Regional Workshop: Low-Carbon Technologies for MSMEs in the ASEAN

Low Carbon and Energy Efficiency Initiatives for Philippine MSMEs

De La Salle University / DOST-PCIEERD EUSTDD

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MSME Profile

MSME Classifications

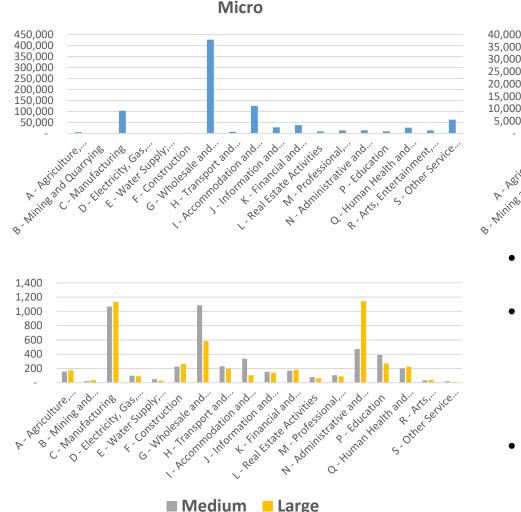
Total Asset Value*	Category	Employment
Up to ₱3,000,000	Micro	1-9
₱3,000,001 - 15,000,000	Small	10-99
₱15,000,001 - 100,000,000	Medium	100-199

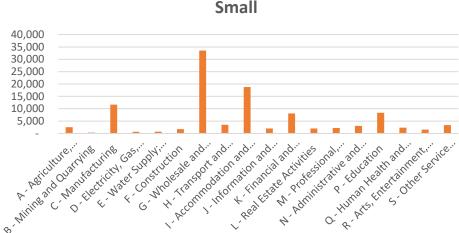
^{*} R.A. No. 6977, as amended by R.A. No. 8289 and further amended by R.A. No. 9501 or Magna Carta for Micro, Small and Medium Enterprises defines MSMEs according to assets. However, please note that available statistics from PSA are still categorized according to the number of employees.

MSME Profile: Sectors

- A Agriculture, Forestry, and Fishing
- **B** Mining and Quarrying
- C Manufacturing
- D Electricity, Gas, Steam, and Air Conditioning Supply
- E Water Supply; Sewerage, Waste Management and Remediation Activities
- F Construction
- G Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles
- H Transport and Storage
- I Accommodation and Food Service Activities
- J Information and Communication
- K Financial and Insurance Activities
- L Real Estate Activities
- M Professional, Scientific and Technical Activities
- N Administrative and Support Service Activities
- P Education
- Q Human Health and Social Work Activities
- R Arts, Entertainment, and Recreation
- S Other Service Activities

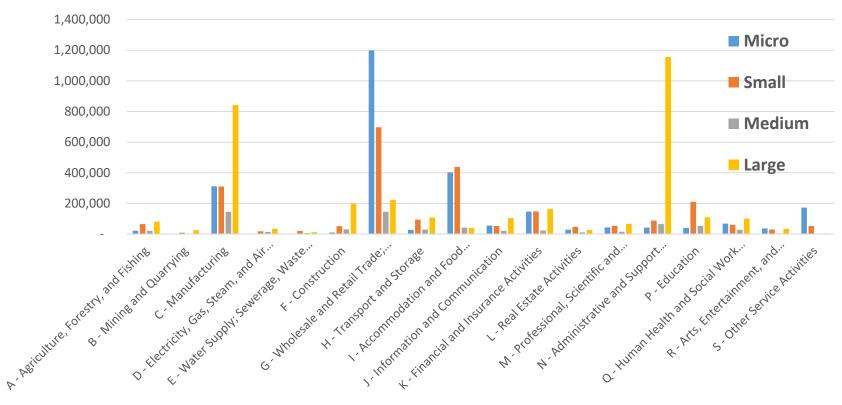
MSME Profile: No. of Establishments





- Classification is based on employment.
- Wholesale and Retail Trade (G)
 has the largest number of
 establishments, followed by
 Accommodation and Food
 Services (I) and Manufacturing
 (C).
- For Medium & Large establishments, share of Administrative and Support (N) Service Activities are also significant.

