Sustainalytics Corporate Solutions

Corporate Impact Report

Executive Summary

PT Austindo Nusantara Jaya Tbk, commonly known as ANJ Group, is a large Indonesian conglomerate that operates in the agribusiness sector.[1] The company is primarily involved in the production and processing of palm oil and agricultural commodities like sago, edamame and renewable energy.[2] ANJ Group has a significant presence in Indonesia's palm oil industry, with plantations and mills located in different provinces across the country.[3]

In this report, Sustainalytics evaluates ANJ's impacts on gross domestic product (GDP) and jobs sustained as a result of its operations, local supply chain spending and investments. Sustainalytics has identified the following key areas for impact assessment:

- ANJ's operations in 2022, including revenue and employment
- Supply chain spending in Indonesia in 2022
- Investments in Community Involvement and Development (CID) programmes, including saving cooperatives, early childhood education and edamame production
- Selected environmental projects, including efficiency improvements for water and energy, as well as production of renewable energy[4]

Using ANJ's annual revenue and supply chain spending data, Sustainalytics measured ANJ's impacts as per the following indicators:

Contribution to Gross Domestic Product (GDP): GDP being the value of final goods and services produced within an economy within a certain period, Contribution to GDP is the total value added to the economy by an activity, measured in USD.

***Employment or Jobs Sustained*:** The annual full-time equivalent (FTE) jobs sustained within the economy resulting from an activity.

[1] ANJ Group, "Our Profile", accessed (14/03/2023) at: https://anj-group.com/en/our-profile
[2] ANJ Group, "Core Business", accessed (14/03/2023) at: https://anj-group.com/en/oil-palm-plantation
[3] ANJ Group, "Oil Palm", accessed (14/03/2023) at: https://anj-group.com/en/oil-palm-plantation
[4] This report does not assess the entire environmental and social footprint of ANJ, but only the ones of selected projects.

Impact Highlights[5,6]

$256M
Impact on GDP

13,170
Jobs Sustained

$133M
Spent on Indonesian businesses

$643,040
Investment in CID programmes (USD)

40,800
tCO_2e avoided

44,563
Renewable Energy Generated, MWh

206
Early childhood education beneficiaries in Southwest Papua

219,953
m^3 water saved

2,507
Beneficiaries of savings cooperatives and grocery stores in Southwest Papua

91
Farmers accessed the edamame cultivation programme in Belitung Island

[5] Based on 2022 data provided by ANJ
[6] Highlighted SDGs are those that Sustainalytics considers ANJ's operations and initiatives have the potential to advance

Impact of ANJ's Operations

This section provides a detailed analysis of the total economic impacts of ANJ's operations, including impacts from company revenue, supply chain and local programmes in Indonesia.

Background

Founded in 1993, the ANJ Group, was formerly known as Perseroan Terbatas (PT) Austindo Teguh Jaya (ATJ). ANJ and its subsidiaries ("ANJ Group") focuses its operations on agribusiness and renewable energy.[7] The company's primary activity lies in the cultivation and production of crude palm oil (CPO) and palm kernel oil (PKO),[7] extraction of sago starch and vegetable harvesting and processing. Where total employment in Indonesia saw a growth rate of 3.5%, from 131 million in 2021 to 135 million in 2022, ANJ Group contributed to this employment with a total of 11,354 full-time employees in 2022, a 6.2%[8] increase from 2021.[9] ANJ Group has implemented several initiatives aimed at reducing its environmental impact and promoting social development in the communities where it operates.

In Indonesia, a 51% share of the 181 million adult population was unbanked or without access to financial services in 2022.[10,11] The absence of banking services and the geographic disconnect resulted in the reliance of the financially excluded population on illegal and unlicensed middlemen and moneylenders, leading to extortion, theft and poor money-saving practices.[10] In this challenging environment, exacerbated by the economic and social repercussions of the pandemic, ANJ's Savings Cooperative Programme implemented by ANJ's subsidiaries PT Permata Putera Mandiri (PT PPM) and PT Putera Manunggal Perkasa (PT PPM), aims to: a) improve access to the national banking system from a remote area in Southwest Papua at a significantly lower cost and b) improve access to staple food and groceries for employees and local communities, by offering store prices 17% lower than market rates.[12,13]

Approximately 4.2 million Indonesians drop out of education each year, leaving many students inept in basic reading and math skills.[14] A 2015 OECD report showcased that more than 50% of Indonesian students aged 15 did not demonstrate mastery in reading or mathematics.[15] To bridge this education gap, the Indonesian government has dedicated more than 20% of its spending towards improved education outcomes, focusing on early learning and teacher training.[15] Since its presence began in Southwest Papua (up until 31 December 2022), ANJ has cumulatively invested USD 292,677 and for the year 2022 ANJ invested USD 57,724 towards the Pendidikan Anak Usia Dini (PAUD) or Early Childhood Education programme in the Benawa, Sumano and Puragi villages in Southwest Papua. The program initially ran in partnership with not-for-profit organizations (ECCD-RC and the Alirena Foundation), but since mid-2022 ANJ ran the program in-house by recruiting teachers and

