

# DNAs' Support to CDM Benefits Beyond Emissions Reduction

By: Albert Altarejos MAGALANG

Philippine DNA for CDM

# Support to CDM Benefits

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- ▶ Enhance the existing SD benefits matrices in SDBD as reference for monitoring by the DNA (e.g. measurement of SD Co-benefits)
- ▶ Conduct of regular monitoring of CDM project activities to determine progress of the provision of their SD benefits to the community/ies or beneficiaries as stated in SDBD
  - *in short, monitoring of the projects' contribution to SD (PA 21, MDGs, expanded CSR, support to the community's development plans, etc.)*



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## Measuring and Monitoring SD Benefits

*e.g., development of a point system for a set of sustainable development (SD) criteria/indicators as part of the MRV framework*



# General SD Criteria

## ECONOMIC DIMENSION

Provides livelihood and other economic opportunities in the community

Provides proper safety nets and compensatory measures for affected stakeholders

Promotes the use of cleaner, more efficient and environment-friendly technology

Provides new financial resources

## ENVIRONMENTAL DIMENSION

Complies with environmental policies and standards

Improves local environment (e.g. air, water, soil) quality

Promotes sustainable use of natural resources

## SOCIAL DIMENSION

Provides education and training which build the capacities of local stakeholders

Provides vulnerable groups access to local resources and services

Promotes local participation in the project

### Annex. Quantified Sustainable Development Benefits

Project Name	Location	Section	Quantified SD Benefits
ADSW RP2012	R. Jorgenetics Farm, Rodriguez Rizal  EG <sup>1</sup> = 767 MWh	A.3	<ul style="list-style-type: none"> <li>The estimated amount of fossil oil displaced annually by the project is estimated at 65.95 tonnes of oil equivalent (toe) which is approximately 485 barrels of oil (bbl). This volume has an estimated market value of approximately \$ 48,500.00 ≈ Php 1,940,000.00 given the market price of oil at \$100/barrel. Thus, the project can help decrease the country's dependence on oil usually acquired through importation.</li> </ul>
		A.4	<ul style="list-style-type: none"> <li>Given the arrangement between the farm and the project developer on the generation and supply of electricity from the digester, the monthly savings in electricity in the farm is estimated at Php 36,000 basing from the previous electricity bills before the project was implemented.</li> </ul>
		B.1	<ul style="list-style-type: none"> <li>The TSS reduction is 68.4%.</li> </ul>
		B.2	<ul style="list-style-type: none"> <li>The amount of fossil oil displaced by the project annually (otherwise consumed by power plants to generate the electricity to supply the grid) is estimated at 485 barrels of oil. This has a market value of approximately \$ 48,500.00 ≈ P 1,940,000.00 given the market price of oil at \$100/barrel.</li> </ul>
		C.3	<ul style="list-style-type: none"> <li>The project will employ 10 contractual employees in the development of the project activity which will last approximately 23 days. Also, at least 30 people will be needed to lay down the HDPE liner and cover the digester. This activity alone will require at least 16 days. The economic incentive of employing local people (from the neighborhood) is estimated at Php 197,000.00.</li> </ul>
ADSW RP2013	Celevy Farm, Bamban, Tarlac  EG = 575 MWh	A.3	<ul style="list-style-type: none"> <li>The estimated amount of fossil oil displaced annually by the project is estimated at 49.44 tonnes of oil equivalent (toe) which is approximately 363 barrels of oil (bbl). This volume has an estimated at market value of approximately \$ 36,300.00 ≈ Php 1,452,000.00 given the market price of oil at \$100/barrel. Thus, the project can help decrease the country's dependence on oil usually acquired through importation.</li> </ul>
		A.4	<ul style="list-style-type: none"> <li>Given the arrangement between the farm and the project developer on the generation and supply of electricity from the digester, the monthly savings in</li> </ul>

