S&JINDUSTRIAL ESTATE ECODISTRICT™ IMPERATIVES COMMITMENT 31 March 2022











S&J Industrial EcoDistrict[™] Imperatives Commitment

Adoption Date: 16 August 2021

Submittal Date(s): 31 March 2022, for endorsement

Adoption Method:

Due to the restriction imposed on the S&J EcoDistricts team because of a hard lockdown in South Africa to curb the spread of covid, a range of integrated, immersive online working sessions in addition to a safe site visit workshop session was undertaken on the following dates (see Annexure A for a full roster of attendance as participants varied):

14 May 2020	10 February 2021	3 May 2021	13 August 2021
27 July 2020	11 February 2021	10 May 2021	14 October 2021
31 July 2020	15 February 2021	1 June 2021	18 January 2022
30 October 2020	25 February 2021	24 June 2021	31 January 2022
19 November 2020	8 March 2021	5 July 2021	8 March 2022
24 November 2020	18 March 2021	13 July 2021	17 March 2022
2 December 2020	12 April 2021	29 July 2021	22 March 2022
28 January 2021 (site-based workshop)	30 April 2021	5 August 2021	28 March 2022

Based on the interactive Steering Committee sessions, a draft document, detailing the overall context along with the detailed approaches to each Imperative Commitment was drafted by the preparers for review. The Core Working Group, the Planning and Implementation Team and the Solid Green team provided and incorporated input into the document that follows.

Each member of the Planning and Implementation Team confirmed through consensus that the Imperatives Commitment that follows is a complete, accurate and true reflection of the commitments made by the proposed S&J Industrial Estate EcoDistrict¹ ready to be submitted for review and endorsement by the S&J NPC. The document was presented by the signatories to the respective boards of the companies that constitute the S&J NPC for final approval.

The S&J EcoDistrict Team (inclusive of the preparers, Solid Green, the Core Working Group and the Planning and Implementation Team) as referenced herein include the following:

Dropororo	Steering Committee	Steering Committee			
Preparers:	Core Working Group ²	Planning & Implementation	n Team ³		
For Redefine:	Ilse Swanepoel	Ilse Swanepoel	Hein Papenfus		
Johann Nell	Victor Mathey	Victor Mathey	Marijke Coetzee		
Victor Mathey	Adam Koekemoer	Adam Koekemoer	Tebogo Mojapelo		
	Chris Roberg	Chris Roberg	Mike Ruttell		
For Solid Green:	Gareth Ahier	Gareth Ahier	Grant Silverman		
Adrie Fourie	Morgan Wratten	Morgan Wratten			
Nomamfengu Mbele	Retha Bezuidenhout	Retha Bezuidenhout			
Marloes Reinink	Tebogo Mojapelo	Anelisa Keke			
	Mike Ruttell	Chantelle Mathomes			

¹ Also referred to as the S&J EcoDistrict.

² The Core Working Group was created to create a smaller, but representative group of participants to collaborate closely with the Solid Green Team to develop submission report content, which required a more substantial time commitment to participate in workshops or meetings. ³ The Planning & Implementation Team is the interim decision-making structure for the S&J EcoDistricts certification process. This larger group of people are convened for workshops to consider final drafts of content, strategy development or to provide further input, clarify or correct any content issues that might not have been picked up by the Core Working Group. Once approval from this group was secured, the documentation and content were presented to the Boards of the respective companies that constitute the S&J NPC for final approval.

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Photo 2: View of the Germiston gold mining area in 18986

1. INTRODUCTION

The history of the old Simmer & Jack gold mine, where the S&J Industrial Estate is now established, is as rich in heritage as it is in its future value as a secure industrial estate.

The old Simmer & Jack gold mine was established in the early days of the gold rush when two prospectors, John Jack, and August Simmer, struck pay-dirt on the farm of Elandsfontein⁴. In 1921, the world's largest gold refinery, the Rand Refinery was established at Germiston. Gold mining gradually wound down in the area and by the end of the 20th century became infeasible.

Photo 1: August Simmer and John Jack c1889

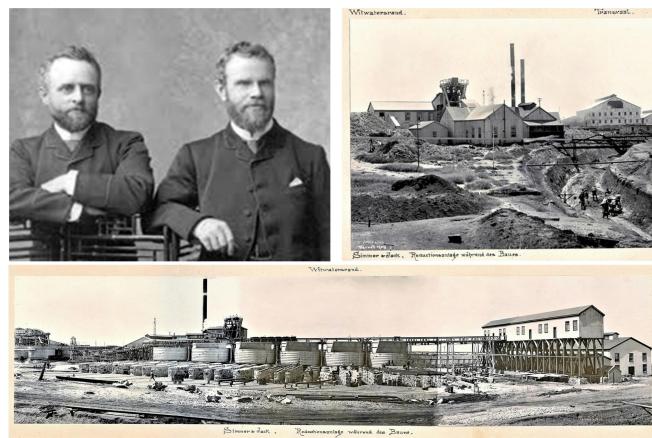


Photo 3: S&J mine during construction of production facilities⁷

Between 1894 and 1896, the Robinson Deep, Sub-Nigel and Simmer & Jack Gold Mines were opened, forming Gold Fields 'trinity' of mines, 'Faith, Hope and Charity'⁸.

The City of Johannesburg has developed through the entire life cycle of the mining industry. In its early years, its development was tied to the varying, but generally upward, fortunes of the mining industry. During this time, gold mining in Johannesburg, and along the Witwatersrand, propelled the growth of South Africa's national economy into a phase of self-sustained development, and created an integrated labour market across southern Africa.

Now the S&J Industrial Estate is poised to set the gold standard for industrial precincts in South Africa, using the EcoDistricts[™] urban development protocol guided by three imperatives: Equality, Resilience and Climate Protection, thus moving further and further away from the tainted legacy of the mining operations that previously occupied this land.

Set to be one of the largest industrial parks in Johannesburg, S&J Industrial Estate will span an impressive 160ha.

⁴ The town of Germiston was established and names after Jack's birthplace in Scotland.

⁵ Image taken from: https://en.wikipedia.org/wiki/Simmer_and_Jack# /media/File:August-Simmer-und-John-Jack_1889.jpg

⁶ Image sourced from: https://www.mindat.org/loc-261179.html

⁷ Image sourced from: https://www.mindat.org/loc-261179.html

⁸ https://www.goldfields.com/1887-1902.php

Situated in the South-Eastern corridor of Johannesburg adjacent to the N3 & M2 highways, between the Elands and Geldenhuys interchanges, S&J Industrial Estate offers great visibility and convenient access to and from the M2, N12, N17 and the N3 highways. The estate is suitable to light manufacturing, warehousing, logistics distribution centres and retail warehousing alike. Land sizes vary to accommodate building designs upwards of 4 000m², with the potential of establishing built facilities as large as 200 000m².



Artistic Render 1: Imagined view of a main entrance

1.1. S&J INDUSTRIAL ESTATE DEVELOPMENT VISION

With a shared vision, Redefine and Abland have joined forces to establish S&J Industrial Estate as a unique industrial environment. As active stakeholders in local based property investment and development these industry stalwarts have combined resources to create the S&J Industrial Estate as a sustainable and smarter choice for industry, business, and the public. The S&J Industrial Estate ("S&J") sets the benchmark for industrial precincts in Gauteng. It is a forward-looking, service-driven development that is business centric, embracing diverse cultural heritage and inclusiveness. It is committed to creating a cohesive and active community defined by its centricity to economic and ecological sustainability.

The intent is to provide a prime environment to anchor businesses, with high visibility and convenient access enabled through exceptional location relative to the network of commerce at large. S&J brings convenience retail, supply-chain hubs, light industrial operators, and conferencing facilities together in a secure environment that is served by an established public transport network that is well integrated with the local and provincial transport network. The development is guided by established urban design guidelines which set out the plans for internal roads, landscaping, pedestrian paths, cycle paths and is near various rail and road public transport options.

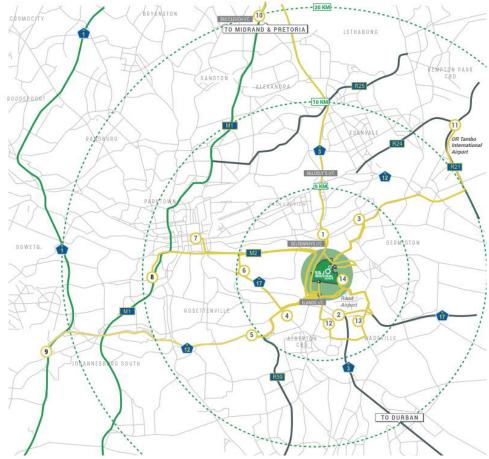
S&J is located in Germiston, in the East Rand region of Gauteng, South Africa, administratively forming part of the City of Ekurhuleni Metropolitan Municipality since the latter's establishment in 2000. It functions as the municipal seat of Ekurhuleni, hosting the municipal council and administration. Insight into the location and the precinct plan is provided by the following maps, depicting the macro and micro locality. The intent behind all the preliminary urban design, infrastructure investment and ongoing facilitation of the development in line with the development guidelines, is to set industry in motion.

The artist render or the precinct plan helps create a shared understanding of the development vision.