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[7] ANJ Group, "Our Profile", accessed (14/03/2023) at: https://anj-group.com/en/our-profile
[8] Full time staff only
[9] Statista Research Department, "Number of employed people aged 15 years and above in Indonesia from February 2013 to February 2022", Statista, accessed (15/03/2023) at: https://www.statista.com/statistics/1333739/indonesia-employment-numbers/
[10] Johan.I., (2022), "Tackling the Challenges of Financial Inclusion and Illegal Lending in Indonesia", Fulcrum, accessed (14/03/2023) at: https://fulcrum.sg/tackling-the-challenges-of-financial-inclusion-and-illegal-lending-in-indonesia/
[11] Hafiz.N, Azmi.K, et.al., (2022), "COVID-19 and its Implications to the Assessment of Sustainable Palm Oil Supply Chain Management – An Indonesian Perspective", Frontiers in Sustainability, Vol.2, 2022, accessed (14/03/2023) at: https://www.frontiersin.org/articles/10.3389/frsus.2021.738985/full
[12] Kagan J., (2022) "Perseroan Terbatas (PT): Overview and Types", Investopedia, accessed (16/03/2023) at: https://www.investopedia.com/terms/p/pt-perseroan-terbatas.asp .
[13] PT Permata Putera Mandiri (PT PPM) and PT Putera Manunggal Perkasa (PT PMP) are subsidiaries of PT Austindo Nusantara Jaya (ANJ) Group.
[14] World Bank, (2020), "The Promise of Education", World Bank, accessed (13/03/2023) at: https://documents1.worldbank.org/curated/en/658151605203420126/pdf/The-Promise-of-Education-in-Indonesia.pdf
[15] OECD and Asian Development Bank, (2015), "Education in Indonesia – Rising to the Challenge", Executive Summary, OECD, accessed (14/03/2023) at: https://www.oecd.org/education/Indonesia-executive-summary.pdf, Access the Full report at: https://doi.org/10.1787/9789264230750-en

assistant teachers. The PAUD programme draws upon local traditions and customs, and creates an avenue to build ownership among parents, indigenous communities and other stakeholders, including the local government in Southwest Papua.

With an effort to contribute to the sustainable production of edamame, ANJ invested USD 1,333 towards its Edamame Cultivation Programme in East Belitung. The programme provides technical assistance for edamame cultivation and helps develop a market for edamame cultivation, sale and introduction of edamame in various food products. Soybeans or edamame can be frozen and exported easily, without having to rely on seasons, which has made it one of the top agri-business products in Indonesia.[16]

This study assesses the total economic and social impacts of ANJ through its operations and activities, and maps the organization's contribution towards the UN SDGs, the environment and the society at large.[17]

ANJ Total Impact

Table 1: Summary of ANJ's total impact to the Indonesian economy resulting from its revenue (2022).

ANJ Revenue (2022)	Impact on GDP	Jobs Sustained
USD 269,167,378	USD 255,709,009	13,170

[16] Musyaraofah and Fajarani.A, (2019), "Social-Cultural Change of Edamame Farmers Society in Panti, Jember and its Utilization as Contextual Learning Materials in Social Studies", Proceeding – The 4th International Seminar on Social Studies and History Education (ISSSHE) 2019, accessed (13/03/2023) at: http://repository.upi.edu/47321/18/SPS_PRO_PIPS_ISSSHE_2019_Musyarofah_Anindya%20Fajarini.pdf

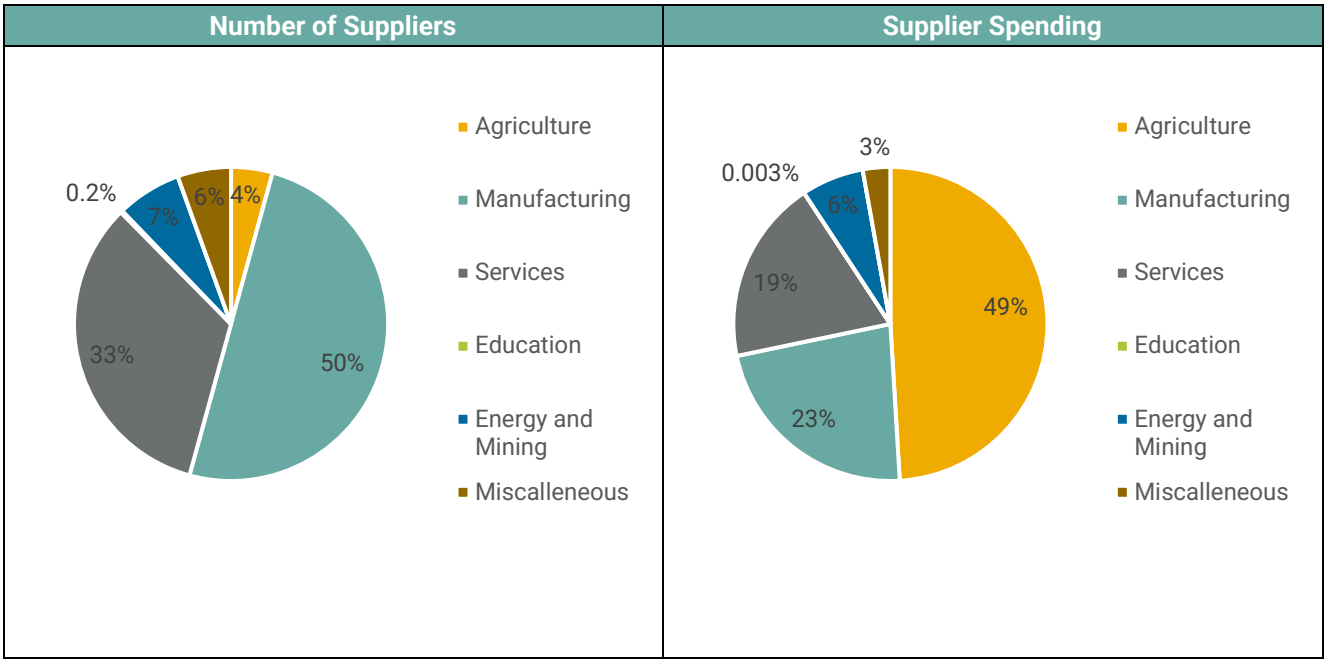
[17] Please refer to Appendix II for a summary on the methodologies that have guided this assessment.

