



Federal Ministry
for Economic Affairs
and Energy



MITTELSTAND
GLOBAL
ENERGY SOLUTIONS
MADE IN GERMANY

PV Implementation in Agro- Industries in Ghana

Webinar

Ishmael Edjekumhene, KITE



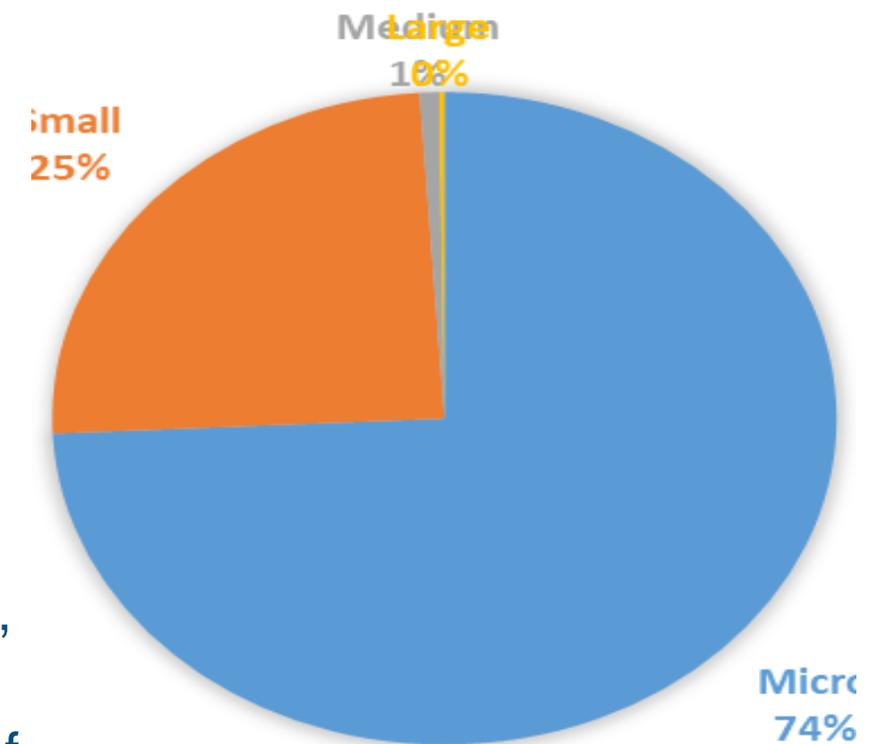
16.06.2021

Facilitator

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Overview of the Agro-Industrial Sector in Ghana

- ❑ Agro-industrial sector a critical sector in Ghana's economy:
 - ❑ Major source of employment
 - ❑ Reduction in Post Harvest Losses
 - ❑ Shelf-life extension
 - ❑ Foreign exchange earner (US\$1.58 billion in 2019 or ~10% of total exports)
- ❑ Majority (99%) of agro-industries are either micro or small
- ❑ Agro-industries a major consumers of electricity and fall with the SLT category, with majority of falling within LV and, MV sub-categories)
- ❑ Faced with high electricity tariffs thus need to reduce cost of electricity the main driver for PV solutions



Status of PV Implementation in Agro Industry

- 7.28 MW installed and operational in 13 establishments with 4.76 MW under construction in another 2
 - 3.929 MW (54%) installed in the beverages (alcoholic and non-alcoholic) sector
 - 1.358 MW (19%) in cocoa processing
 - 0.999 MW (14%) in Fast Moving Consumer Goods (FMCG);
 - 0.524 MW (7%) in fish/meat processing
 - 0.46 MW (6%) in fruit processing
- Eighty-three percent (83%) installed after 2017, coinciding with the advent of third-party financing models
- Eight (62%) of the projects financed through the leasing model; 4 (33%) through PPA; 1 directly procured
- Cross Boundary Energy (CBE), Ecoligo, Berkley Energy, Redavia Solar Power, Dutch & Co, Sunpower Innovations, AB Solar/DSE Group and Yingli Naneme are among the main market players

Potential for PV Implementation in Agro-Industry

- ❑ Could be quite significant given that only less than 15% of agro-processing establishments in Greater Accra have installed captive PV systems
- ❑ Firms involved in cocoa processing, beverages and fruit processing (predominantly for exports) have the greatest potential
- ❑ Opportunities also exist within the government One District One Factory (1D1F) programme. It emerged that some of the already established businesses are struggling with the high electricity bills
 - ❑ 76 factories had been completed as end 2020, 50% of which are into agro-processing
 - ❑ 36 factories completed awaiting operationalisation

