



African Transformative Leapfrogging Advisory Services (ATLAS)

Providing systems-based solutions for transformational change

The Context

Africa as a region is currently faced with multitudes of economic, social and environmental challenges that are adversely affecting the wellbeing of its people. Most of these challenges are mainly caused by combinations of development policy and leadership failures which have national, regional and global dimensions. While there has been some positive trends observed in recent years in terms of Gross Domestic Product (GDP), the region is significantly lagging behind in terms of overall wellbeing improvement. The possibility for the continent to continue with the predominantly stagnant or downward spiral path is very high unless African countries change course from the currently dominant and unsustainable socio-economic development model. Fortunately, Africa has a unique leapfrogging opportunity to transition to an inclusive, low carbon and resource efficient economy through rational utilization of its resource (both natural and human) endowments. This would, however, require critical rethinking of development policies and planning processes through a transformative lens and systematic hybridization and deployment of the most advanced technologies and knowledge systems with context-specific and relevant knowledge.

Our Vision

The vision of the African Transformational Leapfrogging Advisory Services (ATLAS) is to see an Africa that progressively meets the fundamental wellbeing of its people in accordance with the vision and aspirations laid out under Agenda 2063 and that becomes a key player in the global sustainability transition as outlined in Agenda 2030 on Sustainable Development Goals.

Our Mission

ATLAS's mission is to provide cutting edge advisory and technical support to African countries and development organizations with a particular focus on transformational policy and planning processes that enhance Africa's leapfrogging potential to an Inclusive, Low Carbon and Resource Efficient economies.

Core Areas of Expertise

Taking into account both the individual and collective expertise of the company, ATLAS provides the following core technical and advisory support services with the purpose of promoting and supporting transformational change in the African development landscape.

- **Sustainable Infrastructure Development (SID):** Africa's leapfrogging possibilities are mainly determined by the kind of energy, industry, transportation, urban and institutional infrastructure countries develop in the coming decades. ATLAS provides context-specific policy and technical support for the development of a sustainable infrastructure that enables African countries to realize their full transformative potentials.



- **Sustainable Resource Management (SRM):** Efficient and judicious management of Africa's natural resources, which provide the ecological foundation for its development, is a critical element of the transformational leapfrogging that Africa could experience. ATLAS provides the relevant policy and technical advice on sustainable resource management based on context-relevant lessons and practices from the region and across the world.



- **Inclusive Green Industry (IGI):** Industrializing the African economy is a key part of the 21st century transition, as the global economy moves to Industry 4.0. However, Africa's industrialization should not follow the unsustainable path taken by other regions. ATLAS provides state-of-the-art technical and advisory support on effective integration of industrial resource efficiency and inclusive digitization in Africa's industrialization processes.



- **Distributed Renewable Economy (DRE):** The transition to an inclusive, low carbon and resource efficient society requires having a broad-based local economic development that promotes job-creation and value addition at the local level. ATLAS provides advisory and technical support on policy and planning processes for the development of a distributed renewable economy that is driven by recent developments in renewable energy, digital economy and distributed manufacturing systems.



Our key services

The following are key services which ATLAS provides covering one or a combination of the core areas of expertise listed above.

- **Policy review and formulation:** Based upon the extensive experience and expertise of its core team, ATLAS provides policy advisory support to countries and organizations, which may range from reviewing existing policy regimes up to formulation of new policies.
- **Planning advisory:** ATLAS provides custom-made and targeted advisory input to local, national or regional planning processes with a focus on specific or a combination of the stages of a planning cycle at project or programme level.
- **Capacity building:** We provide generic or custom-made capacity building training in areas that are related to our core areas of expertise. This will be supported by the extensive institutional and expert networks ATLAS has through its core members.
- **Advocacy networking:** ATLAS will partner and collaborate with a network of like-minded actors for the promotion of an inclusive transformational development in Africa.

Our guiding principles

ATLAS is an African-based company that is committed to the sustainable development of African Countries and its operation and services are guided by the following key principles.

- **Systems approach:** Our services and operations are guided by systems thinking which starts with understanding the specific dynamics at local & national level and progressively working across the incremental-transformational spectrum in developing solutions.
- **Sustainable enterprise:** ATLAS is a company that strongly believes in the core values and principles of corporate environmental and social responsibilities and, as a sustainable enterprise, is committed to undertake all its activities in accordance with the highest standards of social and environmental compliance.

Our Core Team

The core team of ATLAS consists of senior experts with the highest qualification in the field of engineering, economics and management with more than a 100 years of cumulative experience working with industries, governments, academics, and international organizations at national, regional and international levels. Moreover, our experts are members of some of the leading regional and international scientific institutions and expert networks in their respective areas.

Desta Mebratu, Professor, Founder and CEO of ATLAS, Ethiopia

Desta Mebratu has more than 30 years of experience working for industries, government agencies, universities and international organizations. A chemical engineer by background, he has a PhD of engineering in Industrial Environmental Economics from Lund University, Sweden and an MBA in International Business from the American University of London. He has worked for different United Nations Agencies including the United Nations Environment Programme (UNEP) where he worked for more than thirteen years and served, among others, as Head of the Global Business and Industry Programme (2008-11) and Deputy Regional Director for Africa (2011-2016). He has published more than 40 articles in peer-reviewed journals and Handbooks, including co-editing a Handbook on Sustainable Development Policy and Administration published by Taylors and Francis in 2008. He is currently an Extraordinary Associate Professor at Centre for Complex Systems in Transition, Stellenbosch University. He is a Fellow of the African Academy of Sciences (AAS), Stellenbosch Institute for Advanced Study (STIAS) in South Africa and Pufendorf Institute for Advanced Studies in Sweden.



