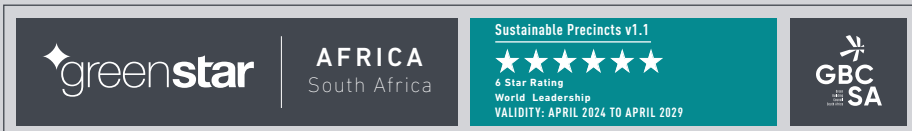




NEWINBOSCH NEIGHBOURHOOD

1 Newinbosch Boulevard, Newinbosch, Stellenbosch

6 Star Green Star – Sustainable Precincts v1.1



TOTAL POINTS:

77

CATEGORY SCORES:

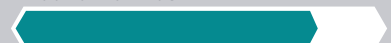
GOVERNANCE



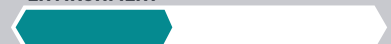
LIVEABILITY



ECONOMIC PROSPERITY



ENVIRONMENT



INNOVATIONS



FLOOR AREAS:

TOTAL GROSS FLOOR AREA (GFA):

334 360m²

TOTAL COMMERCIAL OFFICE AREA:

n/a

CAR PARKING AREA:

n/a

Newinbosch is a new mixed-use neighbourhood on the northern outskirts of Stellenbosch Municipality and falls within the planned expansion zones to the north along the Adam Tas Corridor. At initial certification it consisted of 1331 residential units of mixed typologies including apartment units, simplexes, courtyard homes, townhouses and homesteads. The broader development area will see the construction of a church, shopping centre, preschool, primary and high school and lifestyle precinct to service the community.

Sustainable building features include:

Newinbosch is a sustainable precinct development on the R304 just three kilometres from the heart of Stellenbosch. It was designed to be integrated with the Adam Tas Corridor. Its core focus was on liveability, health, and fostering community through an active community life. As such, it has well-integrated non-motorised and pedestrian-prioritised transit routes that connect residents with its biodiversity routes, green avenues, parks, and a sports and leisure hub, called the Grappa shed and Yard. Taking the notion of sustainable transportation and innovation seriously, remote working opportunities are facilitated by site-wide fibre to the home and most homes are designed to promote remote working with dedicated, street-facing office pods. The sense of place was enhanced through the implementation of 3 heritage interpretation strategies, including the retention of historical names, a farmhouse renovation, and an urban form that was consistent with the peri-urban transitional landscape from urban to rural.

During construction, school leavers and the unemployed are supported in finding gainful employment through a trade-school partnership with Tjeka, offering in-service training that takes learners through NQF levels 1-5 imparting blended theory and practical skills.

On the resources management side of things, all buildings sport efficient sanitary fixtures and state of the art monitoring software to detect water leakages where and when they happen. Approximately 40% of the landscaping irrigation water is supplemented by stored rainwater and greywater collected from the apartment blocks. The development is equipped with enough grid-tied PV and battery banks to ensure that it is resilient with full load up to loadshedding Stage 3 and curtailed from Stage 4 onwards. 65% of the neighbourhood's energy will come from renewable sources. To reduce the embodied carbon of materials, the buildings included hollow core slabs, and cast slabs were carefully designed to reduce the requirement for steel rebar. The structural rebar is also manufactured predominantly from recycled steel and portland cement was reduced through the use of recycled fly-ash.

A site-wide operational waste management plan was developed and each house issued with bins for the separation of waste at source. On-site composting facilities will turn wet-waste into organic fertiliser.

Climate change was modelled for likely and severe impacts and several strategies to mitigate those effects were implemented. This included water sensitive urban design with several key benefits including heat-wave

resilience through soil cooling, ground-water retention and recharge. Stakeholder engagement was held with local disaster responders to refine a response plan should a severe weather event occur. Cooling and biodiversity were enhanced through the introduction of Southern Afro-temperate pocket forests and Swartland Shale Renosterveld plants. A biodiversity management plan will include annual monitoring activities to measure the outcomes of these interventions.

Governance was an important consideration in the establishment of the development and the home-owners association and sub-committees will be prominent partners steering the management of the facilities, including the hosting of events to meet changing community needs over time. At initial certification, Newinbosch targeted, and achieved 7 innovation points; 3 for exceeding benchmarks in the provision of incentives for sustainability, renewable energy provision, and peak energy. It was further recognized and rewarded for market transformation through a new credit in biodiversity connectivity, and responding to innovation challenges in financial transparency, water leak-detection to public space, and a strategy for promoting remote working.

PROJECT TEAM:

OWNER
Cloetesdal
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LANDSCAPE ARCHITECT
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DEVELOPER/ SPONSOR
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Similan

PROJECT MANAGER
Similan

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