



LONGYUAN MULILO DE AAR 2 NORTH WIND ENERGY FACILITY



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Project Title	Longyuan Mulilo De Aar 2 North Wind Energy Facility
Project ID	1950
Project Start Date	31-October-2017
SD Contributions Reporting Period	1-November-2017 to 31-December-2020
Date of Issue	14-December-2021
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1 SUMMARY OF SUSTAINABLE DEVELOPMENT CONTRIBUTIONS

The project comprises only one activity – a single wind farm with the total installed capacity of 144 MW, which was implemented close to the town of De Aar in the Northern Cape Province of the Republic of South Africa. 96 x UP86-1.5MW turbines, supplied by Guodian United Power, are employed by the project.

Electricity generated by the project is fed into the electricity grid of the Southern African Power Pool (SAPP), where South Africa is represented by Eskom, displacing energy that would have otherwise be generated by the operation of the grid-connected power plants of the SAPP and by the addition of new generation sources that is reflected in the combined margin CO₂ emission factor of 0.9871 t CO₂/MWh adopted for the electricity system of the SAPP.

As part of regional development efforts associated with the wind project, Longyuan Mulilo De Aar 2 North (RF) (Pty) Ltd (Longyuan Mulilo) has:

- Initiated a Longyuan Mulilo Health Project to provide health services, including primary healthcare, dental, eye clinic and COVID-19 related services to students, educators and community members around the project using a Mobile Health Clinic (MHC), which was donated to the Department of Health to screen up to 8 800 learners annually on a permanent base. Areas visited by the MHC to date include St Johns Primary School, Emthanjeni Primary School, Orion High School, Monwabisi High School, Veritas High School, De Aar Town Clinic, Hoerskool Theron School, Montana Clinic, Nonzwakazi Clinic;
- Launched Maths Enrichment Program aiming at improving the results of the subjects in the local schools through resourcing the learners, stimulating interest in the subjects, and creating opportunities to study further in subject related tertiary courses. The enrichment program also aims to encourage more leaners to take Maths and Science to Grade 12 level. Longyuan Mulilo's funding contributions went for salaries, student allowances, student study sponsorship, running cost and management fees;
- Launched a Bursary Programme for tertiary studies to support students, which among others includes covering of tuition fees, institution's registration fees and accommodation fees, as well as book allowance per annum, food stipend (if the student applied and qualified) and laptops. Students are selected based on financial circumstances and targeting those that could not have attended tertiary

education without support of the bursary programme. Annual budget of R4 000 000 was allocated to the Bursary Programme;

- Renovated the 3 Early Childhood Development (ECD) Centres: Kaalvoet Akademie ECD, Karoo Druppels ECD and Mthuthuzeli Daycare ECD, with the long term impact to provide quality early childhood development programmes and services for the benefit of young children, their families and the communities and by also improving quality of early childhood development in Emthenjeni and Renosterberg regions of South Africa. Longyuan Mulilo contributes towards salaries, food and other support;
- Upgraded the house and assisted with reparations of the Safe Haven located in Philipstown, which aim is to serve and help the abused women and children of Philipstown;
- Funded the rehabilitation of the water supply system of Philipstown. 5 existing boreholes were cleaned and re-equipped, 1 new borehole was drilled.

2 PROJECT CONTRIBUTIONS

Table 1 : Sustainable Development Contributions

Row number	SDG Target	SDG Indicator	Net Impact on SDG Indicator	Current Project Contributions	Contributions Over Project Lifetime
1)	3.8	3.8.1 Coverage of essential health services	Implemented activities to increase	35 251 people have been screened. These are made up of 2 121 Primary Healthcare screenings, Optometry screenings, Dental screenings and 33 130 COVID-19 Screenings. The actual amount of Primary Healthcare screenings is less than the anticipated (8,800) due to the COVID-19 constraints	35 251 people have been screened These are made up of 2 121 Primary Healthcare screenings, Optometry screenings, Dental screenings and 33 130 COVID-19 Screenings.
2)	4.1	4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Implemented activities to increase	Maths enrichment program was launched for learners in the 10 primary schools and 4 high schools, reaching 2,316 learners	2,316 learners went through the programme in 2018, 2,831 in 2019 and 2922 in 2020
3)	4.2	The number of children enrolled in early childhood development centres	Implemented activities to increase	3 Early Childhood Development Centres were renovated. Longyuan Mulilo contributes towards salaries, food, supporting 155 children between the ages of 2 and 6 years.	Over 155 underprivileged Children ages between 2-6 years attend the ECD from the community.