Detailed Supply Chain Impact

This section of the study focuses on ANJ's suppliers in Indonesia. The following analysis details the economic impacts sustained by ANJ's supplier spending across Indonesia, including the total impacts on GDP and the jobs sustained. The information presented in this section provides estimates on sectoral and regional impacts through ANJ's supply chain spending.

Supply Chain Distribution Across Sectors

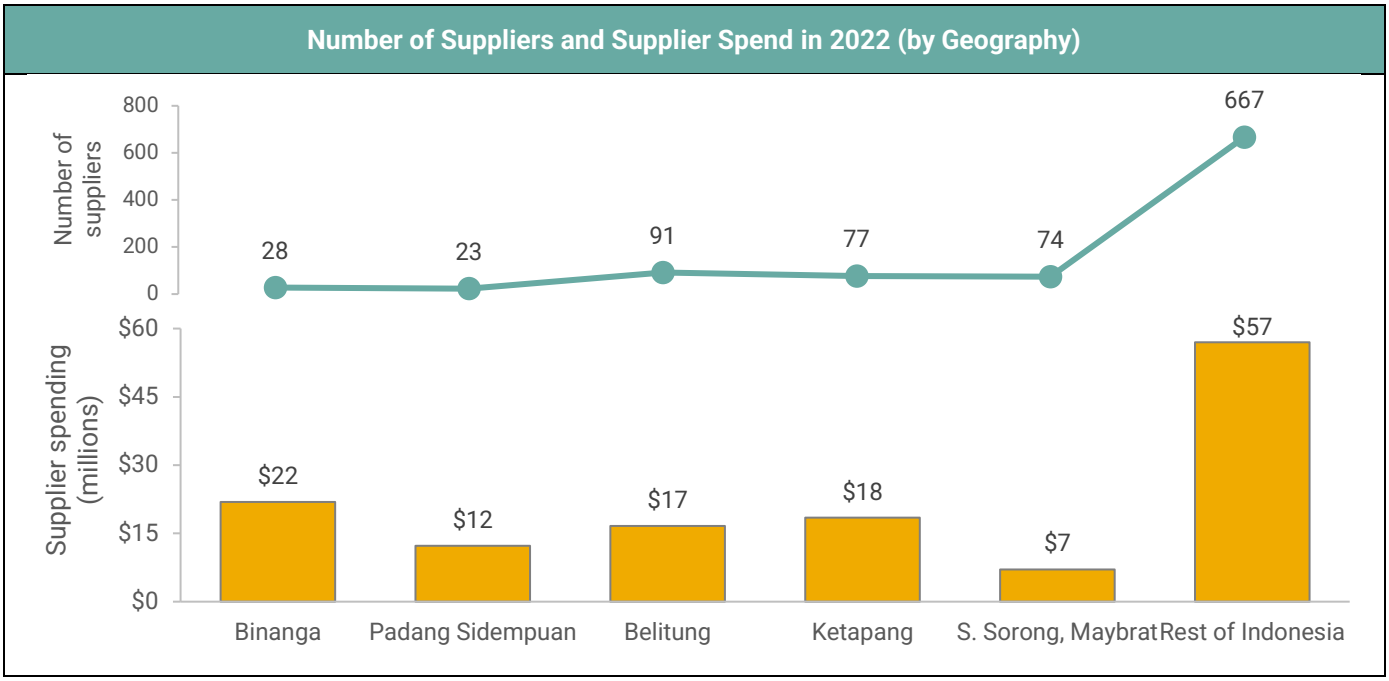
Figure 1: Share of ANJ suppliers across sectors in Indonesia in relation to contract values across sectors



Note that in Figure 1: Share of ANJ suppliers across sectors in Indonesia in relation to contract values across sectors above, the manufacturing sector has the highest share of suppliers, but the largest proportion of spending is in agricultural products.

