côte d'Ivoire est confrontée au défi de la pollution plastique, avec plus de 10 % qui se retrouvent dans les milieux terrestres et aquatiques [2]. Par rapport aux plastiques d'origine fossile, les plastiques biosourcés ont une empreinte carbone plus faible et des propriétés de matériaux plus intéressantes [3]. Quant à la gestion de la fertilité des sols dans le pays, des informations font état d'un appauvrissement chimique et biologique de la plupart des sols en raison des successions, sans restitutions organominales appropriées, qui sont la conséquence de la mise à disposition de nouvelles terres par le biais de la déforestation [4]. Le développement du secteur de l'élevage en Côte d'Ivoire a besoin d'un renforcement du sous-secteur des aliments pour animaux, et surtout d'une production renforcée d'aliments locaux pour relever le défi du coût élevé des aliments pour animaux. Dans ce contexte, le projet Bio4Africa a lancé des activités dans le pays afin de contribuer au développement de l'économie circulaire. Pour ce faire, le projet expérimente, développe et déploie des technologies biosourcées.

Résumé

- La Côte d'Ivoire est confrontée à des défis qui relèvent de la pollution de l'environnement par les plastiques, de la pénurie d'aliments pour le bétail et de la dégradation des sols.
- Le pays dispose des atouts nécessaires pour tirer parti des avantages économiques et environnementaux résultant des progrès réalisés en matière de production et de commercialisation de produits biosourcés.
- Le projet Bio4Africa promeut la production de biogas à partir de résidus de culture tels que les coques de cacao, la production de bioplastiques à partir du jus de pomme de cajou et de granulés pour le bétail à partir de résidus de culture.
- Toutefois, les efforts de développement et de commercialisation de ces technologies se heurtent à plusieurs obstacles : recherche et développement, régimes fiscaux trop onéreux, manque de coordination, capacités insuffisantes, application des normes et régimes fonciers discriminatoires.
- Ce document présente des options politiques pour faire face à ces défis.

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Challenges



Policy relevant challenges

Senegal

- High cost of small off grid electricity generation systems as a result of taxes
- Limited **private sector investment** – No targeted incentives for renewable energy solutions
- **Low adoption** of biobased products – low awareness
- **Land tenure** limiting access to women and youth
- Limited **quality standards**
- Limited **funding for renewable energy research and development**
- Lack of Government let technical and advisory services

Cote d'Ivoire

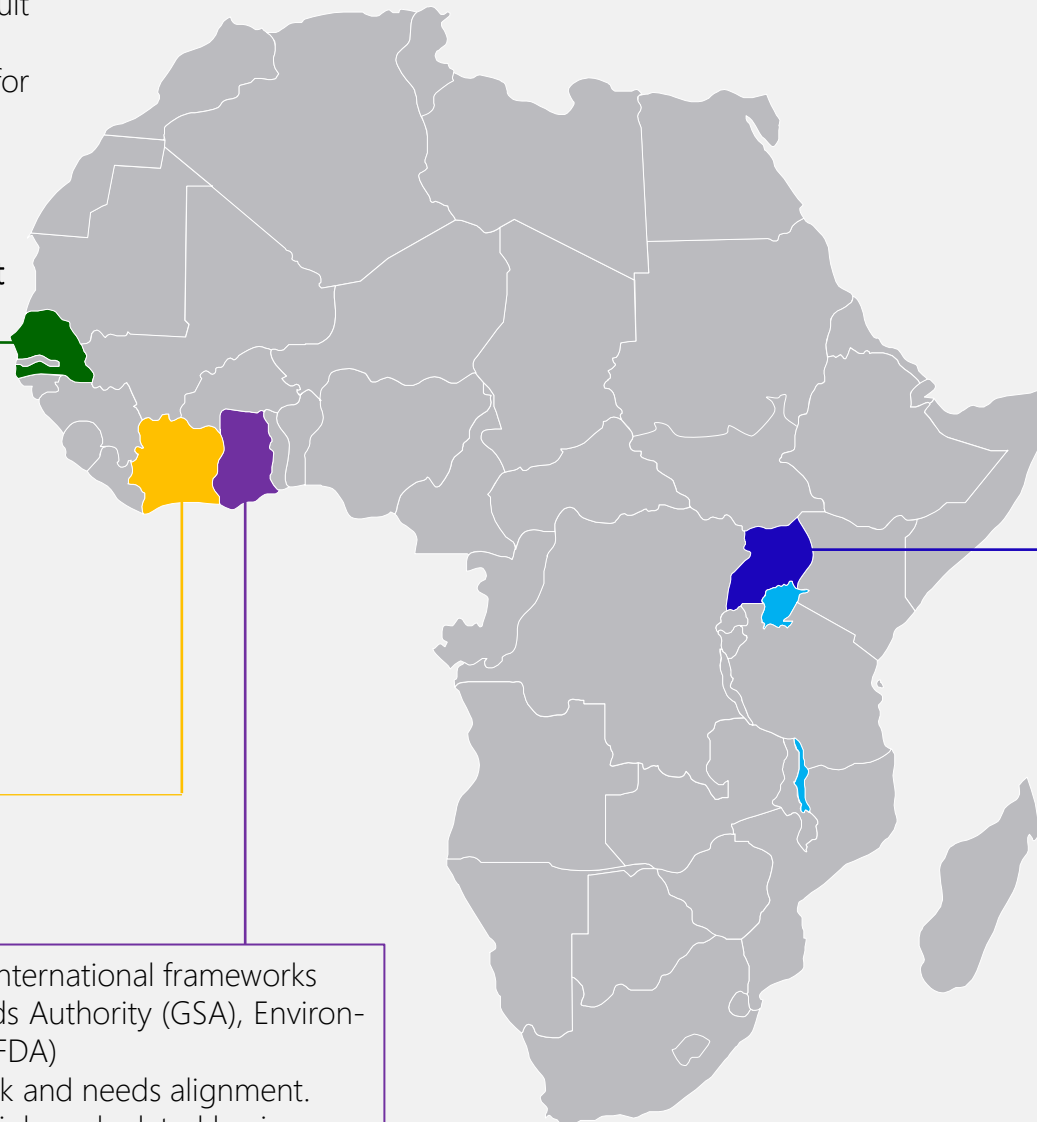
- Limited access to credit facilities for investors seeking to venture into renewable energy
- **Weak linkages and limited cooperation** between different ministries and stakeholders engaged in the bioeconomy
- Land tenure that limits access to land by disadvantaged groups such as **women and youth**
- Limited **quality standards for Biobased products** are limited and where standards are existing, their enforcement remains a challenge, due to capacity issues.