Artistic Render 2: Imagined aerial view of the S&J Industrial Estate





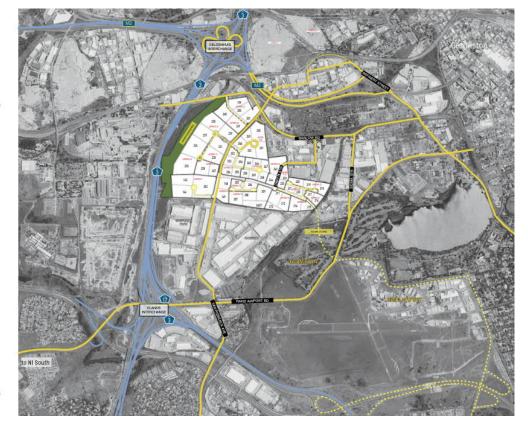
Map 1: Macro Locality

ACCESS TO S&J

providers.

S&J Industrial Estate is ideally located between the Geldenhuys and Elands Interchanges, which makes it highly visible as well as accessible. This area is easily accessible via major highways and offers train, bus and taxi public transport options, while offering an ideal de-bulking solution to logistics

The map below depicts the micro locality, and it provides a clear overview of the development area, illustrating the EcoDistricts boundary.



Map 2: Micro Locality

Highways

Main Feeder Roads

Development Area

Seven secure precincts comprise the S&J Industrial Estate. The precinct identities are deeply embedded in the rich mining context and history. Each precinct will be identified by its own distinct colour. The palette of colour to be used was inspired by the sun setting over the Johannesburg skyline. The inspiration and resultant palette are show in the image below:



Figure 1: Inspiration and Colour Palette





Photo Collage 2: Pictures of the wetland to be rehabilitated looking toward the highway



Photo Collage 3: Site development to date

In addition to the light industrial uses, the S&J Industrial Estate will include several public amenities.

A convenience retail centre is planned which will provide retail and food outlets complimented by the Winding House that will serve as a new conference or events centre.



Figure 2: Convenience retail plan

Some artistic renderings provide a further overview of what those spaces could look like, confirming design guidelines support a strong connection with nature and ensuring universally accessible spaces.



Photo Collage 4: Convenience retail planned 'look & feel'

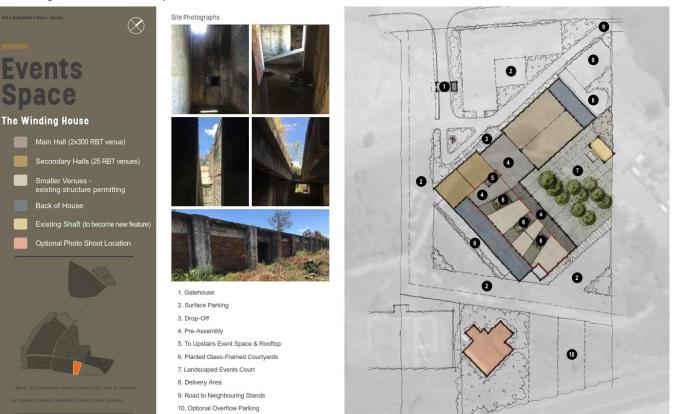


Figure 3: Planned Events Space



Artistic Render 3: Perspective view of the convenience retail

1.2. S&J INDUSTRIAL ESTATE DEVELOPMENT TIMELINE

The table provides an overview of the timeline of the S&J development to date, most of the enabling infrastructure have been completed and the rest of the top structure development and implementation will be market driven and subject to change. Completion is contingent on market conditions.

Description	Dates
Land acquired	Aug-15
Infrastructure Phase 1	April 2016 - One element was the main road
Infrastructure phase 2	March 2017 - Second access point to S&J-Main precinct
Infrastructure Jupiter Ext 9 Internal roads & infrastructure of this township	Nov-17
Start Stamp Mill - Top structure - In Jupiter Ext 9	Oct-18
Infrastructure Jupiter Ext 28- Roads and infrastructure	Jul-20
Start Spare Pro - Top structure	Aug-20
Infrastructure Jupiter Ext 10,17,18 - Internal roads and infrastructure	Targeting Nov 2023
Infrastructure Jupiter Ext 16, 34 - Internal roads and infrastructure	Targeting 2024
Infrastructure Jupiter Ext 10,17,18 - Internal roads and infrastructure	Targeting 2024
Infrastructure Jupiter Ext 19,20 - Internal roads and infrastructure	Targeting 2026
Infrastructure Jupiter Ext 21,22,23,24 -Internal roads and infrastructure	Targeting 2030

1.3. S&J INDUSTRIAL ESTATE GUIDING PRINCIPLES

The S&J Industrial Estate is a development partnership between Redefine and Abland, and as such, guiding principles that define the approach to sustainability within these two organisations, are also regarded as the structuring framework for S&J.

S&J as a responsible corporate citizen benefit by serving internal and external stakeholders with a material stake in our activities, as well as the broader society we affect. In line with this ethos, the board understands that S&J is required to take responsibility for the outcomes of the activities and outputs on the social systems in which they operate, as well as the natural environment on which society depends. Redefine prioritised the 2030 United Nations Sustainable Development Goals (UN SDGs) as part of their governance priorities and have identified primary and

secondary SDGs based on their relevance to their core business that will guide how resources and commitments will be prioritised. The primary SDGs are marked with a blue border, while secondary SDGs are marked with an orange border in the figure below.

SUSTAINABLE GALS



Figure 4: United Nations Sustainable Development Goals

S&J understands that the achievement of the UN SDGs will require stakeholder engagement, awareness-raising, and partnerships within our value chain, as well as within the broader real estate sector. S&J therefore integrates the principles of the triple bottom line (people, planet, and profit) and good governance into its business activities, vision, policies, and strategies.

To guide the development of the S&J strategic sustainability vision, the SDGs are regarded as the main guiding principles, the intent is to link specific SDGs to each of the Imperative Commitments set out in this document. Using the UN SDGs as the main guiding principles, also ensures alignment of the strategic vision for the S&J Industrial Estate and the Climate Action Plan of the City of Ekurhuleni which is currently in development. This alignment is essential to advocate for governmental support, and shared intervention identification and implementation to the benefit of the surrounding community.

Aligning with the SDGs and relevant government policies also provides the opportunity to formulate specific implementation targets to measure progress and performance against.

It should also be noted that SDG 15: Life on Land (marked in green) currently falls beyond the scope of those pursued by Redefine but is regarded as applicable to the S&J development in addition to the primary and secondary SDGs as marked in Figure 4.

Furthermore, S&J Industrial Estate, like the approach Redefine is taking, is also guided by to the Ten Principles of the UN Global Compact⁹:

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: Make sure that they are not complicit in human rights abuses.

9 https://www.unglobalcompact.org/what-is-gc/mission/principles

Labour

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
- Principle 4: The elimination of all forms of forced and compulsory labour.
- Principle 5: The effective abolition of child labour; and
- Principle 6: The elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges.
- Principle 8: Undertake initiatives to promote greater environmental responsibility; and
- Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

• Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

2. EQUITY¹⁰

According to the IMF, "South Africa suffers among the highest levels of inequality in the world when measured by the commonly used Gini index¹⁷, but also state that "inequality manifests itself through a skewed income distribution, unequal access to opportunities, and regional disparities while low growth and rising unemployment have contributed to the persistence of inequality" (IMF, 2020:1). While racial and spatial divides are of utmost importance given the country's history of racial and spatial segregation, it is important to also consider the impact of gender inequality as these overlaps with and amplifies many other disadvantages (StatsSA. 2019:124).

Inequality issues are deeply rooted in South Africa and reducing them will require changes to the structure of the economy and the improvement in the quality of services government provides to ensure equal access, and importantly, equal positive outcomes in terms of health and education across the population. On an economic front, job creation and inclusive economic growth remain vital pillars towards achieving the country's long-term objectives around improving the lives of all South Africans, especially in the areas of poverty and inequality; which are enshrined as the two most fundamental reduction targets in the NDP (NPC, 2012)" (StatsSA, 2019:4).

According to Statistics South Africa¹², the largest contributor to overall income inequality came from the labour market at 74,2 with female workers earning approximately 30% less, on average, than male workers. The report (StatsSA, 2019:) reveals that men are more likely to be employed and have relatively better-paying jobs compared to woman, while stating the earnings distributions also starkly depict the heavily racialised inequality in the South African labour market. Various efforts by the South African government implemented to reduce inequality have focused on higher social spending, targeted government transfers, and affirmative action to diversify wealth ownership and promote entrepreneurship among the previously marginalized¹³.

This drive toward greater equality in the South African context is further supported by a range of national pieces of legislation, of which the most important, is the South African Constitution.

<u>Section Nine of the Constitution of South Africa¹⁴</u> guarantees equality before the law and freedom from discrimination to the people of South Africa. This the first right listed in the Bill of Rights, and it prohibits both discrimination by the government and discrimination by private persons; however, it also allows for affirmative action to be taken to redress past unfair discrimination.

¹⁰ This section is aimed at providing insight into the EcoDistricts Protocol and the implications for the S&J development. Creating a rich contextual insight on what the intent behind the imperative is understood to represent, and clearly identifying how the South African context currently addresses the issue of equity, and what the implications are for the S&J development.