Supply Chain Distribution Across Selected Geographies

Figure 2: Number of suppliers across selected geographies in Indonesia in relation to contract values



In the figure above, “Rest of Indonesia” consists mainly of offices in Jakarta and Medan. The Number of suppliers for each location represents direct suppliers and therefore, it includes intermediary Fresh Fruit Bunches (FFB) collectors. The number does not include smallholder farmers who indirectly supply to ANJ through the intermediary FFB collectors.

Impact on GDP

By Sector

Figure 3: Impact on GDP across sectors based on the activities of suppliers.

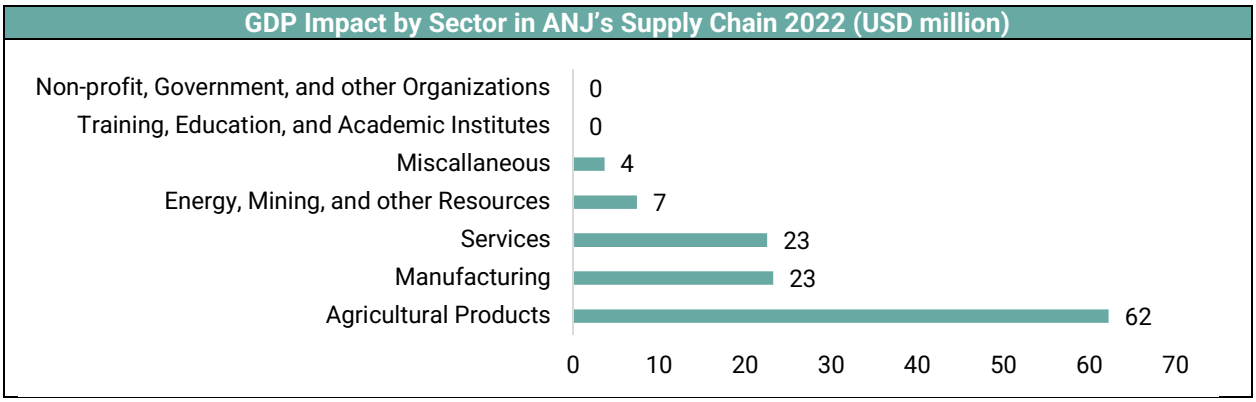


Figure 3: Impact on GDP across sectors based on the activities of shows that the agricultural products sector had the highest GDP impact among ANJ's supply chain in 2022.

By Geography

Figure 4: Impact on GDP across selected geographies based on the activities of suppliers.

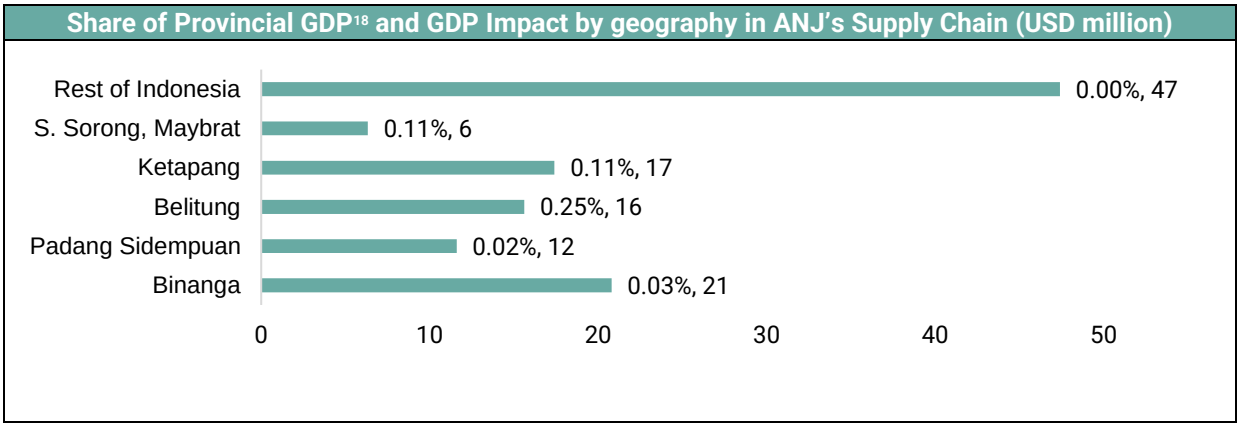
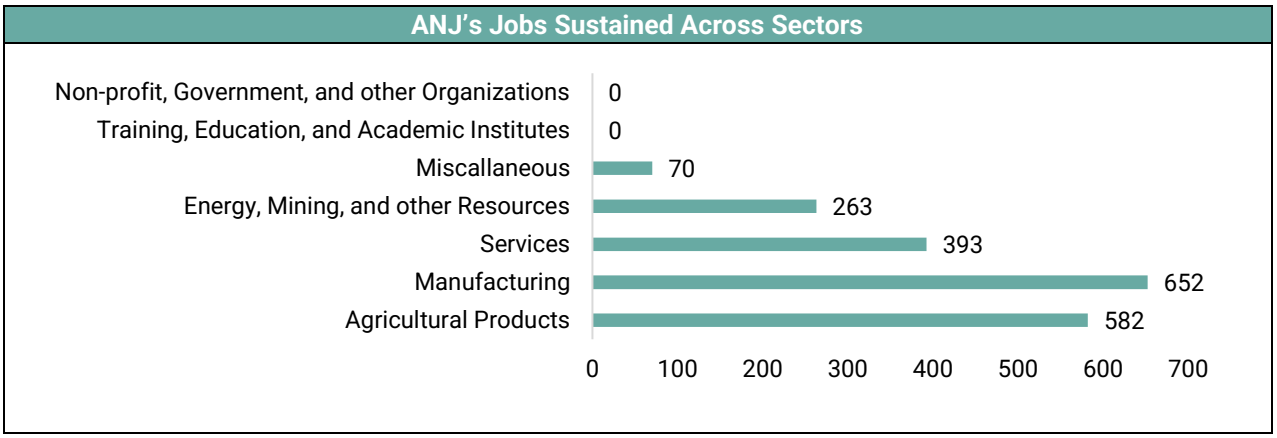


