



**ecolution  
consulting**

We Live, Work & Play  
Sustainability



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# Why we're here

Whilst spending 14 months in Antarctica working for the South African National Antarctic Programme as the team leader and mechanical engineer, director André Harms came face-to-face with the critical situation our planet is facing. Upon his return in 2011, he resolved to combine his new found knowledge, passion for the environment and engineering background to start a sustainability and green building consulting firm: Ecolution Consulting.

# How we work

We are dedicated to redefining business and using it as a force for good. Committed to always staying abreast of the cutting edge solutions and technologies that exist in the market place, we constantly innovate our own strategies and methods to provide maximum value to our clients and achieve more successful, efficient and healthier spaces and communities.

Our dedicated team is based in Cape Town and Johannesburg. A team who not only apply sustainability in their business approach, but in their day-to-day lives.

# What we do

We provide expert insights, solutions and consulting services for businesses and buildings in any industry. Our solutions not only focus on sustainability, but the holistic benefits it provides; from financial profitability to operational efficiency, as well as brand exposure and trust.

Our services are vast, but we focus primarily on providing sustainability consulting and engineering services to the building industry. Why? Because currently buildings account for one-third of the global greenhouse gas emissions, 40% of the world's energy consumption and 25% of the world's water consumption. This industry provides a phenomenal opportunity to reduce our global environmental impact plus live, work and play in better spaces.

# Our values

We are driven by the purpose to be better corporate citizens while nurturing a more sustainable, restorative tomorrow. As we work towards this vision, these are the values that govern our actions and define our aspirations:

**Authenticity** | To be real, transparent and relationship-building.

**Adaptability** | To be flexible, innovative and outcomes-based in a fast-changing world.

**Respect** | To honour the environment, our clients, surrounding community and ourselves.

**Perseverance** | To continually strive for excellence, consistency and professionalism in all that we do.

**Passion** | To be enthusiastic catalysts for change.



## Green Star Certification

The Green Building Council of South Africa (GBCSA) uses the Green Star SA rating system to recognise environmental leadership in the built environment. We drive the Green Star submission process to ensure each building is rewarded optimally for its sustainability initiatives and innovations.



## LEED Certification

Leadership in Energy and Environmental Design (LEED) is the certification applied by the U.S. Green Building Council. It recognises best-in-class building strategies and practices and is considered as the global standard for green building. We guide the submission process of a building pursuing LEED certification.



## EDGE Certification

Excellence in Design for Greater Efficiencies (EDGE) is a tool aimed at increasing energy, water and embodied-energy-of-materials efficiency in most building types. We guide and assist a project team with their EDGE submission, or assist project developers as the approved, independent EDGE Auditor.



## Green Building Design

We offer consulting from project conception through to operation. This includes consulting on passive design strategies and technical interventions such as sustainable sites, water efficiency, energy & atmosphere, materials & resources and indoor environmental quality for new or existing buildings.



## Building Commissioning Process

The Building Commissioning (Cx) Process ensures integrated quality, functionality, maintainability and efficiency. It results in a higher level of building performance that is independently verified. We offer commissioning for Green Star SA and LEED projects, or as a stand alone service.



## Sustainability Consulting

We holistically evaluate your site or business and then develop a high-level sustainability management plan customised to your needs. Some of the areas we consult in are: sustainable operating practices, resource efficiency, waste management, indoor air quality and materials selection.



## Energy Modelling

Our integrated design approach to Energy Modelling optimises building performance and energy end-use through improved thermal comfort, solar loads, natural-light and other passive-design strategies. We apply modelling during building design and for certifications under LEED, Green Star SA or SANS 10400-XA.



## Computerised Maintenance Management Systems

We facilitate the implementation of computerised maintenance management systems (CMMS), a software package that maintains a computer database of information about your organisation's efficiency and equipment, as well as an area's preventative and reactive maintenance tasks and performance.



## Indoor Air Quality / Environmental Quality

We provide IAQ / IEQ inspection, testing, reporting and optimisation services either as stand-alone service or as required for the Green Star SA Existing Building IEQ credits. We work with parameters such as indoor air quality, lighting, thermal & occupant comfort, acoustic quality and daylight & views.



## Employee Engagement & Sustainability Communications

We offer a series of practical behavioural and awareness orientated initiatives to achieve progress in efficiency and sustainability, including: workshops, training, vision strategy and sustainability drives. We also assist with internal and external communications.

# Some of our work



## Hotel Verde - Africa's Greenest Hotel

**Lead Sustainability Consultants and Commissioning Agents (CxA)**

We orchestrated all sustainability consulting on this project which is the first hotel in the world to have achieved a double LEED platinum certification. The project embodies sustainable practices and principles, with emphasis on design, construction and operation with efficiency and conservation at the heart.



## Google Jozi - Head Office

**Independent Commissioning Agents (CxA)**

We were responsible for implementing the fundamental commissioning process for the Google South Africa Head Office in Bryanston, Johannesburg. The project submitted for both LEED and Green Star SA certification and was awarded a top spot in the International Green Interior Awards.



## Allandale Office Building - Atterbury

**Independent Commissioning Agents (CxA)**

We took the design, construction, building systems and building team through the LEED fundamental and enhanced commissioning process, which was supported through the development of system manuals, verification of staff and occupant training, and a 10 month operations review.



## Four Leaf Estate - Old Mutual / Similan

**EDGE Auditors**

The development received the first final EDGE certification in Africa in May 2017. As EDGE Auditors on the project we verified all design documentation and conducted site visits to ensure the construction team complied with the certification.



## The District - Growthpoint

**Net Zero Accredited Professional (AP)**

We were the certification consultants on this project, one of the first commercial properties in Cape Town to certify Net Zero Water and no longer rely on the municipal water grid. The building has a water filtration plant installed that can generate 80kL/day from 4 sumps in the basement supplying 100% of the building's water needs.

## Hotel Verde - Zanzibar's Greenest Hotel

**Lead Sustainability Consultants, Commissioning Agents (CxA), and Green Star Accredited Professional (AP)**

We provided our full suite of services to this project - the second hotel opened by the Verde Hotels group. This included assisting the hotel in achieving a 5-star Green Star SA custom hotel rating from the Green Building Council of South Africa.



## Virgin Active Constantia

**Net Zero Accredited Professional (AP)**

Following the creation of a creative waste management strategy for the group, we were the Net Zero consultants on this pilot project whereby Virgin Active Constantia received a Net Zero Waste certification for their waste separation and recycling efforts. The gym not only diverts more than 93% from and offsets the rest, but also accepts recycling from members.



## Equator - the Belt Factory

**Sustainability Consulting & Green Star Accredited Professional (AP)**

We provide sustainability consulting and Green Star certification consulting, creating short and long term sustainability strategies and interventions to assist this KZN based belt manufacturer on their long-term journey towards progressively more sustainable and carbon neutral operations.



## Kwitonda Lodge - Rwanda

**Energy Modelling & Sustainability Consulting**

As part of an international project team, our work included detailed performance modelling to optimise the façade design, thermal comfort, energy efficiency, HVAC systems, climate-responsive design, natural ventilation and holistic sustainability best practice. This was applied throughout the design, construction, product selection and operation.



## PwC - Attacq / Atterbury

**Independent Commissioning Agents (CxA)**

As the LEED Commissioning agent for this 26-story PwC headquarters building in Waterfall City, Johannesburg we subjected the following systems to the fundamental commissioning process, as per ASHRAE 0-2005: HVAC&R systems, lighting and controls hot water systems, building envelope and water conservation systems.