¹¹ The Gini index, or Gini coefficient, is a measure of the distribution of income across a population developed by the Italian statistician Corrado Gini in 1912. It is often used as a gauge of economic inequality, measuring income distribution or, less commonly, wealth distribution among a population.

¹² See: http://www.statssa.gov.za/?p=12930

¹³ This refers to all communities that were previously marginalised as a result of spatial and apartheid policies.

¹⁴ Since 1996, the Constitution has been amended by seventeen amendment acts. The Constitution is formally entitled the 'Constitution of the Republic of South Africa, 1996'. It was previously also numbered as if it were an Act of Parliament – Act No. 108 of 1996 – but since the passage of the Citation of the Constitutional Laws Act, neither it nor the acts amending it are allocated act numbers.

Section 9:

- 1) Everyone is equal before the law and has the right to equal protection and benefit of the law.
- 2) Equality includes the full and equal enjoyment of all rights and freedoms. To promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination may be taken.
- 3) The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language, and birth.
- 4) No person may unfairly discriminate directly or indirectly against anyone on one or more grounds in terms of subsection (3). National legislation must be enacted to prevent or prohibit unfair discrimination.
- 5) Discrimination on one or more of the grounds listed in subsection (3) is unfair unless it is established that the discrimination is fair.

There are several pieces of legislation, national, provincial, local policies and plans that touch on equity¹⁵ applicable to the S&J EcoDistrict,¹⁶ which will guide the approach to equity within the EcoDistrict as a minimum, to the extent that the Trustees representing the NPC has the ability to employ such resources, specifically in regards to service providers appointed to serve the interest of the property owners forming part of the NPC in accordance with the conditions set out in the MOI.

Act or Policy	Short Summary
Promotion of Equality and Prevention of Unfair Discrimination Act, 2000	Created specifically to enact the rights set out in Section 9 of the Constitution, the Promotion of Equality and Prevention of Unfair Discrimination Act, 2000 (PEPUDA or the Equality Act, Act No. 4 of 2000) is a comprehensive South African anti-discrimination law. It prohibits unfair discrimination by the government and by private organisations and individuals and forbids hate speech and harassment. The act specifically lists race, gender, sex, pregnancy, family responsibility or status, marital status, ethnic or social origin, HIV/AIDS status, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language, and birth as "prohibited grounds" for discrimination, but also contains criteria that courts may apply to determine which other characteristics are prohibited grounds.
Employment Equity Act No. 55 of 1998	The purpose of the Employment Equity Act, No. 55 of 1998 is to achieve equity in the workplace by promoting equal opportunity and fair treatment in employment through elimination of unfair discrimination and implementing affirmative action measures to redress the disadvantages in employment experienced by designated groups, to ensure equitable representation in all occupational categories and levels in the workforce. This Act provides for additional reporting requirements employers with the additional burden of submitting an Employment Equity Report.
The Broad-based Black Economic Empowerment Act No. 53 of 2003	The Broad-Based Black Economic Empowerment Act No. 53 of 2003 ("The B-BBEE Act") is a socio- economic program geared towards the promotion of economic change in South Africa whilst enforcing equality within the business arena; establishing a legislative framework for the promotion of black economic empowerment; empowering the Minister to issue codes of good practice and publishing transformation charters; establishing the Black Economic Empowerment Advisory Council; and providing for matters connected therewith.
Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA)	This act aims to: aims: to provide a framework for spatial planning and land use management in the Republic; to specify the relationship between the spatial planning and the land use management system and other kinds of planning; to provide for the inclusive, developmental, equitable and efficient spatial planning at the different spheres of government; to provide a framework for the monitoring, coordination and review of the spatial planning and land use management system; to provide a framework for policies, principles, norms and standards for spatial development planning and land use management; to

Such documents include¹⁷:

 $^{^{\}mbox{\tiny 15}}$ With reference to economic, spatial and gender equality.

¹⁶ The term S&J EcoDistrict is used to refer to the physical area of the S&J Industrial Estate that will be targeting an EcoDistrict certification and is therefore referred to as the S&J EcoDistrict interchangeably when referring to the Estate in its future state assuming the certification has been secured. The term S&J EcoDistrict there refers both to the physical area that is certified, by also acts as a collective term for the operational aspects associated with implementation of the commitments made, interventions, strategies and projects that have been identified in alignment with the EcoDistricts protocol to enable the S&J EcoDistrict to target carbon neutrality at a future date.

¹⁷ This is not an exhaustive list of legislative policies that are focussed on addressing inequality in South Africa, but the intent was to highlight some of the most prominent pieces of legislation that guides the activities in and around the S&J Estate.

Act or Policy	Short Summary
	address past spatial and regulatory imbalances; to promote greater consistency and uniformity in the application procedures and decision-making by authorities responsible for land use decisions and development applications; to provide for the establishment, functions and operations of Municipal Planning Tribunals; to provide for the facilitation and enforcement of land use and development measures; and to provide for matters connected therewith.

Various organisations, such as the South African Cities Network are also doing research and advocacy around the focus on creating Inclusive Cities, which they define as cities that "offers all its citizens a decent quality of life: access to job opportunities, a safe and secure environment, clean water, healthcare and education, as well as recreational activities" (SACN, 2021:1).

There is a general national call for the creation of inclusive South African cities that should provide opportunities for all city dwellers to share in the social and economic opportunities and resources of city life. Using a tool such as the EcoDistricts[™]Protocol to pursue a formal certification, which places Equity among its three formative principles, provides the opportunity for the S&J EcoDistrict to play an active role in addressing inequalities in South Africa both through adherence to legislation and relevant policies, but also driven by internal company policies and guidelines that will impact on the decision-making processes of the organisations that form the Co-Ownership driving the S&J development as well as the principles governing the S&J NPC which will drive the S&J EcoDistricts certification process as well as its long-term management and implementation.

The intent of the Imperatives Commitment document is not to provide a detailed overview of the various complexities associated with inequality in South Africa but capture the response by the S&J EcoDistrict to the Equity Imperative requirements, which is set out in the following sub-sections.

2.1. EQUITY VISION

The S&J Industrial Estate is a private sector driven industrial development where there is a commitment to equity in the ongoing evolution and performance of the S&J EcoDistrict, including its staffing, governance structure, establishment of objectives, development and tracking of indicators, prioritization of strategies, and implementation of projects.

We commit to advancing procedural, structural, distributional, and cross generational equity in all the S&J EcoDistrict activities and addressing equity in all the phases of the EcoDistrict itself: Formation, Roadmap and Performance.

To achieve these aims, the commitment scope includes the following:

- PROCEDURAL EQUITY. Inclusive and authentic engagement of organizations that represent vulnerable populations in the EcoDistrict Formation, Roadmap development, and Performance.
- STRUCTURAL EQUITY. Transparent decision-making that considers historic inequities that may have subordinated vulnerable populations elsewhere are not repeated here but is held accountable for equitable decisions.
- DISTRIBUTIONAL AND CROSS-GENERATIONAL EQUITY. Fair distribution of the benefits and burdens of EcoDistrict projects and programs across all populations, and current and future generations as it relates to the S&J EcoDistrict context.

2.1.1. Development Drivers

The S&J development was originally driven by the three original co-owners of the site: Redefine Properties Limited¹⁸ and The Pivotal Fund Limited¹⁹ and GGP Investments Proprietary Limited²⁰ who are governed through a Co-Ownership Agreement²¹. This agreement has been in place since 2018 and ensures that a common agenda regarding the development of the S&J industrial Estate is implemented. The S&J Industrial Co-Ownership was *inter alia* responsible for the preparation of the S&J Master Development Plan as amended from time-to-time; and will take responsibility

¹⁸ Registration number: 1999/018591/06

¹⁹ Registration number: 2015/030215/06 - it should be noted that Abland takes on the role of development manager and project manager on the S&J development, and reference from here on would be directly to Abland as the implementation partner.

²⁰ Registration number: 2015/216964/07

²¹ This Co-Ownership shall be known and will conduct its business under the name and style "S&J Industrial Co-Ownership".

for activities as may be necessary or desirable for or ancillary to the purposes of the successful execution of the Project²².

The long-term management of assets and overall management of the S&J Industrial Estate as well as the implementation of the requirements of the S&J EcoDistrict will fall within the scope of the S&J Industrial Estate Owners Company Not-For-Profit Company (NPC)²³ which was created to represent all 'members' or registered owner(s) of any erven within the 'Estate'²⁴. It is envisioned that in the long-term, the NPC will be the Backbone Organisation for the S&J EcoDistrict while the current Co-Ownership might play a supportive role until they have fulfilled their development obligations, should they choose to step away from this project at that point.

The S&J EcoDistrict Team²⁵ will serve as connectors, conveners, and collaborators with representative organisations of vulnerable groups relevant to the S&J Industrial Estate with a focus of advancing procedural, structural, distributional, and cross-generational equity in all EcoDistrict activities.

While S&J recognises that the current socio-economic context in which it is operating is fraught with many unknowns, the S&J NPC remain committed to delivering long-term value to their stakeholders by making strategic decisions that safeguard the future. S&J's purpose is to create and manage spaces in a way that changes lives. To have a meaningful impact on lives, they will work collaboratively for positive change in creating long-term sustainable solutions for all our stakeholders, aligning efforts to ensure focus on sustainability and build long-term partnerships with key stakeholders such as investors and the S&J community.