Figure 4 shows that the largest proportional impact in comparison with provincial GDP occurs in Belitung, whereas the largest impact on GDP occurs across the rest of Indonesia.

Jobs Sustained

By Sector

Figure 5: Jobs sustained across sectors resulting from spending with suppliers.

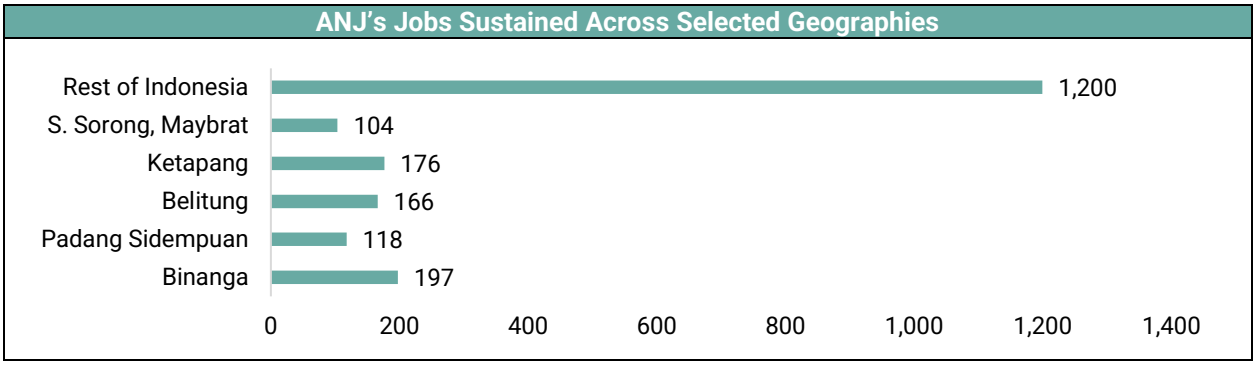


In Figure 5 jobs are defined in FTE, or full-time equivalent. ANJ sustains 582 FTE jobs from the agricultural products sector but has 4,182 smallholder farmers supplying fruits to palm oil mills, which may not work full time on supplying the fruit.

[18] Badan Pusat Statistik, "Produk Domestik Regional Bruto (Milyar Rupiah), 2020-2022", accessed (23/4/23) at: https://www.bps.go.id/indicator/52/286/1/-seri-2010-produk-domestik-regional-bruto-.html and USD/IDR exchange rate 0.0648, accessed (17/3/23), at: oanda.com

By Geography

Figure 6: Jobs sustained across selected regions resulting from spending with suppliers.



Across the selected geographies, the most jobs sustained from the ANJ supply chain outside of "Rest of Indonesia", which includes Jakarta and Medan, are in Binanga.

