INENSUS

COMPANY PROFILE

2026

Our Vision, Mission and Action

Vision

Empowered rural communities through **IN**tegrated **EN**ergy **SU**pply **S**ystems.

Mission

Eradicate energy poverty and unlock economic potential of rural communities by innovating in the rural electrification sector.

Action

We work to fulfil our mission through Transformation, Digitalisation and Rural Industrialisation.

Introduction

With 20 years of experience as a consulting and engineering firm, we, INENSUS, are a unique "one-stop-shop" for advisory services on mini-grids and decentralised renewable energy (RE) systems.

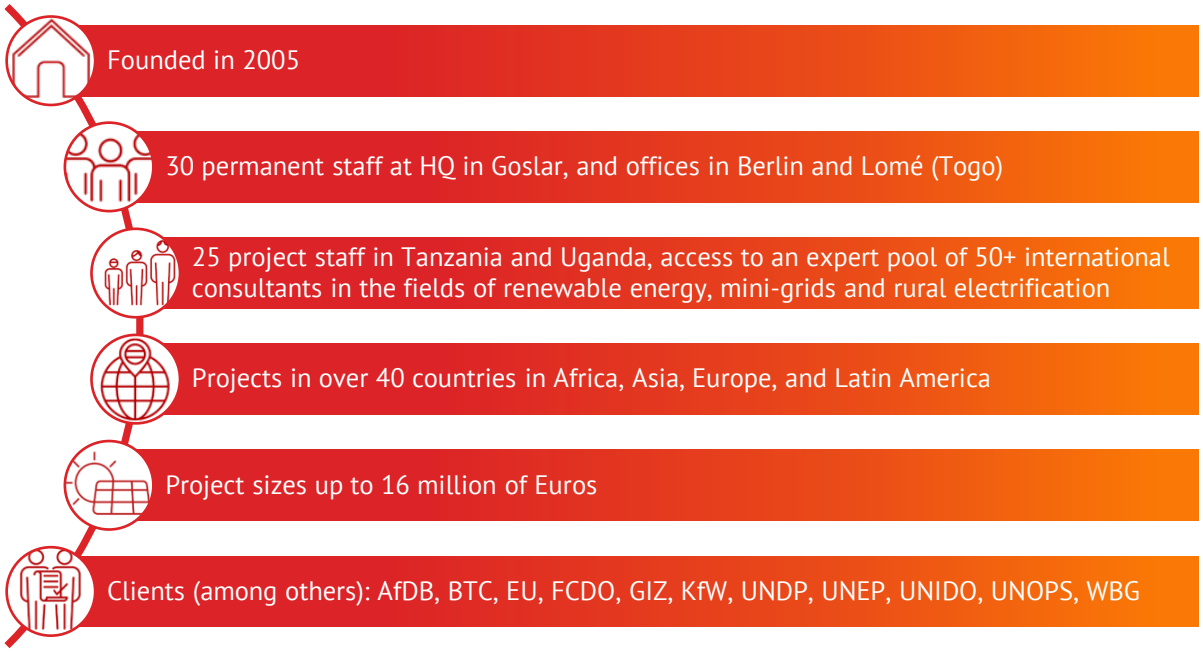
Building on a portfolio of projects in over 40 countries in Africa, Asia and Latin America, as well as operating our own micro-utilities in Senegal, Tanzania and Uganda, we are well placed to offer a wide range of services for mini-grids.

We have extensive practical expertise in analysing policy gaps, designing **policy/regulatory frameworks** for rural electrification, deploying off-grid energy systems, and developing **business models** and **investment de-risking**.

In some of the most important mini-grid markets in Africa, such as Nigeria, Tanzania, Togo, Senegal or Sierra Leone, we have been a driving force in **opening up the sectors to private investors**, including through the preparation and implementation of tenders for several hundred mini-grids commissioned by and/or in cooperation with GIZ, EU, UN, AfDB, the World Bank Group, and others.

Our innovation work in the rural electrification sector aims to **optimise the profitability** of mini-grid developers and **unlock development potential** of rural communities through process optimisation and digitalisation.

Key Facts



Our Mission in Action

We work to fulfil our mission through Transformation, Digitalisation and Rural Industrialisation.