Salif Diop, Professor, University CAD of Dakar, Senegal

Salif Diop has been working at the United Nations, in particular at UNEP's Division of Early Warning and Assessment (DEWA) as a Senior Officer for nearly 16 years. He is a water specialist with extensive experience in various aspects of coastal oceanography, freshwater assessment, aquatic and marine issues, sustainable management and development. He holds a 3rd Cycle Doctorate he defended in 1978 and a State Doctorate he defended in 1986 from University Louis Pasteur/Strasbourg/France. He is a member of various expert and working groups, including numerous scientific and research institutions. He has more than 40 referred publications with 6 books as main author and co-author and has been awarded a Nobel Peace Prize Certificate – IPCC 2007. Another 140 publications can be added to his own list as technical documents, research work, monographs, thesis, abstracts, and book reviews. He is a University Professor, Vice-Chair of ILEC (International Lakes Environment Committee Foundation), since Nov. 2016, Member of the National Academy of Sciences and Techniques of Senegal since February 2006, Member of the African Academy of Sciences (AAS) and Member of The World Academy of Sciences for the Advancement of Sciences in the Developing Countries (TWAS).



Gulelat Kebede, New School, New York

Economist by training, Dr Gulelat Kebede has over 25 years of professional experience at local, national and global levels. His most recent experience includes coordinating UN-Habitat's global activities in urban economy and municipal finance, and prior to that in training and capacity building.



During his long career with the UN, he authored or contributed to many publications and capacity development tools in the areas of urban economy, governance, finance, leadership, sustainable cities, climate change and green economy. His work in Africa includes coordinating and supporting urban projects on local economic development, environmental planning and management, housing and municipal finance and local leadership. Since 2016 he has been contributing to the United Nations Economic Commission for Africa's (UNECA's) work on integrating urbanization into national development planning. He was the lead consultant for the Economic Report on Africa 2017, a flagship report on urbanization and industrialization. He was a visiting scholar at Darmstadt Technical University (Germany), The University of Rome, The University of Vietnam, Ho Chi Minh City, and The University of Auckland. He is currently part time faculty at The New School, New York, and guest lecturer at The University of British Columbia.

Toolseeram Ramjeawon, Professor, Environmental engineering, University of Mauritius

Toolseeram Ramjeawon holds a Diplome D'Ingenieur from the Ecole Polytechnique de Montpellier (France) and a PhD in Environmental Engineering from the University of Mauritius. Professor



Ramjeawon has more than 28 years of experience working for academic institutions, government agencies, industries and international organizations and is currently a Professor of Environmental Engineering in the Department of Civil Engineering of the Faculty of Engineering, University of Mauritius. He held a number of senior management positions such as Head of Department of Civil Engineering, Dean of Faculty of Engineering and Acting Vice Chancellor of the University of Mauritius. He also acted as Technical Adviser on Environmental Management to the Ministry of Environment of the Government of Mauritius and served as International and Regional

consultant to a number of international organizations including United Nations Agencies and the African Development Bank. He has more than 25 publications in refereed international journals and more than 35 publications in refereed International Conference Proceedings. Professor Ramjeawon was also a Fulbright visiting research scholar at Virginia Tech, USA.

Getachew Assefa, Associate Professor, Environmental Design, University of Calgary, Canada

Getachew Assefa is an Associate Professor of Environmental Design at the University of Calgary with a focus on sustainable development and design. He is the former Athena Chair in Life Cycle Assessment at the Faculty of Environmental Design. He has a B.Sc. degree in Chemical Engineering from Addis Ababa University in Ethiopia, MSc in Environmental Engineering and Sustainable Infrastructure and a Ph.D. in Industrial Ecology from The Royal Institute of Technology in Stockholm. His research particularly focuses on the design and development of technical systems including energy systems, biofuels and bioenergy, waste management system, and buildings. He teaches courses in life cycle assessment, industrial ecology and sustainable development. His research has been published in



internationally recognized peer-reviewed journals such as the Journal of Cleaner Production,

International Journal of Life Cycle Assessment, Journal of Building and Environment, and Journal of Sustainable Cities and Society. He has active teaching and research collaboration with three universities in Ethiopia.

Yacob Mulugeta, Professor, Energy and development policy, University College London, UK

Yacob Mulugetta is a Professor of Energy and Development Policy at the University College London; and held an academic post at the Centre for Environmental Strategy, University of Surrey, UK. He is a founding member of the African Climate Policy Centre (ACPC) at the UN Economic Commission for Africa



(UNECA) based in Addis Ababa, Ethiopia where he worked as Senior Climate & Energy Specialist (2010-2013). He has 25 years of research, teaching and advisory experience specialising on the links between energy infrastructure provision and human welfare. His research is focused on three interconnected areas: energy systems and development; energy systems and climate change; and political economy of low carbon development. He served as a Coordinating Lead Author of the Energy Systems chapter of the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report (Working Group III on Mitigation), a

member of the core writing team for the IPCC synthesis report, Steering Committee member of UNEP's Emissions Gap Reports (2015-2017), and lead author in the upcoming IPCC Special Report on Global Warming of 1.5°C. More recently, he served in the drafting team of the African Renewable Energy Initiative (AREI), and continues to provide technical support for the initiative. In 2017, Yacob Mulugetta was elected Fellow of the African Academy of Sciences (AAS).

For more information, please contact

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