Community Involvement and Development Programmes

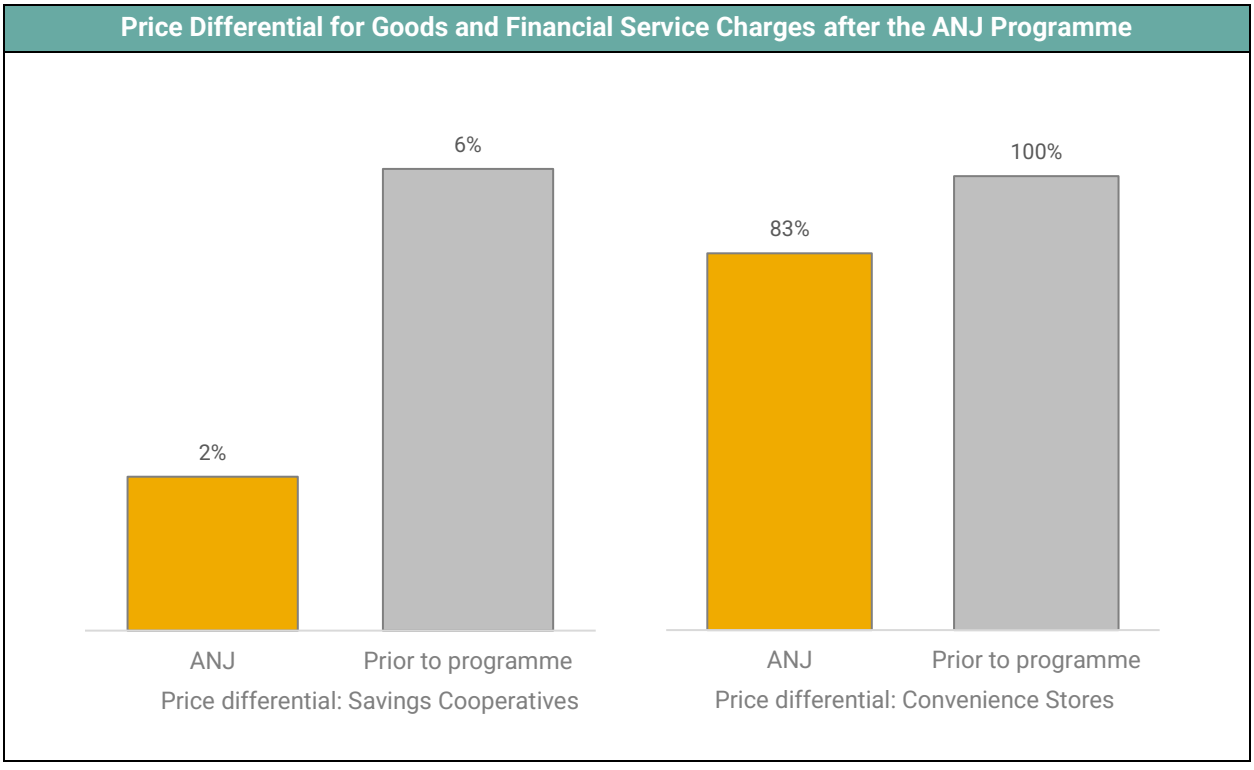
This section details some of the CID programmes in which ANJ invested in 2022, namely savings cooperatives, early childhood education and edamame programmes.

Savings Cooperatives

Up until the end of 2022, the company cumulatively invested USD 91,563 towards the Savings Cooperatives programme, which was spent towards opening grocery and convenience stores as well as financial services counters in Southwest Papua. This programme benefited 2,507 people, including employees and the broader community, while the total population in the South Sorong regency was 51,967 people.[19]

The graph below also depicts the difference in price experienced by service users prior to the ANJ programme. ANJ offers to clients of its savings cooperatives bank transfer costs that are 66% lower than it would have otherwise been in this area, including eliminating the need to travel to nearby cities for this service. ANJ also sells staple goods at prices 17% lower than the average market price to the beneficiaries of its convenience stores in 2022.

Figure 7: Price differentials for goods and financial service charges.



[19] Statistics of Sorong Selatan Regency, accessed (24/03/2023), at: https://sorongselatankab.bps.go.id/publication/2023/02/28/037891f42dd26cc806aee813/kabupaten-sorong-selatan-dalam-angka-2023.html.

Early Childhood Education

With an investment of USD 57,724 towards the PAUD programme, representing 9% of its total CID expenditure, ANJ reached 206 children in the Southwest Papua province in 2022.

The PAUD programme offered by ANJ did not charge any fees from its beneficiaries, offering free education as part of the programme, in comparison to the average monthly cost of USD 35 to access early childhood education in Indonesia.[20]

Edamame Cultivation Programme

ANJ invested USD 1,333 towards the Edamame Cultivation programme, to equip farmers with the tools and technical know-how on the sustainable production of edamame, and to educate farmers on how to process and use compost for the edamame cultivation. The programme, which offered free access to facilities and education services, reached 91 farmers in the East Belitung regency. In 2022, ANJ employees spent a total of 6,612 hours towards the Edamame programme, which reached 91 farmers amounting to approximately 73 hours per farmer in 2022. The intent of the programme is to provide an alternative source of protein and to support the Government of Indonesia's program to reduce stunting.

[20] Education Destination Asia, "Preschool & Kindergarten Education System in Indonesia" (2023), accessed (13/03/2023) at: https://educationdestinationasia.com/essential-guide/indonesia/indonesia-preschool-education#:~:text=The%20average%20fees%20for%20preschool%20in%20Indonesia%20depends%20on%20the,Levy%20as%20an%20entry%20prerequisite

Impact from Environmental Projects

Renewable Energy

To estimate the GHG emissions produced from renewable energy projects focusing on biogas and biomass, Sustainalytics analyzed the energy generated by both technologies. The following details the total renewable energy produced, and estimated emissions avoided through the implementation of non-progressing activities between the 2019-2021 baseline average and 2022.[21]

Table 2: Summary of estimated renewable energy produced and GHG emissions avoided based on ANJ's 2022 renewable energy investments.

44,563	36,927	2,437,182
Renewable Energy Produced (MWh)	Estimated GHG Emissions Avoided (tCO_2e)	Equivalent numbers of trees sequestering CO_2 per year

Energy Efficiency

To estimate the annual energy savings through energy optimization and the implementation of other non-processing activities, Sustainalytics investigated the energy usage associated with diesel, gasoline and other fuels. Previously implemented non-processing energy saving initiatives include the installation of multistage turbines to improve energy conversion, LED lights in all mills and biogas facilities, replacing meeting-related traveling with teleconferences and exchanging old air conditioning units with updated and energy-saving models. These initiatives and activities allow for reductions in energy used and consequently an increase in emissions avoided.[22]

The following details the annual energy saved and emissions avoided through the implementation of non-progressing activities between the 2019-2021 baseline average and 2022.[23]

Table 3: Summary of estimated annual energy saved and annual emissions avoided based on ANJ's 2022 energy consumption.