TRANSFORMATION

We transform the rural electrification sector by advising on policy, regulation and financing, developing innovative business models and providing technology transfer.

DIGITALISATION

We develop and apply cutting-edge software solutions and artificial intelligence to change business models and provide new revenue and value-producing opportunities.

RURAL INDUSTRIALISATION

We invent new concepts to unlock development and revenue potential by embedding minigrids in value chains of rural communities.

Our Team

Our ever-growing team is made up of highly skilled, motivated and open-minded people from diverse backgrounds who are passionate about delivering our shared vision.

29	14	16	36	45%	55%
TEAM MEMBERS	NATIONALITIES	SPOKEN LANGUAGES	AVERAGE AGE	WOMEN	MEN

Our Impact

We have already been involved in more than 90 projects in over 40 countries in Africa, Asia, South America and Europe, implementing our mission in different ways.

TRANSFORMATION

We transform the rural electrification sector by advising on policy, regulation and financing, developing innovative business models and providing technology transfer.

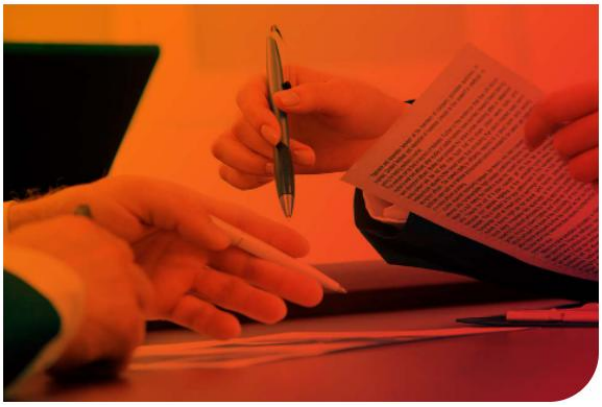
POLICY, REGULATION & FINANCING

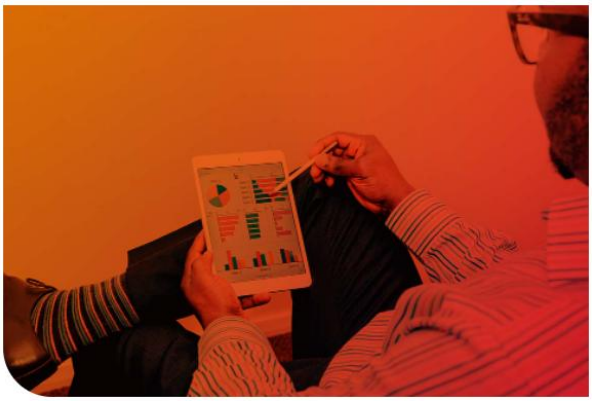
Mini-grid markets can only emerge if the necessary policy and regulatory frameworks as well as adapted financing mechanisms are created. With our advisory services, we support policy makers, development institutions and donors in the development and implementation of appropriate frameworks and programmes.

MARKET RESEARCH

POLICY & REGULATION

GRANT PROGRAMS





BUSINESS MODELS

Based on the development and testing of innovative business models with our subsidiaries in Senegal, Tanzania and Uganda, we support private mini-grid developers in optimising their business models and implementing their operating strategies, as well as investors in evaluating the economic viability of mini-grid companies as investment opportunities.

BUSINESS MODEL & PROJECT DEVELOPMENT

OPERATION STRATEGIES & IT

FINANCING & TECHNICAL DUE DILIGENCE

TECHNOLOGY TRANSFER

We support the development of electrification markets in general and individual mini-grid developers and projects in particular through knowledge and technology transfer. With our electro-mechanical workshop and laboratory, we provide valuable technical expertise and trainings covering all aspects of the mini-grid and renewable energy system value chains.

TECHNICAL SYSTEM DESIGN

TENDER PREPARATION & PROCUREMENT

EPC

DIGITALISATION

We develop and apply cutting-edge software solutions and artificial intelligence to change business models and provide new revenue and value-producing opportunities.

MICRO POWER MANAGER

The MicroPowerManager Open Source is an all-in one software platform that greatly simplifies the operation of mini-grids. It makes it easy for operators to manage their customers, revenues and assets and to monitor their business with real time revenue and asset data visualization while keeping control of their data.