4)	4.3	4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	Implemented activities to increase	Bursary programme. Of these 108 students, 12 are government identified students from around South Africa with the remaining coming from the communities within a 50 km radius of the Wind Farm, 4 are studying postgraduate qualifications, 6 are on the graduate programme for work experience as part of their qualification, 4 are studying degrees in China as part of an energy skills transfer programme and the remaining are studying undergraduate degrees.	108 students are currently on the Bursary programme. Of these 108 students, 12 are government identified students from around South Africa with the remaining coming from the communities within a 50 km radius of the Wind Farm, 4 are studying postgraduate qualifications, 6 are on the graduate programme for work experience as part of their qualification, 4 are studying degrees in China as part of an energy skills transfer programme and the remaining are studying undergraduate degrees.
5)	4.b	4.b.1 Volume of official development assistance flows for scholarships	Implemented activities to increase	Bursary programme has spent a total of R11,727,823,36 to end December 2020	Bursary programme has spent a total of R11,727,823,36 to end December 2020
6)	6.1	6.1.1 Proportion of population using safely managed drinking water services	Implemented activities to increase	Completed cleaning of the 5 existing boreholes to provide potable water to 6,502 people	Provided at least 941 kl of potable water per day to 6,502 people by improved wells
7)	13.0	Tonnes of greenhouse gas emissions avoided or removed	Implemented activities to decrease	By supplying wind-generated electricity to the grid, the project has prevented the release of 1,428,835 tonnes of CO ₂ into the atmosphere during the reporting period	Prevented the release of 1,428,835 tCO ₂ into the atmosphere

APPENDIX 1: SUPPORTING EVIDENCE



Figure 1 – Photos from Longyuan Mulilo Health Project



Figure 1 – Photos from Longyuan Mulilo Health Project (continuation)



Figure 1 – Photos from Longyuan Mulilo Health Project (continuation)



Figure 2 – Photos from Maths Enrichment Program classes



Figure 2 – Photos from Maths Enrichment Program classes (continuation)



Figure 2 – Photos from Maths Enrichment Program classes (continuation)

LAERSKOOL

KAREEVILLE

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PRIMARY SCHOOL

November 26, 2019

Longyan Mulilo Wind Projects

THANK YOU FOR YOUR CONTINUED SUPPORT OF OUR SCHOOL KAREEVILLE PRIMARY.

It is with a grateful heart that I am writing you this letter. Thank you for funding the Douglas SEDC De Aar mathematics program. The projects is providing valuable support to our teachers, learners and young persons from our community. Their model supports us in our efforts to implement inclusive education and improving numeracy amongst all our learners.

We look forward to your continued support to grow and expand the impact of our collective efforts to improve the lives of the communities of the Pixley Ka Seme district.

Thank you again for making this possible.

Yours sincerely

D.J. Karelse

D.J. KARELSE
HEADMASTER

Figure 2 – Photos from Maths Enrichment Program classes (continuation)

Departement van Onderwys / Department of Education

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To: Longyuan Mulilo Wind Projects

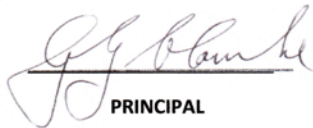
RE: THANK YOU FOR YOUR CONTINUED SUPPORT OF OUR SCHOOL ALPHA PRIMARY.

It is with a grateful heart that I am writing you this letter. Thank you for funding the Douglas SEDC De Aar mathematics program. The projects is providing valuable support to our teachers, learners and young persons from our community. Their model supports us in our efforts to implement inclusive education and improving numeracy amongst all our learners.

We look forward to your continued support to grow and expand the impact of our collective efforts to improve the lives of the communities of the Pixley Ka Seme district.

Thank you again for making this possible.

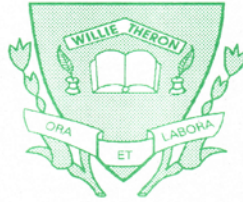
Yours sincerely



PRINCIPAL

Figure 2 – Photos from Maths Enrichment Program classes (continuation)

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Longyuan Mulilo Wind Projects

1. Thank you for your continued support of our school, Willie Theron Primary.

I am very fortunate to write this letter to you. Thank you for funding the Douglas SEDC De Aar mathematics program. We could clearly see the big difference that is made through this project. The project is providing valuable support to our teachers, learners and young persons from our community. Their model supports us in our efforts to implement inclusive education and improving numeracy amongst all our learners.

We look forward to your continued support to grow and expand the impact of our collective efforts to improve the lives of the communities of the Pixley Ka Seme district.

Thank you again for making this possible.