11,683	3,873	255,618
Estimated Annual Energy Saved (MWh)	Estimated Annual Emissions Avoided (tCO_2e)	Equivalent of trees sequestering CO_2 per year

[21] Methodologies and data used for energy saved and emissions avoidance are included in Appendix II.
[22] ANJ Group, "Energy use and renewable energy", accessed at (14/3/23), at: https://www.anj-group.com/en/energy
[23] Methodologies and data used for energy saved and emissions avoidance are included in Appendix II.

Water Consumption

To estimate ANJ's annual water savings, Sustainalytics compared 2022 water consumption and water intensity with the baseline average of the preceding consecutive years 2019-2021. Water savings were reached through different activities, such as the introduction of policies for water conservation, task forces focusing on the implementation of water management programmes, as well as a tool for the motoring and measuring of water usage and savings. ANJ also works with an external audit for water management focusing on water intensity and trends. Mitigation efforts advocating water use efficiency for domestic usage, and water recycling programmes.[24]

Table 4: Summary of estimated reduction in water usage and annual savings based on ANJ's 2022 water consumption.[25]

219,953	12.84%	267
Annual Water Savings (m^3/year)	Estimated Annual Savings (%)	Equivalent water withdrawal per person[26]

Other Environmental Impact

In addition to the environmental projects evaluated by Sustainalytics, ANJ has a number of environmental projects estimated to avoid GHG emissions with alternative methodologies. These include:

- Palm Oil effluent treatment plant in Belitung which captures methane. Estimated to reduce emissions by 59,453 tCO2e in 2022
- Projects reducing the usage of inorganic nitrogen fertilizers through composting and drip fertigation. Estimated to reduce emissions by 3,321 tCO2e in 2022
- Land conservation of 88,634 ha of High Conservation Value Areas, including initiatives in replanting, patrolling and engagement with illegal loggers. this land sequestered 812,791 tCo2e in 2022

Note that these impact estimates maybe be different in scope and methodologies from Sustainalytics estimates and might not be comparable.

[24] ANJ Group, "Water use efficiency", accessed at (14/3/23), at: https://www.anj-group.com/en/water-use-efficiency
[25] Methodologies and data used for water consumption and emissions avoidance are included in Appendix II.
[26] Based on total withdrawal per capita, including the agricultural, municipal, and industrial sector

Appendix I: Glossary

TERM	DEFINITION
Gross Domestic Product (GDP)	Gross Domestic Product (GDP) measures the value of final goods and services produced within an economy within a certain period.
Economic Output	Economic output is a measure of the total economic activity occurring within a given period and refers to the total value of all goods and services produced within an economy within that period.
Jobs	The annual FTE jobs sustained within the economy resulting from company operations, supply chain, and associated consumer spending.
Full Time Equivalent (FTE)	Full-time equivalent (FTE) positions defined as the total hours worked divided by average annual hours worked in full-time jobs.
Direct Effects	Impacts on economic output, employment and GDP from generating goods and services and their own value-added beyond the material inputs and purchases that they sourced from other industries. Referred to throughout this report as "the impacts of the company's direct operations."
Indirect Effects	Impacts on economic output, employment and GDP due to purchases and other firms or industries providing the goods needed for the production of goods and services (ie. steel, chemicals, machinery, other services, etc.) Referred to throughout this report as "the impacts from supply chain."
Induced Effects	Economic impacts resulting from consumer spending induced by labour incomes derived from production under the aforementioned direct and indirect industrial activity. Referred to throughout this report as "the impacts from associated consumer spending."

Appendix II: Methodologies

Economic Impact

Sustainalytics has established a methodology for corporate impact projects, which includes utilizing company, programme and supplier data provided by its client. Working with economic impact multipliers from the Asian Development Bank, Sustainalytics analyzes supplier contract data and calculates the estimated impact of client activity on the local economy in GDP and jobs.[27]

Sustainalytics' economic impact model is based on input-output multipliers from the Asian Development Bank. Input-output tables give an overview of how spending in one industry draws upon other industries by purchasing from those industries to meet the change in demand. Applying multipliers derived from the input-output tables allows our team to translate an organization's operations into various economic indicators, such as GDP and employment.

The total impacts analyzed by Sustainalytics include direct, indirect, and induced impacts. Direct impacts include the impacts from final goods and services sold by an organization, indirect impacts result from spending with suppliers to produce the final products, and induced impacts occur from wages paid to employees which are spent in the economy. Sustainalytics' analysis looks at all three factors to give a fulsome picture of the total impacts across an economy resulting from an activity.

Direct Impacts	Impacts on economic output, employment and GDP from increased demand for goods and services causing increased economic activity, not including purchases sourced from other industries. Referred to as "Impacts from company operations."
Indirect Impacts	Impacts on economic output, employment and GDP due to purchases and other firms/industries providing the goods needed for the production of goods and services (ie. steel, chemicals, machinery, other services, etc.) Referred to throughout this report as "the impacts from supply chain."
Induced Impacts	Economic impacts resulting from consumer spending induced by labour incomes derived from production under the aforementioned direct and indirect industrial activity. Referred to throughout this report as "the impacts from associated consumer spending."