ARTIFICIAL INTELLIGENCE

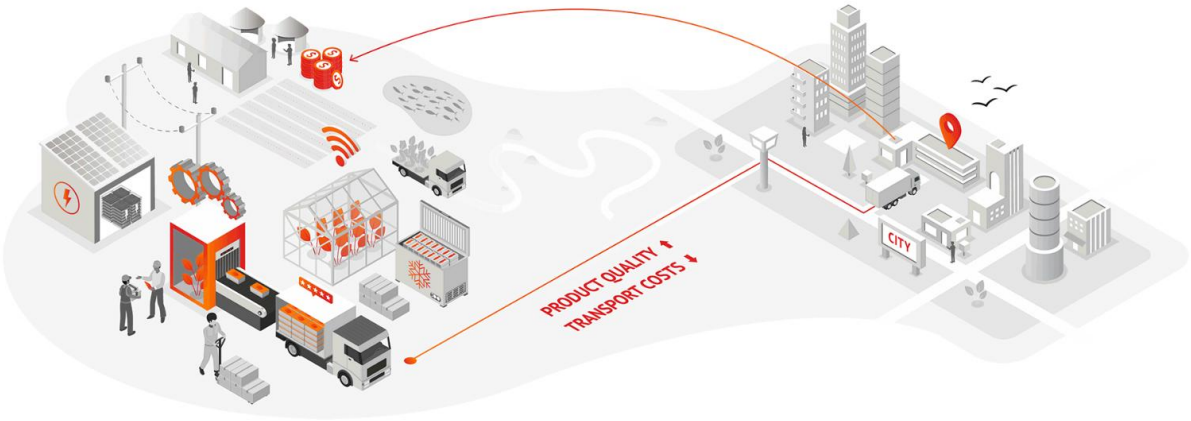
We apply Artificial Intelligence and Stochastic Optimisation with the aim of making the operation and maintenance of mini-grids more efficient.

DIGITAL SOLUTIONS

We develop customized digital, web-based solutions that enable regulators, donors, development institutions or others to get the overview they need of the sector, a project or a specific energy system.

RURAL INDUSTRIALISATION

We invent new concepts to unlock development and revenue potential by embedding mini-grids in value chains of rural communities.



We have developed the **KeyMaker Model** as a tool for identifying and unlocking the economic potential of rural communities.

These retain control over their natural resources and enable processing companies to reduce costs by decentralising their processing structures.

By using electricity from mini-grids, locally available raw materials are processed on site in such a way that they can be sold as a qualitatively superior product with greatly reduced transport costs on supraregional markets.

We apply best practices

Additional experience relevant to technical due diligence includes:

- We have provided technical assistance to more than 100 mini-grid developers (both multinational and local) across Africa as part of the AfDB's GMG Helpdesk.
- We have set up micro utilities in Senegal, Tanzania and Uganda, and are able to incorporate real-world experience into our advisory services.
- We have supported the development of policies and regulations for mini-grids in a number of markets, including Nigeria, Sierra Leone, Ethiopia, Cameroon, Madagascar, Mozambique, Burundi, DRC, Togo, and Myanmar.

We develop and apply state-of-the-art tools

We have produced numerous reports and presentations on best practice in the sector and are well placed to offer a wide range of services, using both publicly available and proprietary tools:

- We have many years of experience working with the mini-grid software HOMER Pro, the global standard for optimizing mini-grid design. We use this software for both technical design review and cost estimation.
- We have developed state-of-the-art distribution network planning procedures for mini-grids based on QGIS, which we use for the development and submission of mini-grid layouts and bills of quantities to financiers.
- Our team of IT specialists has developed the MicroPowerManager Open Source, a software for managing decentralised power utilities, which can be used to digitalize the operation and maintenance of mini-grids and interact with customers.
- We have developed advanced financial models for our and our customers' mini-grid projects, some of which are being used in practice by development partners such as the AfDB or UNOPS, and by various private mini-grid developers.

We strive for gender equality

Our gender-balanced team is committed to promoting gender equality in our interventions and to gender-mainstreaming all related activities. In doing so, we draw up on our own experience as well as on best practices and approaches from our clients in the international development sector.