MSME Profile: Employment



 Wholesale and Retail Trade (G) has the largest number of employees, followed by Manufacturing (C) and then Administrative and Support Services (N).

MSME Profile: Contribution to Economy

62.9%



35.7%



60%



Source: 2017 Philippine Statistics Authority Data

MSME Policies:

Country Framework Plan

More globally competitive MSMEs that are regionally integrated, resilient, sustainable, and innovative thereby performing as key drivers of inclusive Philippine economic growth

STRATEGIC GOALS

Improved BUSINESS CLIMATE

(Government MINDSET)

- R.A. No. 9501: Magna Carta for MSMEs
- R.A. No. 9178: Barangay Micro Business (BMBEs) Act of 2002
- R.A. No. 10644: Go Negosyo Act
- R.A. No. 10679: Youth Entrepreneurship Act
- Enhanced Business Name Registration System
- R.A. No. 11032: Ease of Doing Business and Efficient Gov't Service Delivery Act
- R.A. No. 11232: Revised Corporation Code of the Philippines

Improved ACCESS TO FINANCE (MONEY)

- R.A. No. 9501, Section 15: Mandatory Allocation of Credit Resources for MSMEs
- Pondo sa Pagbabago at Pag-asenso (P3)
- Access of Small Entrepreneurs to Sound Lending Opportunities (ASENSO Program)
- Credit Surety Fund Program (CSF)
- R.A. No. 11057: Personal Property Security Act (PPSA)

Enhanced MANAGEMENT AND LABOR CAPACITIES (MINDSET, MASTERY, MENTORING)

- SME Roving Academy (SMERA)
- Kapatid Mentor ME (KMME)
- ASEAN SME Online Academy
- Youth Entrepreneurship Program (YEP)
- Negosyo Serbisyo sa Barangay (NSB)
- Skills Training for Employment/ Entrepreneurship Program (STEEP)
- Gender-Responsive Economic Actions for the Transformation (GREAT) of Women
- · Productivity Toolbox (NWPC)

Improved ACCESS TO TECHNOLOGY AND INNOVATION (MACHINES, MODELS)

- Shared Service Facilities (SSF)
- Fabrication Laboratories (FabLab)
- One Town, One Product (OTOP) Next Gen
- Small Enterprise Technology Upgrading Program (SETUp)
- Food Innovation Center (FIC)
- One Laboratory (OneLab)

Improved ACCESS TO MARKET (MARKET)

- Trade Fairs
- Regional Interactive Platform for Philippine Exporters (RIPPLES) Plus Program
- Go Lokal!
- One Town, One Product (OTOP) Hub
- Brand Equity Development Program (BrEDP)
- APEC MSME Marketplace

Low Carbon, Energy Efficiency & Renewable Energy Related Support Program for MSMEs

Green Economic Development (GED)

- Promotion of GED (ProGED, 2013-2016)
 - Promoting inclusive, environment-friendly, and climatesmart strategies and measures.
 - The interventions are geared towards encouraging MSMEs to make their business more environment-friendly and climate-smart while increasing their competitiveness.
- Acceleration of GED (AccGED, 2017-2018)
 - Aimed at capacitating regional GED focal persons and business counsellors on the positive results of the project.

Link to project: https://www.dti.gov.ph/programs-projects/faps/proged

Low Carbon, Energy Efficiency & Renewable Energy Related Support Program for MSMEs

Greening the Philippine Manufacturing Industry Roadmap

- developed as part of ProGED
- defines a well-focused stimulation and promotion program for an industry driven GED
- Focus Sectors:
 - 1. Pulp and Paper
 - 2. Housing
 - 3. Plastics
 - 4. Automotive
 - 5. Furniture

Link to report: http://boi.gov.ph/industry-development/industry-development-program/programs/greening-manufacturing/

MSME Policies:

Excerpt from the Automotive Industry Greening Roadmap

Challenges & Support Needed

1 Parts & Vehicle Manufacturing

Challenges	Support Needed	
Sustainable vehicle & parts manufacturing	Collaboration between the academe & industry to identify measures on how to incorporate sustainability initiatives in the manufacturing plants:	
	 Shift to low-carbon technologies Use of renewable energy Reduce water consumption, etc. 	
 Increase number of ISO 14001 certified parts manufacturers 	Industry to encourage parts manufacturers to secure ISO certification	
Production of "cleaner" vehicleAffordable clean vehicle	Government to provide incentives to the manufacture, assembly, importation and use of AFVs	