2.1.2. Vulnerable Groups

The S&J Industrial Estate does not include a residential component, nor does it have a potential sphere of influence to any residential areas within a 1km radius²⁶ (see map included on next page). For the EcoDistrict processes, the S&J Industrial Community was defined as follow²⁷:

- Property Owners
- Development Partners (Developers)
- Tenants
- Employees (of tenants or businesses within the node)
- Employees of the Management Company
- Visitors; and
- Service Providers (and/or suppliers).

One township, namely Jupiter Extension 9 comprising of multiple erven has been established and the proclamation of Jupiter Extension 28 is imminent, adding additional erven to the established zones within the precinct. The remainder of the development will unfold as market forces dictate. The S&J NPC and the steering committee created to drive the EcoDistricts processes have stepped in to ensure inclusive planning around potential vulnerable groups that will be present in the S&J EcoDistrict once reasonable progress in construction roll-out and operational status is reached, but in the interim, from a pro-active planning approach, the vulnerable groups that are expected within this community in the long-term, include²⁸:

²² Refers to the S&J Industrial Estate development.

 $^{^{\}rm 23}$ Referred to as the S&J NPC from this point forward. Registration Number 2018/364144/08.

²⁴ Refers to the estate to be developed on the Land comprising the Erven and the Common Property and to be known as S&J Industrial Estate.

²⁵ With reference to the S&J NPC, representatives of the current Co-Ownership, the Steering Committee created to drive the EcoDistricts process as well as the S&J NPC that will become the backbone organisation in the long term, representatives of which will be duly elected and voted in by members of the NPC representing the property owners within the S&J Industrial Estate.

²⁶ The Certification Handbook requires EcoDistrict without residential to assess an area of 0.4 miles beyond their boundary is 0.64km and the S&J project expanded this to include a 1km radius.

²⁷ Definition created as part of the serious of interactive workshops.

²⁸ According to a report by Statistics South Africa, entitled *Marginalised Groups Indicator Report, 2019*, "'vulnerable groups' are defined as a part of the South African population that experience a higher risk of poverty and social exclusion than the general population" (StatsSa, 2019b:1). The report further defined these vulnerable groups as children aged 17 years and below, the youth (people aged 15-34 years), women (which they them go on to problematically define as 'the female population'), older persons (people aged 60 years and above) and people with disabilities (those experiencing various levels of difficulties in functional domains such as seeing, hearing, walking, remembering, and concentrating, selfcare, communicating and social interaction). Not all of these are useful classifications or even regarded as the most accurate reflection of what should be regarded as vulnerable, and therefore the S&J Industrial Estate EcoDistrict have created a more suitable list of vulnerable groups expected to find employment within in the Estate.

- People from previously disadvantaged communities²⁹.
- Low-income or unskilled/semi-skilled employees³⁰.
- Immigrants³¹.
- Youth and the elderly (in as much as these groups is represented in the employed population).
- People with disabilities and people that might be medically vulnerable (due to health conditions such as diabetes, TB, vulnerability to extreme heat, etc.); and
- Lesbian, gay, bisexual, transgender, and questioning people (including all people that might be vulnerable to gender-based violence³²).

It should be noted that in the spirit of the EcoDistricts Protocol, the list of vulnerable groups will be refined with the input of the actual community through appropriate input and engagement processes to ensure that the specific accommodations made are appropriate and adequate.

Engagement with the S&J community will continue throughout the EcoDistrict certification process, but more importantly will be part of the operationalisation processes to ensure that engagement will remain inclusive, robust, and ongoing.

2.2. WORK PLAN, RESPONSIBILITIES AND SCHEDULE

The S&J Team will incorporate and integrate the following tasks and actions into the planning, implementation, and certification processes during each phase to endeavour to remove inequalities and strengthen equitable outcomes. It is anticipated that as the formation phase unfolds, information is sourced and strategies refined as part of the roadmap phase, these tasks will adjust, to reflect the dynamic nature of the EcoDistrict process and of the progress being made by the different role players and stakeholders in defining the way forward.

Table 1: EQUITY Workplan

EQUITY IN THE FORMATION PHASE				
Type of Equity	Task	Responsibility	Schedule	
Procedural	Task 1: Reach out to identified vulnerable groups, explaining Formation steps and participation opportunities.	Solid Green with input from the S&J Core EcoDistrict Team throughout the certification process with a longer-term strategy to be included in the relevant operationalisation action plans.	As part of the Formation phase (target date end of August)	
Structural	Task 2: Recruit representatives from identified vulnerable groups for participation in the EcoDistrict decision-making body activities.	S&J Core EcoDistrict Team with input from business owners/tenants in the EcoDistrict and responsibility will reside with the S&J NPC.	Immediate interaction with current owners/tenants but longer-term process envisioned as development build out happens	
EQUITY IN THE RC	DADMAP PHASE			
Procedural	Task 3: Ensure feasible participation of identified vulnerable groups in Roadmap workshops.	Solid Green with input from the S&J Core EcoDistrict Team will drive inclusion or representative consideration in the absence of community-based participants.	Current focus will fall on inclusionary consideration during the interim roadmap development process and will expand to greater representation	

²⁹ To acknowledge the racial inequality that is still present in the South African society.

³⁰ To acknowledge that not all the jobs created within the S&J Industrial Estate EcoDistrict would require highly skilled, experienced workers, which in turn would have an impact on the income-earning potential of such positions. The S&J Industrial Estate EcoDistrict is commitment that diversified training would be facilitated and/or advocated for to ensure that all workers are provided with access to opportunities to upskill themselves to access improved employment and/or to contribute to created economic resilience.

³¹ In March 2019, the South African government launched its National Action Plan to combat Racism, Racial Discrimination, Xenophobia and Related Intolerance (NAP). Among the actions the NAP identifies to be taken to combat xenophobia, are creating mechanisms to ensure foreigners receive services they are entitled to, facilitating their integration, and embracing a humane and dignified approach to managing migrants, refugees, and asylum seekers. Ensuring immigrants are noted as a separate vulnerable group will also ensure that appropriate information is gathered timeously to ensure appropriate support infrastructure is put in place to adequately support and protect this group. ³² Which is unfortunately a significant concern in the South African context.

			when the presence of vulnerable group members happens.
Equity in the ro	ADMAP PHASE		group members happens.
Type of Equity	Task	Responsibility	Schedule
Structural	Task 4: Perform an equity- screening of all proposed projects and programs during the strategic prioritisation.	Solid Green with input from the S&J Core EcoDistrict Team & the S&J Steering Committee.	Medium to long-term; and ongoing through lifespan of the EcoDistrict.
Distributional & cross- generational	Task 5: Draft an EcoDistrict Roadmap that is created and implemented by inclusionary representatives of the S&J community so that all S&J's populations, including future generations, are considered in how projects and programs will impact the S&J community.	Solid Green with input from the S&J Core EcoDistrict Team & the S&J Steering Committee.	Short term to set up framework for project assessment and prioritisation - then ongoing as potential strategies and projects are identified or considered.
EQUITY IN THE PE	RFORMANCE PHASE		
Type of Equity	Task	Responsibility	Schedule
Procedural	Task 6: Evaluate equity results as part of the reporting and identify ways to improve or adjust	S&J NPC	Short term to set up framework and then ongoing
	Task 7: Meet with identified vulnerable groups to review equity of burdens and benefits and adjust as required.	S&J NPC	Ongoing

2.3. INDICATORS

The following indicators of Equity developed to date by the S&J EcoDistrict Team are illustrative and not meant to be exhaustive. The indicators most relevant and meaningful to the S&J Industrial Estate and its identified community and the contents of which will be confirmed in the Formation and Roadmap Phases. The roadmap development process will also entail setting specific targets for each indicator to ease tracking progress to enable identification of milestones, if not reached, will require course correction or additional intervention:

- Number of vulnerable group representative organisations engaged with.
- Employment opportunities created (construction and operational).
- Number of safe person-hours on site (occupational health and safety).
- Number of training opportunities during construction and operation of S&J.
- Employment figures by race, gender, and education level.

2.4. EVALUATION & ADJUSTMENT

Equity conditions (opportunities, challenges and/or areas of intervention/change needed) will be regularly updated as new data becomes available, and the findings inform program and project prioritisation for defined work plans moving forward. Biennial performance reports will be used to inform potential enhanced initiatives to address unmet needs as decided by the NPC and the self-assessment by the EcoDistrict Team, this process may include the addition of metrices to track and/or include in future Community Needs Assessments, and/or may lead to new partnerships or projects.

2.5. LETTERS OF SUPPORT

A letter of support from Hawk Academy is provided in Annexure C.

3. RESILIENCE

The City of Ekurhuleni defines resilience as 'the capacity of a system to survive, adapt, and grow in the face of unforeseen changes, even catastrophic incidents' (COE, 2017: 87). The city identified several stresses and shocks that could hamper city resilience, and these include:

- Increased temperatures: heat stress impacts on human health worsened by urban heat islands; loss of productivity; declining air quality in cities; and increased demand for cooling.
- Extreme weather: heat waves and droughts increased water demand, water quality problems, heat-related deaths and reduced guality of life, food insecurity.
- Extreme weather: heavy rainfall and violent storms water quality problems; deaths and injuries, infections, and water-borne disease; damage to infrastructure and economy, loss of property.