To ensure equal access to energy services, energy policies at all administrative levels must be geared to the different needs, preferences, skills, constraints and abilities of men and women. Our experts are trained to translate high-level gender strategies into practical gender action plans and operational measures on the ground.

This includes including women as entrepreneurs and employees in energy supply chains and the targeted support to benefit women. Our approach to project implementation is gender-sensitive, enabling the development of evidence-based recommendations for gender-equitable outcomes in the rural electrification sector.

A selection of relevant references

Dates	Region	Services provided	Client	Budget
2024 - 2026	Ethiopia	**Access to Distributed Electricity and Lighting in Ethiopia (ADELE)** TA on project implementation, market survey of solar contractors, site survey of standalone PV systems for public facilities	EEU Ethiopia	US$ 530k
2024	Nigeria	**Nigeria Distributed Access to Renewable Energy Scale-up Project (DARES)** Definition of system configurations and minimum technical and service standards for a large-scale mini-grid RBF program	WBG	US$ 190k
2024 - 2025	ECOWAS countries	**Clean Energy Mini-Grid Feasibility Studies in Burkina Faso, Guinea Bissau, Liberia, Mali and Niger** Feasibility studies for 150 sites, development of e-tendering platform	AfDB, ECREEE	US$ 570k
2024	Madagascar	**Promotion of Rural Electrification through Renewable Energies (PERER) III** TA during tendering process, conduction of TDD of three local mini-grid companies	GIZ	EUR 77k
2023 - 2025	Sub-Saharan Africa	**GET.invest Finance Readiness Support** Business development support to local companies	GIZ	EUR 500k
2022	Myanmar	**Mini-grid Technical Support** Development of tender concept for 100 mini-grids on a commercially sustainable basis independent of public subsidies	PACT	US$ 400k
2020-2023	DR Congo	**Creation of an enabling environment for Green Mini-Grid development** Improvement of regulatory framework and preparation of tender for five large mini-grid projects	AfDB, UCM	US$ 480k
2018-2023	Nigeria	**Nigeria Energy Support Program (NESP) II** Development and implementation of MG tenders and standardised TDD processes	GIZ	EUR 420k
2018-2024	Togo	**Rural Electrification in Togo (ProEnergie)** Development of tender concept for 300+ mini-grids, provision of TA to AT2ER	GIZ	EUR 2.2m
2017-2022	Sierra Leone	**Rural Renewable Energy Project (RREP)** Development of mini-grid regulations, implementation of tender for 95 mini-grids, TA to GoSL and mini-grid operators	UNOPS	US$ 2.4m
2017-2021	Sub-Saharan Africa	**Green Mini-Grid Help Desk** Development of platform, TA provision to 100+ mini-grid companies	AfDB	EUR 1.1m
2014-ongoing	Tanzania	**Micro Power Economy – Tanzania Roll-out** Development and operation of 20+ mini-grids, piloting of KeyMaker Model (with subsidiary JUMEME Ltd.)	EU/ own projects	EUR 16m
2010-2013	Senegal	**MicroPower30** Development and operation of 6 mini-grids (with subsidiary ENERSA S.A.)	RVO/ own projects	EUR 1m

Through the experience and specialized knowledge gained over the last 20 years, we have established a leading role in the rural electrification sector. We were one of the first companies to develop a viable private sector-based business model (the award-winning Micro Power Economy, from 2008) and to implement it in our own mini-grid projects. We have been a driving force in the development of dedicated regulations for mini-grids (Nigeria from 2014, Sierra Leone from 2017, Mozambique from 2020), and have been leading in terms of developing mini-grid projects that have successfully mobilized private capital (RREP in Sierra Leone with approx. US$ 13 m). We are taking a leading role in the further development of the sector and are contributing innovative ideas and initiatives.

Based on the experience of working with more than 100 mini-grid companies in Africa and Asia, we have launched the "Mini-Grid Business" podcast as a platform that explores key topics related to mini-grids, rural electrification, and decentralized energy systems, with a particular focus on Africa (link: The Mini-Grid Business). In each episode, our CEO and his guests – seasoned experts who have navigated the complexities of the mini-grid sector – offer candid insights based on real-life experiences. The objective of these exchanges is to question the accepted status quo of the mini-grid sector, aiming to unearth new perspectives or expose misunderstandings that need addressing.

Your contact

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