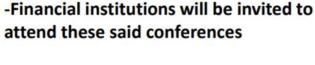
MSME Policies:

Excerpt from the Plastic Industry Greening Roadmap

Towards Technological Innovation thru Bank Financing



 PPIA could arrange Technological conferences for their members to promote efficient and sustainable production





-Unfortunately, upgrading technologies and processes comes with a hefty cost



 These financial institutions will be asked to create a financing plan to help PPIA's SME members to upgrade their technology and processes.

MSME Best Practices

Finance Access for Energy Efficiency & Renewable Energy Program

- DOST Small Enterprise Technology Upgrading Program (SETUP)
- DOST-ITDI Energy Auditing Services (free)

Link to report:

http://pcieerd.dost.gov.ph/images/pdf/informationresources/APEC_2016/9_Sicat_DOST_Energy_Audit_and_SETUP_Progra m_for_MSMEs.pdf

MSME Best Practices: SETUP

DOST SETUP improves the competitiveness of MSMEs through:

- Technology Needs Assessment (TNA)
- Access to and Acquisition of Appropriate Technology
- Innovation System Support (ISS) Funding Assistance
 - Acquiring Appropriate Equipment
 - Capacity Building and Technical Trainings
 - Consultancy and Technical Advisory Services
 - Product Development and Product Standards and Testing
 - Packaging and Labeling
- Information System

RESULTS

- ✓ Increased productivity
 - ✓ Improved product quality and marketability
- ✓ Increased capability to serve wider market
- ✓ Access to international market
 - ✓ Diversification of products and expansion

MSME Best Practices: SETUP

SETUP Accomplishments (from 2002-2015)

- ✓ Total amount of projects funded is 57M USD.
- √ 3,869 projects funded.
- √ ~3,000 MSMEs assisted per year.

MSME Best Practices: Energy Audit

Scope of Free Energy Auditing Services

- Boilers and Steam Systems
- Electrical Motors
- Lighting
- Refrigeration and Air Conditioning
- Kilns and Furnaces
- Pumps and Fans
- Air Compressors
- Dryers
- Generator Sets and Transformers





MSME Best Practices: Energy Audit

ENERGY AUDIT IN MSMES

A food manufacturing company in Laguna realized:

- savings of about \$11,230.00 within six months (Dec 2010-May 2011) with improvements in their boilers and steam system.
- savings of around 32 barrels of oil equivalent (boe).
- reduction of greenhouse gas emission equivalent to 37 metric tons(MT) of CO₂.



MSME Best Practices: Energy Audit

ENERGY AUDIT IN MSMES

A meat processing company in Pampanga realized:

- savings of about \$40,750.00 within six months (Sept. 2007-March 2008) with improvements in their refrigeration and air conditioning system.
- saving of around 155 barrels of oil equivalent (boe).
- reduction of greenhouse gas emission equivalent to 132 metric tons (MT) of CO₂.



MSME Best Practices: Energy Audit

DOST Energy Auditing Accomplishments:

- ✓ Total of 213 detailed energy audits from 2000-2015.
- ✓ Total potential annual savings of about 4M USD.
- ✓ Reduction of GHG emissions equivalent to 14 ktons of CO₂.
- ✓ Savings of around 12k barrels of oil equivalent.

For

government

MSME Needs Analysis

Intervention Needed to improve MSME Energy Utilization Management

- Technology Access
 - Exposure of local MSMEs to international sector-specific best practices and technologies.
 - Capacitating industry associations/chambers.
- Financing Access
 - Existing investment incentive schemes should address more comprehensively green elements.
- Policy Support
 - Assistance on design and measurement of indicators for "greening" of industries.
 - Comprehensive cost-benefit study on improving energy efficiency and use of low carbon technologies in MSMEs.

For the

company

- ✓ Statistics on actual energy consumption
- ✓ Energy savings vs investment costs
- ✓ Health savings (from pollution reduction)
- ✓ Social costs (from greenhouse gas mitigation)
- ✓ Energy security costs (from reduced primary energy importation)
- Information dissemination / awareness drive

Thank you!

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