Sustainalytics collected information on company operations, employment, programmes invested in and supply chain data from ANJ for 2022. Sustainalytics used data provided by ANJ as inputs into its economic impact models. It also compared data provided by ANJ to regional benchmarks to assess the contribution of ANJ's activities.

[27] Asian Development Bank (2018), "Economic Indicators for Southeastern Asia and the Pacific: Input-Output Tables", accessed at (01.03.23), at https://www.adb.org/publications/economic-indicators-southeastern-asia-and-pacific-input-output-tables

Environmental Methodologies

Sustainalytics developed its own methodologies for quantifying GHG avoidance and other metrics, including leveraging publicly available best-in-class methodologies, protocols and frameworks that are currently industry best practice. Our estimation practices and general principles rely on the GHG Protocol.[28] Our methodologies are based on guidance provided by the International Financial Institutions[29] on calculation methodology and global emissions. In addition, we rely on the Partnership for Carbon Accounting Financials' Global Accounting Standard[30] for guidance on estimation where data is not readily available and assumptions must be made. Finally, the UN's Clean Development Mechanism[31] provides guidance and information, serving as the foundation for these and other methodologies, including those implemented in this report.

Renewable Energy

It is assumed that new energy generated by the projects crowd out a mix of current and upcoming planned generation capacity, and therefore associated emissions. The approach taken to derive the carbon avoidance is based on the comparison between:

- The emissions of the renewable energy projects.
- The baseline emissions or emissions occurring in the absence of the project. For electricity generation, these emissions are based on the energy mix used to supply electricity to the local grid.

Data Sources and Assumptions

- For the projects included in this report, energy generation (measured in MWh) data was provided by ANJ.
- The baseline emission factors for the countries where projects are located were sourced from IFI. [32]
- The project emission factors for biogas and biomass, were sourced from DEFRA.[33]

Energy Efficiency

Energy efficient technologies implemented by the project financing is assumed to replace the energy consumed using current technologies, and thereby reduce the associated emissions. The approach taken to calculate the energy savings and a reduction in emissions avoidance is based on the comparison between:

- Project level energy consumption. This was calculated with the production volume of 2022 and the energy efficiency of the same year.
- Baseline energy consumption, or the energy consumption in absence of the efficiency improvements. This was calculated with the production volume of 2022 and the average energy efficiency from the previous years.

Data Sources and Assumptions

- For the projects included in this report, energy consumption (measured in kWh) data was provided by the issuer.

[28] Greenhouse Gas Protocol, About Us, at: https://ghgprotocol.org/
[29] International Financial Institutions, "Members of the International Financial Institutions on Greenhouse Gas Accounting", at: https://unfccc.int/sites/default/files/resource/IFIs membership for UNFCCC %27white pages%27_0.pdf
[30] Partnership for Carbon Accounting Financials, About, at: https://carbonaccountingfinancials.com/
[31] UNFCCC, CDM Methodology Booklet, (2021), at: https://cdm.unfccc.int/methodologies/documentation/index.html
[32] UNFCCC, The IFI Dataset of Default Grid Factors, at: https://unfccc.int/sites/default/files/resource/Harmonized_Grid_Emission_factor_data_set.xlsx
[33] DEFRA, at: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022

- Project level emissions associated with electricity consumption were calculated using a national grid emission factor sourced from IFI.[34] Emissions from other fuel types were sourced from the UK Government.[33]
- To account for emissions from upstream activities, such as electricity transmission losses and the extraction and refining of primary fuels, Sustainalytics applies an additional, indirect emissions factor.[35]

Water Efficiency

It is assumed that investments reported result in reduced water consumption, and therefore, water efficiency. The approach followed in order to derive the volume of water saved is based on the comparison between:

- Project level water consumption. This was calculated with the production volume of 2022 and the water efficiency of the same year.
- Baseline water consumption, or the water consumption in absence of the efficiency improvements. This was calculated with the production volume of 2022 and the average water efficiency from the previous years.

Data Sources and Assumptions

- For the projects included in this report, water consumption data including location, sector, project type and measured water consumption was provided by ANJ and was used as inputs for the calculations.
- The baseline water consumption was provided by ANJ and represents the water consumption prior to implementation of the water efficiency projects.
- The UN FAO AQUASTAT[36] database was used to source data used to calculate the number of peoples consumption the water savings are equivalent to.
- Water savings calculations for the projects in this report are based on relevant and comparable sector-level and country-level benchmarks.

[34] Harmonized Grid Emission factor data set can be accessed at: s://unfccc.int/sites/default/files/resource/Harmonized_Grid_Emission_factor_data_set.xlsx
[35] Department for Business, Energy and Industrial Strategy, Greenhouse Gas Reporting Conversion Factors 2021, at https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021
[36] Food and Agriculture Organization of the United Nations (FAO) AQUASTAT database, at: https://www.fao.org/aquastat/statistics/query/index.html

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