It also sets out the main climatic hazards for the Ekurhuleni region as follows:

- Earthquakes: Until now small, with little physical damage.
- River flow: Disruption of business, damage to property, power outages, groundwater pollution, and distribution of solid waste through high and fast water flow. In some instances, property damage, business damage, tainting of ground water, loss of life, and spread of disease and refuse.
- Floods, inundations: Depending on severity can affect traffic circulation, business activity, damage to property, power outages, displacement, and spread of disease. The above has been experienced within Ekurhuleni over the last few years. There are cases where there was extensive loss of property and businesses, spread of illness and loss of life, and loss of access to clean water.
- Extreme temperature: As a result of both urbanization and loss of green space, increases in ground temperature and resulting instances of dengue. Loss of life due to dengue, usually within poor communities.

As part of its planning process, the city has identified that the abovementioned Climatic Hazards can have incremental impacts on urban systems, which can be divided into the following categories:

- Built environment
 - Stress on building foundations which is highly significant given the dolomitic conditions within the region.
 - Road washouts and pothole development
 - Changing disease vectors
 - Stress on storm water and sewage systems
 - Stress on water treatment systems
 - Increased energy demand
 - Increased road surface damage
 - Increased demand for water
- Natural environment
 - Altered ecosystems and wetlands.
 - Slope instability
 - Groundwater depletion and sink hole formation related to the dolomitic geology of the region.
 - Reduction in green space and growing conditions including urban agriculture.
 - Changes in fish populations
 - Increased runoff contamination
 - Increase heat island effect.
 - Increased air pollution
- Affects on urban residents.
 - Illness: heat stress, heat stroke, malnutrition, water borne disease, asthma, physical and mental disability
 - Exposure to elements from substandard construction
 - Disruption of basic service provision and access to supplies
 - Housing instability
 - Property loss and relocation
 - Loss of livelihoods
 - Community fragmentation
 - Exposure to flood-related toxins and wastes
 - o Disruption in availability of potable water, food, and other supplies
 - Water shortages
 - Food shortages; Higher food prices
 - Disruptions of electricity.

Although not all these shocks and stresses might have a direct bearing on the S&J development, this is the information that will be considered throughout the lifespan of the EcoDistrict to name areas of interventions or potential spheres of influence. The intent is for the S&J Industrial Estate EcoDistrict to target these vulnerabilities with proactive strategies to minimise or avoid shocks or stresses, as well as strategies to mitigate the potential negative effects when shocks and/or stresses are unavoidable.

The following table unpacks these potential social, environmental, and economic shocks and stresses and the atrisk population in more detail.

Shocks/Stresses (*)	Туре	Character	Relative Magnitude	At-Risk Population
Flooding	Social, Economic and Environmental	Occurs most often during high-rainfall season, but could also see more out-of- season weather impacts	High	Specific risk for businesses in the floodplain and commuters travelling on routes more prone to flooding
Infrastructure Collapse	Environmental and Economic	Surrounding infrastructure failing as a result of limited funds for maintenance	Medium to High	Everyone, implications for business owners but also workers if emplovment disrupted
Heat wave	Social and Environmental	Extreme weather can cause severe health reactions	Medium	Youth, elderly, individuals with health concerns
Changing disease vectors / disease outbreak	Social and Economic	Prior to covid19 the impact of disease outbreaks has been limited but this could put pressure on healthcare systems as well as economic infrastructure	Low	Youth, elderly, individuals with health concerns
Major employer moves out of the S&J EcoDistrict	Social and Economic	A major employer moving out of the area could place significant pressure on employment	Medium	All workers
Ongoing loadshedding (*)	Social and Economic	Unplanned electrical disturbances can create significant pressure on businesses and impact negatively on performance	Medium to High	Everyone, implications for business owners but also workers if emplovment disrupted (appropriate pro-active response planning is required)
Water shortages	Social and environmental	Unplanned water shortages as a result of a breakdown in service deliver or drought could lead to occupational health and safety concerns	Medium	Youth, elderly, individuals with health concerns
Organised crime around construction activities	Social and Economic	Industrial action at construction sites placing worker safety in jeopardy but also hampering development work to continue	Medium	All workers (both construction and permanent on operational sites due to threat of violence)
Service delivery breakdowns, with specific reference to waste managed services provided by EMM	Environmental	Potential health and safety concerns if there is a breakdown in waste management processes on site.	Medium	All workers.
Water quality in the adjacent wetland	Environmental	Sewage dumping or spillage from adjacent highway	High	Wildlife. Workers at businesses directly adjacent to the wetland

Shocks/Stresses (*)	Туре	Character	Relative Magnitude	At-Risk Population
		affecting water quality and animal health		
Poor air quality	Social, Environmental	Previous investigations have identified potential air quality issues in the Germiston area, the node is also next to a highway	Medium	Everyone, especially youth, elders, and those with health concerns (especially heart disease and asthma)
Inefficient public transport	Environmental, Economic	Alternative modes of transport potentially limited in destination to housing options and frequency on weekends to accommodate shift workers schedules		Workers reliant on public transportation

In response to these challenges, the S&J Team commits to support and foster current local/provincial/national resilience measures applicable to the EcoDistrict including incorporation of relevant elements of the Ekurhuleni Metropolitan Municipality's Climate Change Response Strategy, the Climate Action Plan that is currently in development, as well as the biodiversity strategy that is being finalised.

3.1. VISION & SCOPE

Stresses, such as unemployment or crime, could weaken a district or node on a chronic basis, while shocks, such as heat waves, flash flooding and global pandemics such as COVID-19, are sudden, unexpected disruptions that could threaten both the development of and operational activities within the S&J Industrial Estate. Through the collaborative activities of informal social networks, community organizations, and other local role-players, the most vulnerable among us can be better equipped or supported to overcome these stresses and shocks.

The S&J EcoDistrict is committed to building resilience knowledge and expertise that empowers action through effective organisations and networks, enabling people, businesses, and places to thrive when confronted with social, economic, and environmental stresses and shocks³³.

The S&J EcoDistrict commits to developing infrastructure that serves the dual purpose of climate protection and emergency preparation where practicable (e.g., stormwater management through the wetland rehabilitation project, and consideration for the future incorporation of solar so that critical services can function independently from the municipal grid). As the development and urban management vehicle of the S&J Industrial Estate the S&J NPC³⁴ will be best placed to gather and share knowledge on ways to respond to shock events while providing guidance on the preparedness for long-term changes through implementation tools such as disaster risk and management plans.

To achieve these aims, the commitment scope will address the following resilience categories:

- KNOWLEDGE AND EXPERTISE. Leadership and governance that empowers stakeholders, integrates resilience into the EcoDistrict Roadmap, and effectively manages resilience initiatives.
- ORGANIZATIONS AND NETWORKS. Social groups and economic structures that provide collective identity, social stability and security, and financial resources.
- PEOPLE. The health and wellbeing of individuals, including employment, life and health safeguards, and minimal vulnerabilities to stresses and shocks.
- PLACE. Infrastructure and environmental strength, including reduced physical exposure to stresses and shocks, and reliability and continuity of critical services, such as communications, transportation, and medical care.

³³ This could be done through S&J guidance on risk and disaster management planning on a EcoDistrict scale, and more information on this is set out in this document, with the expectation being that more detail will form part of the road mapping processes.

³⁴ More information on the backbone organisation that will drive the S&J EcoDistrict will be set out in the Declaration of Collaboration.

3.2. WORKPLAN, RESPONSIBILITIES AND SCHEDULE

The S&J Team will incorporate and integrate the following tasks and actions into the planning, implementation, and certification processes during each phase to endeavour to minimize and avoid stresses and shocks when possible and, when unavoidable, mitigate their negative side effects:

RESILIENCE IN THE FOR	MATION PHASE		
Type of Resilience	Task	Responsibility	Schedule
Knowledge / Expertise & Organizations / Networks	Task 1: Reach out to at risk ³⁵ groups, explaining resilience goals (potential those sites located within a flood line or close to the wetland that might experience flooding during heavy rains).	S&J NPC will be the primary organisation driving this task in the long term with the Co-Ownership and their implementing agents playing a support role during the development period.	Short Term (and ongoing as new sites are developed)
People & Place	Task 2: Recruit representatives from identified at-risk groups and critical facility representatives for the EcoDistrict decision- making body	S&J NPC will be the primary organisation driving this task in the long terms with the Co-Ownership and their implementing agents playing a support role during the development period.	Short Term (and ongoing as new sites are developed)
RESILIENCE IN THE ROA	DMAP PHASE		
Type of Resilience	Task	Responsibility	Schedule
Knowledge / Expertise & Organizations / Networks	Task 3: Review existing emergency Roadmap and identify gaps, plus ensure the feasible participation of at-risk groups in roadmap workshops	S&J NPC	Short Term (and ongoing as new sites are developed)
People & Place	Task 4: Evaluate the robustness of strategies to withstand stresses and shocks and eliminate over-reliance on single assets (for example relying on one sub-station or one source for water)	S&J NPC	Short Term (and ongoing as new sites are developed)
RESILIENCE IN THE PER	FORMANCE PHASE		
Type of Resilience	Task	Responsibility	Schedule
Knowledge / Expertise & Organizations / Networks	Task 5: Collect and analyse progress biannually towards EcoDistrict resilience goals, adjust strategy as needed	S&J NPC	Long-term (ongoing)
People & Place	Task 6: Continuous engagement with at risk groups and emergency planning groups noting feedback to course-correct the resilient roadmap living document	S&J NPC	Long-term (ongoing)

3.3. INDICATORS

The following indicators of Resilience developed to date by the S&J EcoDistrict Team are illustrative and not meant to be exhaustive. The indicators most relevant and meaningful to the neighbourhood will be confirmed in the Formation and Roadmap Phases:

• Creation of an S&J disaster management team and development of an appropriate response plan (inclusive of climate scenario planning supported by an appropriate environmental management system).