<sup>1</sup> EG Electricity Generated annually

			electricity in the farm is estimated at Php15,436 basing from the previous electricity bills before the project was implemented.
		B.1	• The TSS reduction is 52.7%.
		B.2	• The amount of fossil oil displaced by the project annually (otherwise consumed by power plants to generate the electricity to supply the grid) is estimated at 363 barrels of oil. This has a market value of approximately \$ 36,300.00 ≈ P 1,452,000.00 given the market price of oil at \$100/barrel.
		C.3	• The project will employ 10 contractual employees in the development of the project activity which will last approximately 23 days. Also, at least 30 people will be needed to lay down the HDPE liner and cover the digester. This activity alone will require at least 16 days. The economic incentive of employing local people (from the neighborhood) is estimated at Php 204,000.00.
ADSW RP2014	Edward Farm, Porac, Pampanga  EG =767 MWh	A.3	• The estimated amount of fossil oil displaced annually by the project is estimated at 65.95 tonnes of oil equivalent (toe) which is approximately 485 barrels of oil (bbl). This volume has an estimated at market value of approximately \$ 48,500.00 ≈ Php 1,940,000.00 annually given the market price of oil at \$100/barrel. Thus, the project can help decrease the country's dependence on oil usually acquired through importation.
		A.4	• Given the arrangement between the farm and the project developer on the generation and supply of electricity from the digester to the farm, the monthly savings in electricity in the farm is estimated at Php 19,000 basing from the previous electricity bills before the project was implemented.
		B.1	• The TSS reduction is 35.7%.
		B.2	• The amount of fossil oil displaced by the project annually (otherwise consumed by power plants to generate the electricity to supply the grid) is estimated at 485 barrels of oil. This has a market value of approximately \$ 48,500.00 ≈ Php 1,940,000.00 given the market price of oil at \$100/barrel.
		C.3	• The project will employ 10 contractual employees in the development of the project activity which will last approximately 23 days. Also, at least 30 people will be needed to lay down the HDPE liner and cover the digester. This activity alone will require at least 16 days. The economic incentive of employing local people (from the neighborhood) is estimated at Php 204,000.00.
ADSW RP2015	Geneco, San	A.3	• The estimated amount of fossil oil displaced annually by the project is estimated

	Fernando, Pampanga EG = 767 MWh		at 65.95 tonnes of oil equivalent (toe) which is approximately 485 barrels of oil (bbl). This volume has an estimated at market value of approximately \$ 48,500.00 ≈ Php 1,940,000.00 given the market price of oil at \$100/barrel. Thus, the project can help decrease the country's dependence on oil usually acquired through importation.
		A.4	<ul style="list-style-type: none"> <li>Given the arrangement between the farm and the project developer on the generation and supply of electricity from the digester, the monthly savings in electricity in the farm is estimated at Php 12,000 basing from the previous electricity bills before the project was implemented.</li> </ul>
		B.1	<ul style="list-style-type: none"> <li>The TSS reduction is 57.8%.</li> </ul>
		B.2	<ul style="list-style-type: none"> <li>The amount of fossil oil displaced by the project annually (otherwise consumed by power plants to generate the electricity to supply the grid) is estimated at 485 barrels of oil. This has a market value of approximately \$ 48,500.00 ≈ Php 1,940,000.00 given the market price of oil at \$100/barrel.</li> </ul>
		C.3	<ul style="list-style-type: none"> <li>The project will employ 10 contractual employees in the development of the project activity which will last approximately 23 days. Also, at least 30 people will be needed to lay down the HDPE liner and cover the digester. This activity alone will require at least 16 days. The economic incentive of employing local people (from the neighborhood) is estimated at Php 204,000.00.</li> </ul>
ADSW RP2016	Purebreed Farm, Sta. Ignacia, Tarlac EG = 767 MWh	A.3	<ul style="list-style-type: none"> <li>The estimated amount of fossil oil displaced annually by the project is estimated at 65.95 tonnes of oil equivalent (toe) which is approximately 485 barrels of oil (bbl). This volume has an estimated at market value of approximately \$ 48,500.00 ≈ Php 1,940,000.00 given the market price of oil at \$100/barrel. Thus, the project can help decrease the country's dependence on oil usually acquired through importation.</li> </ul>
		A.4	<ul style="list-style-type: none"> <li>Given the arrangement between the farm and the project developer on the generation and supply of electricity from the digester to the farm, the monthly savings in electricity in the farm is estimated at Php 11,300.00 basing from the previous electricity bills before the project was implemented.</li> </ul>
		B.2	<ul style="list-style-type: none"> <li>The amount of fossil oil displaced by the project annually (otherwise consumed by power plants to generate the electricity to supply the grid) is estimated at 485 barrels of oil. This has a market value of approximately</li> </ul>