Ghana

- **Weak alignments between** national strategies with regional and international frameworks
- Limited **enforcement of quality standards** by the Ghana Standards Authority (GSA), Environmental Protection Agency (EPA) and Food and Drugs Authority (FDA)
- The **enabling environment regulating the bioeconomy** is still weak and needs alignment.
- Lack of sufficient **incentives for women and youth** to venture in biobased related businesses.
- Land tenure that emphasizes on land ownership and control by men disadvantages women and the youth.

Uganda

- Limited number of enforcement officers - insufficient capacity for quality control to enforce quality standards for bio-based products
- Limited **adoption** of products generated through biobased technologies
- Limited dissemination of quality standards leading to low awareness by traders and consumers
- **Limited technical advice** and external services to support acquisition and maintenance of new and advanced equipment and tools to shift to more innovative approaches
- **Weak linkages between actors** in the innovation ecosystem and scaling entrepreneurs
- **Limited funding** on renewable energy and Bioeconomy research.



Recommendations





1. Establish a **renewable energy fund** and other policy support instruments for renewable energy such as tax breaks, subsidies and incentives for the investment in solar energy and other renewable energy.
2. **Waive taxes** on the equipment or **Zero rate the import duty on renewable** energy related equipment to encourage the importation of such equipment at low cost.
3. Popularize the **National Agency for the Promotion of Investments and Major Projects** (APIX) through awareness creation campaigns and linkages with investors.
4. To facilitate the access to **low cost credit to finance investments** in the bioeconomy and green energy, the Government of Senegal is encouraged to establish an investment guarantee fund.
5. Establish a **policy to support the formulation and commercialization of bio-based fertilizers**.
6. Enhancing the flexibility of existing guarantees to facilitate access to land by disadvantaged groups such as women and youth
7. Intensify and diversify the agricultural production through strategies that encourage production of certified seeds and adoption of hybrid varieties to boost the production of feed stock.



1. Fast track the **finalization of the National Bioeconomy Policy (NBP)** and the supporting regulations and guidelines to create an enabling **environment** to drive research, commercialization and development of bioeconomy
2. **Value Added Tax (VAT) exemption** for equipment used for Biobased equipment such as briquette making machines
3. Investment in capacity building and equipping the UBS including **capacity strengthening** through hiring and training of more standards officers.
4. Policy reforms towards establishment of **waste management facilities** and promoting **waste segregation**.
5. Encourage stakeholders to **engage Uganda National Bureau of Standards (UNBS) to develop standards** for new bio-based technologies and products and **translate existing of standards** into local languages for ease of dissemination
6. **Increased mobilization** of accessible research funds for bioeconomy innovation both from government and external sources



1. **Awareness creation** among private sector companies and users of biobased products. This can be supported by technology demonstrations and setting up of technology parks.