³⁵ 'At risk' groups are not the same as vulnerable groups, although vulnerable groups could be 'at risk'. In this context, 'at risk' refers to groups of people that might be impacted negatively by anticipated shocks and stresses. For instance, businesses located close to the wetland on site might be more 'at risk' for flooding.

- Number of engagements with 'at risk' groups and sharing knowledge and information on anticipated shocks and stresses.
- Number of EV-charging bays at the convenience retail centre
- MWA electricity produced within the precinct by sustainable energy sources.
- Number of transportation routes and access routes created.
- Number of triple net leases in place.
- Percentage distribution of employment workforce in primary, secondary, and tertiary sectors.
- Percentage of wetland rehabilitation for effective stormwater management.
- Quantity of rehabilitated groundwater harvested and treated for use on site to reduce reliance on municipal supply while cleaning up the negative impacts associated with the gold mine previously located on site; and
- Number of street trees and the percentage of canopy cover created.

3.4. EVALUATION & ADJUSTMENT

The indicators listed above will be used to evaluate progress toward the resilience goals set for the S&J EcoDistrict through biennial reporting and evaluation with the distinct task of identifying additional opportunities for continual improvement.

3.5. LETTER OF SUPPORT

A letter of support from the Ekurhuleni Metropolitan Municipality is provided in Annexure D.

4. CLIMATE PROTECTION³⁶

The City of Ekurhuleni (CoE; "the City"), an important industrial and logistics hub in South Africa, aims to become a "delivering, capable, sustainable" city by 2055. As part of these efforts, the City has prioritized responding to climate change through various initiatives. The EMM's Green City Action Plan³⁷ has identified actions—including city-level policies, investments, and planning strategies—that can help the City meet its climate mitigation and sustainability targets.

The specific targets pursued in the Green City Action Plan are aligned with the City's existing Ekurhuleni+ Challenge 2030 targets, as follows³⁸:

- a) 25% reduction in fossil fuel energy use*
- b) 20% reduction in private fossil fuel vehicle kilometers travelled**
- c) 20% improvement in water security**
- d) 50% reduction in waste sent to landfill*
- e) 20% reduction in greenhouse gas (GHG) emissions*.

As mentioned elsewhere, the S&J site was historically home to a gold mine, and the mining activities had a significant detrimental effect on the environment and surrounding communities. Since the decommissioning of the mine, and the development of the S&J Industrial Estate development concept, significant environmental rehabilitation initiatives were implemented or formulated for implementation. This includes the removal of extensive mine dumps and facilitation of the rehabilitation and betterment of such affected areas together with the extraction and treatment of groundwater present within a remote mine shaft located on the Estate for utilised for irrigation purposes. Additionally, the wetland forming part of S&J is being rehabilitated and maintained by the NPC in accordance with its environmental management plan.

SA's increasing electricity costs, as well as its erratic supply, has significant implications for S&J and its future tenants. The national utility, Eskom, implemented an average increase to direct consumers of 8.76% during the year while the National Energy Regulator of South Africa guideline increase was set at 6.22% for municipalities. S&J's income from electricity recoveries is thus affected as higher tariff increases may be applied to higher consumption levels. While numerous opportunities have been identified to improve efficiencies, S&J also continuously considers the business case in efficiency initiatives to ensure their long-term sustainability. Unfortunately, independent producers do not have the legal right to place energy back into the electrical grid, further placing significant strain

³⁶ Text included here was sourced from the Redefine ESG report and adapted - input/approval/guidance on relevance needed.

³⁷ City of Ekurhuleni. 2021. Draft Green City Action Plan.

³⁸ *Ekurhuleni+ Challenge 2030 target; and **New target but aligned with Ekurhuleni+ targets.

on the intrinsic value of renewable resources and the role it can play at scale within financial affordability and viability considerations.

4.1. VISION & SCOPE

S&J is committed to building up to their ultimate goal of carbon neutrality at a future date with interim targets and benchmarks linked to those set out by the City of Ekurhuleni as a minimum. While S&J will actively be building a pathway to carbon neutrality by addressing direct and indirect operational CO_2 emissions from energy use in buildings, water systems and infrastructure, solid waste, wastewater management, and transportation as our development pipeline itself becomes clear, specific offset commitments or larger impact interventions will be dependent on larger conversations (such as ongoing wheeling³⁹ agreements with the City of Ekurhuleni which is currently only available to customers on the City Tariff D and Tariff J, connected at \geq 6.6kV with a notified maximum demand (NMD) of \geq 1 MVA that have entered into a wheeling transaction with a generator or energy trader will qualify for wheeling).

To achieve these aims, the commitment scope must include, at a minimum, the following sources of operational CO₂ emissions, as adapted from the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories:

- SCOPE 1. Operational emissions from sources located within the EcoDistrict, including the building, transportation, and infrastructure sectors.
- SCOPE 2. Operational emissions occurring outside the EcoDistrict from the use of grid-supplied electricity and thermal energy within the EcoDistrict in the building, transportation, and infrastructure sectors.

4.2. CONTEXT

Prior to the development of the S&J Industrial Estate, the site was zoned for mining but vacant and used to store mine tailings⁴⁰ which have been relocated before the new owners took possession of the site. The site therefore had no historic emissions to consider as part of the EcoDistrict processes.

Although Greenfield development districts that are currently vacant⁴¹ are exempt from the baseline energy use and CO₂ emissions inventory requirement, it was deemed an important step in the S&J Industrial Estate roadmap development process to create a full understanding of the magnitude of the CO₂ emissions profile. Doing so would guide the discussion around appropriate Strategies, Projects, and Programmes to consider as part of the decarbonization efforts linked to the overarching goal of the EcoDistrict approach.

The build-out projection does include energy use and CO₂ emissions estimates as occupancy will likely begin in line with the top structure build out with selected interventions in line with Net Zero mandates and other carbon emission reductions and other interventions that will occur over time to a neutrality year.

There is no energy consumption or carbon emissions related to infrastructure (wastewater treatment facilities, landfills, etc.) within the physical boundary of the S&J Industrial Estate, and those would therefore be considered Scope 3 emissions. The energy baseline and CO₂ emissions inventory only account for Scope 1 and Scope 2 emissions as described in the Global GHG Protocol and the EcoDistricts Certified Handbook (page 56).

The Energy Use Intensity and Related Carbon Emission Inventory will be calculated using the following inputs:

- Energy consumptions of buildings (warehousing and mixed-use). Energy source predominantly will be fossilfuel based electricity;
- Energy consumption of street- and traffic lights. Energy source also likely to be fossil-fuel based electricity unless intervention identified to use alternative source (such as solar with back-up battery).

³⁹ "Wheeling" means the transportation of electricity (electrical energy) by a generator or energy trader to a consumer through a network not owner, controlled or leased by either party and deals with financial flow of electrical energy.

⁴⁰ Ahmari & Zhang (2015: 289) describe mine tailings (NT) as 'pulverized rocks that remains after the valuable metal-bearing minerals have been extracted in physical separation processes'.

⁴¹ The reference to 'currently vacant' here was taken to reference the baseline date, and for easy reference this was taken as 2019, where enabling roads- and bulk infrastructure was developed on site, with limited to no top structure development taking place and no operational activity happening. The activity on site would therefore be restricted to construction related emissions which falls outside the scope of the EcoDistricts requirements.

• Traffic emissions will be a combination of daily worker commuter traffic, suppliers as well as visitors to the node. As part of the initial calculations the Traffic Impact Assessments conducted for the node will be used to guide the assumptions made, but over time, actual data captured at the entrance gates and through the employee/worker traffic/travel assessment surveys will enable the ongoing modelling processed to become more fine-grained and accurate. Assumptions as part of this portion of the assessment will refer to the distances travelled, type of vehicle, fuel type as well as the carbon emissions factor per vehicle type used in the calculations.

The intent would be to assess the overall carbon emissions profile and determine the most suitable carbon emissions reductions interventions required to move the S&J Industrial Estate EcoDistrict to a carbon neutral state at a future date. Interventions that will be considered, could include:

- Energy efficiency interventions as a base requirement for all new developments to ensure that net zero targets for new buildings (set by Redefine one of the current co-owners) are met;
- Passive design intervention to reduce electricity use (such as light wells to reduce daytime energy use for lighting requirements);
- Reduction in fossil-fuel based electricity and an increased use of solar-based renewables;
- Investigating the sourcing of clean energy from alternative sources to offset current consumption as an
 alternative to current fossil-fuel sources (will require formal wheeling agreements to be in place);
- Investigate feasible carbon offsets once reduction strategies have been exhausted.