# Economic Dimension

SD Criteria/Indicators	Points
Additional employment generated (permanent) per Php 1,000,000 CER revenue	10
Additional employment generated (temporary) per Php 1,000,000 CER revenue	5
Additional PhP 100,000 generated in livelihood activities per Php 1,000,000 CER revenue	5
Additional PhP 100,000 generated in micro-financing activities per Php 1,000,000 CER revenue	5
Additional employment generated (perm) in livelihood activities per PhP 1,000,000 CER revenue	10
Additional employment generated (temp) in livelihood activities per PhP 1,000,000 CER revenue	5
Per 1% of compensation paid for relocation, resettlement	2
A well-designed or well-maintained pollution control facility/system	5
For each program on clean technology, energy and water conservation in use	5
For each community environmental outreach program in place	5
For each program on waste reduction in specific media (e.g., solid, liquid)	5
For every \$1000,000 new investment generated internationally (i.e., direct foreign investment)	10
For every \$1000,000 new investment generated domestically (i.e., from local banks)	5

CER-related

Non-GHG



# Environmental dimension

SD Criteria/Indicators	Points
Compliance with all required environmental permits	5
For every environmental award (local/provincial)	5
For every environmental award (national)	10
For every environmental award (international)	20
For every pollution level of effluent/emission better than standards	2
for every pollution level of effluent/emission 20% better than standards	5
Environmental Management System is in place	10
per PhP 100,000 allocated in outreach program on sustainable use of natural resources per PhP 1,000,000 CER revenue	5
per PhP 50,000 allocated in direct investment on natural resources (e.g., reforestation) per PhP 1,000,000 CER revenue	5

# Social dimension

SD Criteria/Indicators	Points
per PhP 100,000 allocated to training activities per PhP 1,000,000 CER revenue	5
per PhP 50,000 allocated to (formal school) scholarship per PhP 1,000,000 CER revenue	5
per PhP 100,000 allocated to basic services (e.g., water, health, sanitation) per PhP 1,000,000 CER revenue	5
per PhP 50,000 allocated to special services targeted for vulnerable groups per PhP 1,000,000 CER revenue	5
per PhP 50,000 allocated to IEC campaign on CDM per PhP 1,000,000 CER revenue	10
per PhP 50,000 of goods or services from CDM projects given to residents for free (e.g., compost, electricity)	5
per PhP 100,000 of goods or services from CDM projects given to residents at below market cost_(e.g., compost, electricity subsidy)	5
per 10% of community involvement as measured in participation in MMT, monitoring activities, company events, etc.	5

# New Approaches (?) Using SD Indicators

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- ▶ Domestic Incentive system for the business sector (e.g. Carbon Sequestration Investment)
- ▶ Co-benefits Measurement (e.g. 1 ton of CO<sub>2</sub> ~ US\$100) – dependent on baseline data and linked to national priorities  
*(inter-governmental convergence, e.g., significant roles of ministries of : health, agriculture, environment & natural resources, social work and development, etc.)*



# Support to CDM Benefits

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- ▶ Assist in providing the necessary information and updates on related policies and programs that could facilitate smooth and effective delivery of SD benefits (i.e., RE policies, tax incentives, etc.)
- ▶ Ensure public participation in the development and implementation of CDM projects
- ▶ Strengthen inter-governmental collaboration and public-private partnerships on CDM investment promotion



# Support to CDM Benefits

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- Explore other mechanisms (e.g. NAMAs or NMMs) as an alternative market for carbon credits generated by mitigation projects – to co-exist with the existing market mechanism
- Actively support the improvement of the modalities and procedures of CDM to encourage better participation;
- Facilitate the formulation of national policies that would promote the participation of the small players in the industry especially in the energy sector



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*thank you . . .*

Presented By:  
Albert Altarejos MAGALANG  
Head, Climate Change Office  
Environmental Management Bureau  
Department Of Environment and Natural Resources  
The Philippines

*Email: [albertmagg@emb.gov.ph](mailto:albertmagg@emb.gov.ph)  
+632 9202251/ 376 1992*