2. Align Ghana's **trade initiatives** and policies with the **African Continental Free Trade Agreement (AfCFTA)**

3. Establish **relevant bi-laws, regulations** and **guidelines** to facilitate commercialization of biobased technologies

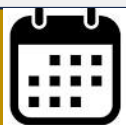
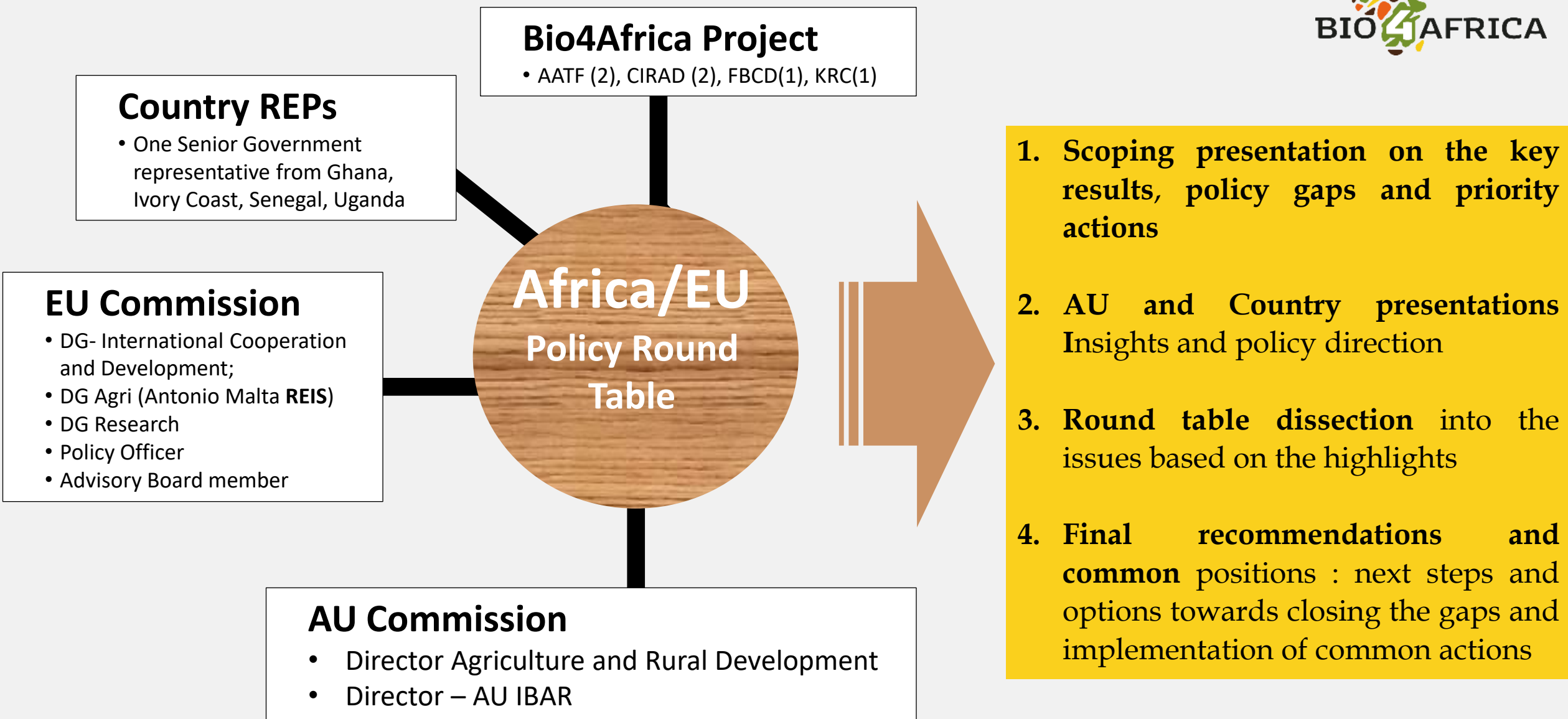
5. Enhance the **enforcement of quality standards** by Ghana Standards Authority (GSA), Environmental Protection Agency (EPA) and Food and Drugs Authority (FDA).

4. The **Fiscal incentives** in the sector including duty exemptions spearheaded by Ministry of Food and Agriculture (MOFA) and Ministry of Finance (MoF). .



1. **Fiscal incentives** to the private sector such as tax exemption, reduction of custom duties charged on renewable energy equipment
2. Facilitation of **access to credit** facilities (development fund; credit guarantee schemes and low interest loans)
3. **Awareness and sensitization campaigns** by the Government and partners
4. Redefining of the **cooperation policy between different ministries** in the framework of development to enhance synergies and eliminate duplication of mandates and enhance efficiency.
5. Inclusion of **agricultural parcels in urban planning to facilitate** low cost access to raw materials
6. **Capacity enhancement for public institutions** involved in research and innovation in renewable energy and the bioeconomy
7. Strengthening of the capacities of existing structures such as the **Ivory Coast - Agence nationale d'appui au développement rural, ANADER** (National Rural Development Support Agency).

Africa-EU Policy Round Table Discussion



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Brussels, Belgium



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