The Roadmap document will provide more detail around the anticipated interventions which will be based on the estimated energy use intensity and associated carbon emissions inventory linked to the roadmap horizon year, district build-out estimate as well as horizon year performance targets being set.

4.3. WORKPLAN, RESPONSIBILITIES AND SCHEDULE

The S&J EcoDistrict Team will incorporate and integrate the following tasks and actions into the planning, implementation, and certification processes during each phase to endeavour to minimize energy demand, maximize energy efficiency, produce energy from clean and renewable sources, and sequester or off-set CO₂ emissions:

CLIMATE PROTECTION IN FORMATION PHASE		
Task	Responsibility	Schedule
Task 1: Reach out to identified interest groups explaining climate protection goals and participation opportunities	S&J Core EcoDistrict Team will be the primary organisation driving this task with input from the S&J NPC and the o-Ownership while the development is still actively rolling out.	Short term (ongoing)
Task 2: Recruit climate change practitioners and interested community group representatives for the EcoDistrict decision-making body ⁴²	S&J NPC with external input as needed.	Short term (ongoing)
Task 3: Developed tenant green guideline as part of our carbon neutral journey to encourage energy and water-efficient practices and equipment	S&J NPC with external input as needed.	Short term (ongoing)
CLIMATE PROTECTION IN ROADMAP PHASE		
Task	Responsibility	Schedule
Task 4: Ensure the participation of interested community groups in Roadmap workshops, including language translation and pre-workshop process orientations	S&J NPC with external input as needed.	Short term (ongoing)
Task 5: Conduct a carbon - screening of all projects and programs during the strategies ranking step	S&J NPC with external input as needed.	Short term (ongoing)

⁴² Current considerations include C40, ICLEI, IFC and/or the Green Building Council of South Africa.

Task 6: As part of biennial progress reporting, prepare and evaluate carbon reduction results to date, and recommend strategy adjustments to accelerate the rate of reduction to ensure overall commitment to carbon neutrality is supported effectively.	SG to create the framework for S&J NPC to undertake ongoing tracking	Medium term (ongoing)
CLIMATE PROTECTION IN PERFORMANCE PHASE	Ints to accelerate the rate of reduction to (ongoing) mitment to carbon neutrality is supported (ongoing) N IN PERFORMANCE PHASE Responsibility Schedule Schedule listrict performance is transparent and S&J NPC/Marketing Department Long term (ongoing) nate Protection commitment. Report out via Sevent via	
Task	Responsibility	Schedule
Task 7: Ensure EcoDistrict performance is transparent and accessible to ensure the results is used to adjust and strengthen the Climate Protection commitment. Report out via website, social media, community meetings, newsletters and any additional methods deemed appropriate for the EcoDistrict		0

4.4. INDICATORS

Climate Protection Indicators developed to date by the S&J EcoDistricts team are illustrative and not meant to be exhaustive. However, some indicators are more meaningful, relevant and data more readily available than others and the team understands that too many indicators can be onerous and difficult to manage and measure. The indicators most relevant and meaningful to the S&J EcoDistrict will be confirmed in the Formation and Roadmap Phases:

- Percentage of buildings benchmarked and measuring energy performance.
- Annual energy use intensity for buildings in the EcoDistrict
- Annual tons of GHG emissions from building energy use, transportation, and waste
- Percentage of annual electric supply generated from EcoDistrict-based renewable sources.
- Percentage of waste diverted from landfills annually.
- Number of renewable energy installations within the EcoDistrict (this could eventually be upgraded to measure the extent of renewable energy generated in the EcoDistrict (kWh/day))
- Renewable energy used in the EcoDistrict (kWh/day)
- Net tons of CO₂ emissions in the EcoDistrict
- Urban tree canopy percentage
- Number of green infrastructure projects in the EcoDistrict
- Extent of the wetland rehabilitation
- Volume of water reclaimed and treated from the old mine shaft on site.

4.5. EVALUATION & ADJUSTMENT

Climate Protection conditions are regularly updated as new data becomes available, and the findings inform program and project prioritization for ensuing work plans. Biennial performance report used as feedback to be cross-referenced for adaptation and adjustment within each Performance Phase Work Plan.

4.6. LETTER OF SUPPORT

A letter of support from the City of Johannesburg is provided in Annexure E.

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ANNEXURE A – S&J INDUSTRIAL ESTATE ECODISTRICTS STEERING COMMITTEE MEETING SCHEDULE

S&J Industrial Estate EcoDistrict Steering Committee & External Parties Engagements for Imperatives Commitment Development and Adoption		Last Name, First Name	Adam Koekemoer	Adrie Fourie	Anelisa Keke Chantelle	Chilu Lombe	Chris Roberg	Gareth Ahier	Grant Silverman	Hein Papenfus	llse Swanepoel	Jacques Kok	Johann Nell	Julian Raal		Marloes Reinink Mibe Brittell	Morgan Wratten	Nomamfengu Mbele	Retha Bezuidenhout	Kelly Maphuma	Roan Stewart	Tebogo Mojapelo	Victor Mathey	Elsabeth van der Merwe	ls'haaq Akoon	Martin Bekker	Lovemore Nkuna	Nokuthula Dubazane	Maggy Hadebe	Aadil Engar	Liteboho Makhele	Teva Needleman	Naomi Cole
		Affiliation	Redefine	Solid Green	Redeține Abland	Solid Groon	Jour dieen Abland	Redefine	Abland	Abland	Redefine	Redefine	Redefine	Abreal	eulenau veneluie	Solid Green Pedefine	Redefine	Solid Green	Abreal	Abcongroup Foundation	Abman	Abland	Redefine	EMM	EMM	EMM	EMM	EMM	EMM	EMM	SACN	EcoDistricts	Independent Assessor
TOTAL ATTENDANCE		140	4	31	8 6	4	1 4	10	2					0 5		6 8		14	8	2	1	1 1	17	2	2	1	1	1	1	1	1	1	1
S&J Industrial Estate High-Level EcoDistrict Introduction and Relevance Discussion	14/05/2020	7																															
EcoDistricts Introduction Overview Presentation and Discussion Preparation Dry-Run	27/07/2020	4																															
EcoDistricts Introduction Overview Presentation for Initial Decision to Proceed	31/07/2020	6																															
Implementation of an EcoDistrict	30/10/2020	10																															
Alignment of Redefine CSI Framework to EcoDistrict Imperative Commitment Requirements	19/11/2020	17																															
EcoDistrict/Redefine ESG Alignment Discussion	24/11/2020	2																															
EcoDistrict Workshop 1	02/12/2020	16																															
S&J Industrial Estate Site Visit	28/01/2021	8																															
SG Internal Strategic Workshop	10/02/2021	3																															
Imperatives Commitment Workshop Prep with Core Liaison Team	11/02/2021	5																															
Imperatives Commitment Core Working Group	15/02/2021	8																															
Imperatives Committment Document Run- Through	25/02/2021	6																															
Second Imperatives Committment Core Working Group Session	08/03/2021	7																															
Steering Committee Workshop Prep with Core Liaison Team	18/03/2021	5																															
Redefine Internal Responsibilities & Way Forward	12/04/2021	7																															
S&J Workshop Prep with Core Liaison Team	30/04/2021	6																															
EcoDistrict Workshop 2 - Overarching Protocol Alignment Session - Full Steering Committee Members	03/05/2021	10																															
SG Internal Strategic Workshop	10/05/2021	3																															
S&J EcoDistrict Introduciton & Strategic Support Request Discussion with Ekhurhuleni Metropolitan Municipality	01/06/2021	4																															
Combined EcoDistrict Imperatives Commitment, Formation and Roadmap Integrated Workshop - Full Steering Committee	24/06/2021	11																															
S&J EcoDistrict Strategic Planning Session to proceed with Initial Formation and Roadmapping Strategic Engagement	05/07/2021	2																															

S&J Industrial Estate EcoDistrict Steering Committee & External Parties Engagements for Imperatives Commitment Development and Adoption		Last Name, First Name	Adam Koekemoer	Adrie Fourie	Anelisa Keke	Chantelle Mathomes	Chilu Lombe	Chris Roberg	Gareth Ahier	Grant Silverman	Hein Papenfus	llse Swanepoel	Jacques Kok	Johann Nell	Julian Raal	Marijke Coetzee	Marloes Reinink		Morgan wratten Nomamfengu Mbele	Retha Bezuidenhout	Kelly Maphuma	Roan Stewart	Tebogo Mojapelo	Victor Mathey	Elsabeth van der Merwe	ls'haaq Akoon	Martin Bekker	Lovemore Nkuna	Nokuthula Dubazane	Maggy Hadebe	Aadil Engar	Liteboho Makhele	Teva Needleman Naomi Cole	
		Affiliation	Redefine	Solid Green	Redefine	Abland	Solid Green	Abland	Redefine	Abland	Abland	Redefine	Redefine	Redefine	Abreal	Redefine	Solid Green	aulanax	keaejine Solid Green	Abreal	Abcongroup Foundation	Abman	Abland	Redefine	EMM	EMM	EMM	EMM	EMM	EMM	EMM	SACN	<i>EcoDistricts</i> Independent	Assessor
S&J EcoDistrict Strategic Planning Session to clarify Imperative Commitment Queries	26/07/2021	2																																
S&J EcoDistrict Final Imperatives Commitment Close-Out and Sign-Off by Steering Committee	29/07/2021	13																																
S&J EcoDistrict Introduction and Letter of Support Request Discussion Session with South African Cities Network Representative	05/08/2021	3																																
S&J EcoDistricts Strategic Guidance and Confirmation of Sign-Off from all Co-Owners on Imperatives Commitment for Endorsement	13/08/2021	2																																
S&J Industrial Estate - EMM Strategic Support Discussion	14/10/2021	9																																
Round 1 Assessment Feedback Discussion Session	18/01/2022	3																																
EMM Letter of Support Requirement Briefing Session	31/01/2022	2																																
Round 1 Strategic Response and Round 2 Prepration and Close-Out Discussion Session	08/03/2022	2																																
Final Letter of Support Requirement Initial Briefing Session	17/03/2022	2																																
Second Briefing Session Final Letter of Support	22/03/2022	2																																
Confirmation telecon regarding Final Letter of Support	28/03/2022	2																																
Accepted and present Status of attendance unknown Declined Tentative but attendance status unknown																				<u> </u>	<u> </u>													