Yours sincerely

Principal



Figure 2 – Photos from Maths Enrichment Program classes (continuation)

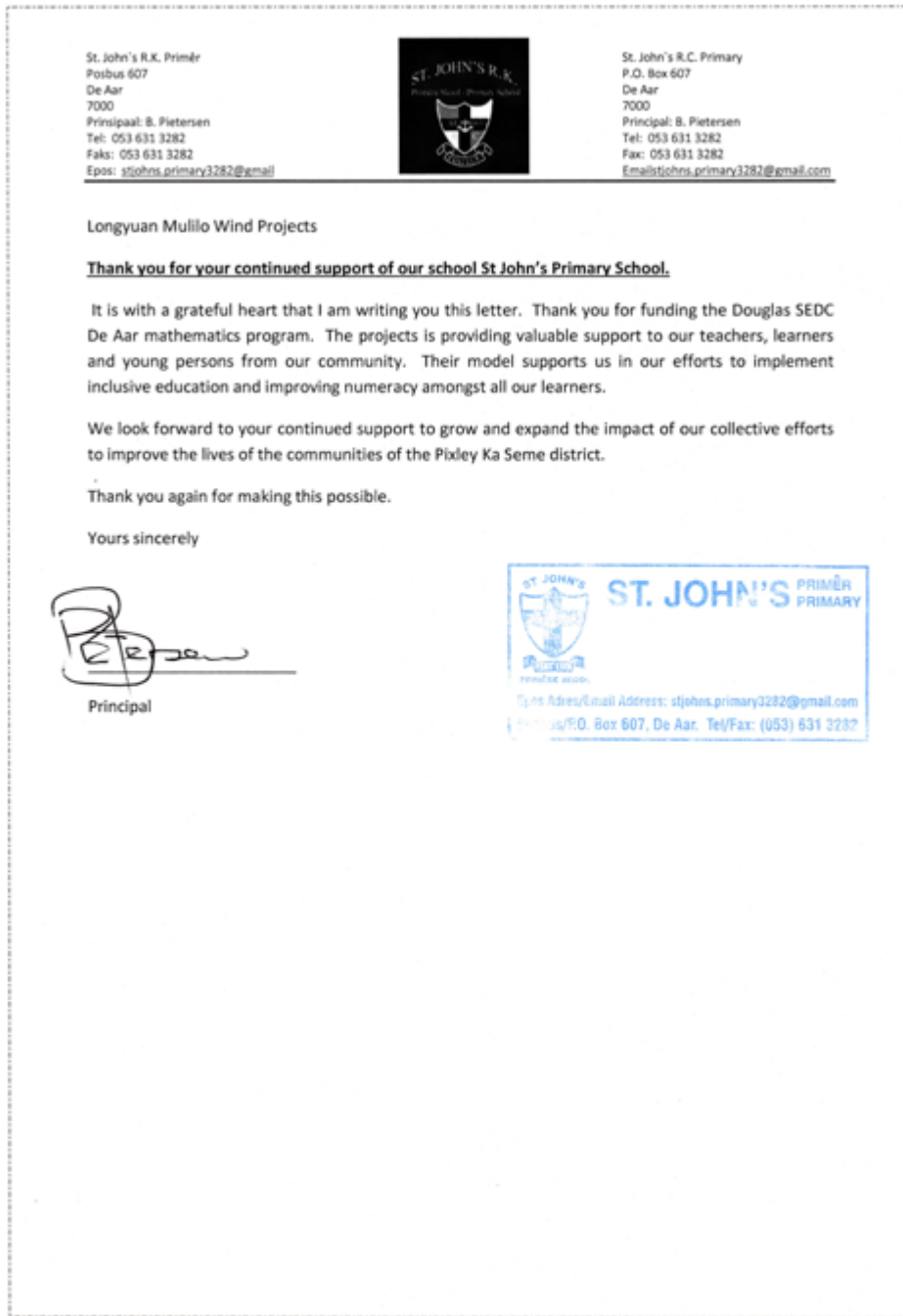


Figure 2 – Photos from Maths Enrichment Program classes (continuation)



Figure 3 – Learners of the Kaalvoet Akademie ECD



Figure 4 – Learners of the Karoo Druppels ECD



Figure 5 – Photos of the Mthuthuzeli Daycare ECD



Figure 6 – Photos of students of Bursary Programme



Figure 7 – Photos of re-equipped boreholes



Figure 7 – Photos of re-equipped boreholes (continuation)



Figure 7 – Photos of re-equipped boreholes (continuation)



Figure 7 – Photos of re-equipped boreholes (continuation)