ANNEXURE B – SIGNATORIES

The names and affiliations of the mandated signatories of the S&J EcoDistrict Imperatives Commitment are set out below. The Mandated Signatories acting on behalf of the S&J Industrial Estate EcoDistrict NPC Trustees are as follow:

Redefine Properties Limited, represented by:

Johann Nell

Johann Nell National Asset Manager johannn@redefine.co.za

GGP Investments Proprietary Limited. represented by:

Roan Stewart

Roan Stewart Asset Manager stewart@abreal.co.za

and The Pivotal Fund Proprietary Limited, represented by: Joshua van Tonder

Joshua van Tonder Development Manager joshua@redefine.co.za

ANNEXURE C – HAWK ACADEMY – LETTER OF SUPPORT



HAWK ACADEMY

PRIMARY AND HIGH SCHOOL EMIS: 700400591 No.12 Main Reef Road, Primrose Tel: 011 043 9895 Cell: 0764308400 Fax: 086 603 7103 Email: hawkacademyep@gmail.com

25 March 2022

To the EcoDistrict Certification Review Committee

It is our pleasure to write this letter of support for the S&J Industrial Estate and its commitment to Equity within the S&J Industrial Estate EcoDistrict.

Hawk Academy, in Germiston, has established itself as a centre of academic excellence, at the sharp end of league statistics and offering students a comprehensive learning experience, not just in subjects and curriculum learning, but also in sports and supporting activities. The academy has over 700 pupils that are from the neighbouring informal settlements, receiving supporting from private sector funders with master planning, infrastructure development, maintenance and providing pupils with access to event of national importance.

The school understands that S&J Industrial Estate is a private sector driven industrial development where there is a commitment to equity in the ongoing evolution and performance of the S&J EcoDistrict, including its staffing, governance structure, establishment of objectives, development and tracking of indicators, prioritization of strategies, and implementation of projects.

As a facility that works with youth from historically and current marginalised communities, we commend S&J for the commitment to incorporating Equity Commitments into its operational processes, decisionmaking structures to ensure distributional and cross-generational equity among all S&J EcoDistrict community members.

We look forward to engaging with the S&J Industrial Estate throughout its journey as an EcoDistrict and beyond.

Please feel free to reach out to me at hawkacademygp@gmail.com or 011 043 9895 with any questions or thoughts. We look forward to your decision.

Sincerely,

Mrs Agnes Mkhonto Principal Hawk Academy

Atten ina

HAWK ACADEMY GDE: 700400591 12 MAIN REEF RD, PRIMROSE GERMISTON, 1401 TEL: 011 043 9698 FAX: 036 003 7103 EMAIL: hawkacademygp@gmail.com

ANNEXURE D – EKURHULENI METROPOLITAN MUNICIPALITY – LETTER OF SUPPORT

CC: Ms Adrie Fourie Head of Department: Sustainable Cities Solid Green Consulting adrie@solidgreen.co.za

To:

From: Mr. Is'haaq Akoon Acting Divisional Head: Strategic Planning Environmental Resource and Waste Management Is'haaq.Akoon@ekurhuleni.gov.za

Eco District Certification Review Committee



Cnr Van Riebeeck Ave Hendrik Potgieter Edenvale 1460

PO Box 25 Edenvale 1610

Tel: 011 999 3106 www.ekurhuleni.gov.za

03 March 2022

To: EcoDistrict Certification Review Committee

ACKNOWLEDGEMENT OF THE S&J INDUSTRIAL ESTATE'S AMBITIOUS DEVELOPMENT APPROACH

On behalf of the City of Ekurhuleni's Environmental Resource & Waste Management Department (ER&WM), I would like to acknowledge the S&J Industrial Estate Development. The S&J Industrial Estate is a private sector driven industrial development committed to building resilience knowledge and expertise that empowers action through effective organisations and networks, enabling people and businesses to effectively respond to economic, environmental and social shocks and stresses. S&J ambitious development approach states that there is a strong commitment towards carbon neutrality, which aligns with the City of Ekurhuleni's climate change targets and goals.

The ER&WM has been made aware of the plans from S&J through two engagements that provided insight into the proposed development and the overarching approach and embedded principles. In an effort to further support the vision and objective of this development, the ERWM utilised the engagement opportunity to share documents that detail the City's climate change response & the 2030 targets as a way of ensuring that there is strategic alignment and collaboration between the City & S&J industrial Estate. We trust that these have been incorporated in the climate resilience vision of the S&J Industrial Estate.

Collaborations such as these are the roadmap that will help the City to achieve its climate change ambitions and goals. Therefore, we are committed to providing strategic support and assisting the S&J team in their final plans towards getting their certification. The Department commits to review and comment on all of the final documents as it may be required, and trust that the relevant legislative development requirements mandated to other departments within the City will be duly followed in ensuring final approvals.

We look forward to embarking on this journey of collaboration with S&J Industrial Estate to ensure that the Ekurhuleni region is carbon neutral by 2050.

Yours Sincerely,

Digitally signed by Is'haaq Akoon DN: cn=Is'haaq Akoon, o=City of Ekurhuleni, ou=Strategic Planning, email=ishaq,akoon@ekurhuleni.gov.za, c=ZA Date: 2022.03.03 16:02:29 +02'00'

MR IS'HAAQ AKOON ACTING DIVISIONAL HEAD: STRATEGIC PLANNING ENVIRONMENTAL RESOURCE AND WASTE MANAGEMENT DEPARTMENT ANNEXURE E - CITY OF JOHANNESBURG - LETTER OF SUPPORT



City of Johannesburg Department of Development Planning City Transformation and Spatial Planning Directorate

10th Floor A Block Metropolitan Centre 158 Civic Boulevard Braamfontein PO Box 30733 Braamfontein 2017 Tel +27(0)11 407-6870 Fax +27(0)11 339-1547 www.joburg.org.za

9 September 2021

To: EcoDistrict Certification Review Committee

SUPPORTING THE S&J INDUSTRIAL ESTATE'S AMBITIOUS DEVELOPMENT APPROACH

It is our pleasure to write this letter of support for the S&J Industrial Estate and its commitment to Climate Protection.

The S&J Industrial Estate is located on the physical and administrative border between the City of Johannesburg and the Ekurhuleni Metropolitan Municipality within the Gauteng City Region, South Africa's economic hub. Both these metropolitan cities are pursuing ambitious goals transitioning toward low carbon economies. The City of Johannesburg (CoJ) has recently adopted its Climate Action Plan to outline city actions to reach the target of a net-zero emissions and resilient city by 2050.

One of the priority programmes is aimed at achieving net zero for all new buildings by 2030 and all existing buildings by 2050. This commitment was a result of the pioneering work conducted as part of the C40 South Africa Buildings Programme, which ensures city planning alignment with the ambitious goals of the Paris Agreement to restrict global heating at 1.5 degrees Celsius or below. The City has recently completed its first Green Building Policy for new buildings, outlining a pathway towards low and net zero buildings. The critical role of precinct and district scale interventions has been highlighted many times during the consultative processes and aligns very clearly with the *EcoDistrict™ Methodology*.

As part of CoJs focus on delivering on its international commitments regarding climate change declarations, the City has appointed Solid Green to *Develop and Test an EcoDistrict™ Methodology for the City of Joburg for the Orange Grove Special Development Zone* as part of this innovative approach toward a low carbon city. It is this ongoing work that creates a significant touchpoint with the S&J Industrial Estate and its commitment to target carbon neutrality in 2050.

Public and private sector collaboration on issues that impact our cities, and our communities are essential to ensure that industry share knowledge and create not only the momentum but also the motivation for widespread change which is needed to achieve SDG11 and other ambition goals needed to around climate protection.

We look forward to engaging with the S&J Industrial Estate throughout its journey as an EcoDistrict and beyond.

Please feel free to reach out to me at <u>LianaS@joburg.org.za</u> or +2782 555 0618 with any questions or thought. We look forward to your decision.

Sincerely,

Liana Strydom Assistant-Director: Regional Planning City Transformation and Spatial Planning Directorate Department of Development Planning