



CITY OF CAPE TOWN  
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STAD KAAPSTAD



# SMART OFFICE HANDBOOK



Making sustainable living a reality in Cape Town offices

Making progress possible. Together.

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- Entries on the contents page link to the relevant page.
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**QUICK START:** Look out for this icon to see how you can get going on each topic.

# SMART OFFICE HANDBOOK

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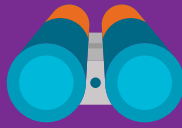
Every effort has been made to ensure the accuracy of information in this book at the time of publication. The City of Cape Town accepts no responsibility and will not be liable for any errors or omissions contained herein.

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# INTRODUCTION



This section provides an overview of the toolkit structure and how to use this handbook.

Going 'green' is no longer a trend; it is the responsibility of every business, big or small, that operates in what is acknowledged to be the 'new reality'. Every action we take, every piece of equipment we use, every meeting we have, every item or service we buy has an impact on our world – either positive or negative.

There is a strong focus around the world on the role that organisations across all industries play in reducing the true environmental and social cost of the way in which they conduct business. Many understand that a responsible approach also delivers competitive advantage and are making very good progress, while government regulations and industry initiatives provide added motivation for businesses to reconsider how they run their operations.

It is not limited to the boardroom, though, and extends to everyday business practices. We all have a responsibility to live in a more sustainable manner and reduce our negative environmental impact at home and in the workplace, and even change to practices that will help regenerate the rapid depletion of Earth's resources.

The benefits to business include reduction in cost for both operations and maintenance. Retrofits offer protection from energy inflation costs as a measurable return on investment along with less risk of exposure to water scarcity. Local sourcing helps to decrease transport costs, supports our local economy, and helps to reduce poverty and unemployment. The reduction in waste to landfill will lessen the long-term strain on resources and thereby contribute to a stable economic environment in the future.

Another benefit is the decline in carbon emissions due to reduction in energy use and transport. The procurement and use of environmentally friendly products (e.g. detergents, chemicals and paints) is better for staff health and the natural environment, while fair-trade goods are based on good ethical standards and promote social benefits. If done correctly, going 'green' can also help brand building and enhance market penetration.

## THIS TOOLKIT WILL HELP YOU TO:

- ✓ **Understand** the impact of your office and business.
- ✓ **Identify** what you can do at the office.
- ✓ **Develop** a process for implementing a sustainability strategy in the workplace.
- ✓ **Learn** tips for practical things you can do around the office.
- ✓ **Plan** a successful and cost-effective approach to addressing environmental issues in the workplace.
- ✓ **Compile** an environmental policy and strategy that is relevant to your business and of interest to your clients and stakeholders.
- ✓ **Explore** further options for implementing sustainability through brief introductions to green building and event greening.

## SMART OFFICE

Sustainability is a journey, not a destination. It is about the people and the processes that you need to engage with to create a better future for all. It is about making decisions while considering the full cost, not just the rand value. It is about knowing how to measure your impact on the environment, thereby helping you to best reduce your negative impact.

The purpose of the Smart Office Toolkit is to provide a practical resource that enables both office managers and employees to implement effective greening or sustainability programmes and practices in the workplace. Big or small businesses, as well as government or non-profit organisations, can use the toolkit because the principles remain the same.



An in-depth analysis<sup>1</sup> published in 2019 found that in over 90% of individual product categories for consumer packaged goods (CPGs) examined, the growth of sustainability-marketed products outpaced total category growth.

Conducted by the NYU Stern School of Business Centre for Sustainable Business and IRI, it was found that **products marketed as sustainable grew 5,6 times faster** than conventionally marketed products, and 3,3 times faster than the CPG market.

<sup>1</sup> [www.sustainablebrands.com/read/business-case/sustainable-share-index-illustrates-roi-for-sustainably-marketed-products?\\_ga=2.98410009.785984775.1591525244-2013867246.1589494127](http://www.sustainablebrands.com/read/business-case/sustainable-share-index-illustrates-roi-for-sustainably-marketed-products?_ga=2.98410009.785984775.1591525244-2013867246.1589494127)

## HOW TO USE THIS TOOLKIT

The **Smart Office Toolkit** has been designed to assist you in your journey towards a greener office, step by step. It has been developed in support of the **Smart Office Handbook** focusing on the office, with various resources to assist you with implementation.

The *Smart Living Handbook* provides additional background information and relates specifically to the home environment. The *Smart Events Handbook* provides information about hosting events in a sustainable manner, while the *Smart Building Handbook* is a guide to green building in Cape Town. The *Smart Travel Guide* promotes sustainable transport options.

This is confirmed in results from Unilever, which in 2019 announced that it will sell off brands that do not contribute positively to society in terms of the company's sustainable business agenda. Three-quarters of Unilever's 2018 turnover growth was attributed to the 28 brands in its Sustainable Living portfolio, which accounted for more than half of its sales.

# SUSTAINABILITY IS A JOURNEY, NOT A DESTINATION.



This handbook has been developed to be used online and not printed. The toolkit does, however, include various resources that can be downloaded and printed as needed, such as a checklist or office communication.



### CONTACT

For support material relating to the Smart Living campaign, contact the Environmental Management Department in the Spatial Planning and Environment Directorate at the City of Cape Town at [smartliving@capetown.gov.za](mailto:smartliving@capetown.gov.za), or download the *Smart Living Handbook* at <https://bit.ly/Smartliving2020>

# STRUCTURE OF THIS TOOLKIT AND HANDBOOK

The toolkit includes this handbook and additional support material, which can be downloaded and used as required.

This **handbook** has been designed to provide you with a step-by-step guide to greening your office. It comprises different sections – you can focus on the section that is most appropriate to your stage of the journey.

- ✓ It starts with a quick overview of the main **environmental concerns**, and then provides an overview of the process, with five simple steps on the **basics of greening your office** that will assist you on your journey towards a more sustainable office.

## PROCESS

The process for implementation is outlined in the section on **basics of greening your office** and provides five basic steps to help you implement more sustainable business practices.

## PRACTICES

Details on the greening principles are outlined with practical things that you can do at your office. Each section has a brief introduction, a quick start that puts it into context, a list of practical things you can do and links to the various resources available.

**The focus areas are the following:**

- ✓ Energy efficiency
- ✓ Waste reduction
- ✓ Water conservation
- ✓ Eco-procurement
- ✓ Transport
- ✓ Environmental impact
- ✓ Social impact

Once you have implemented the basics at your office, you might want to consider the next steps along your journey towards a **sustainable business** and how to extend practices **beyond the office**.

## SUSTAINABLE BUSINESS

To assist you, we have provided additional information about sustainable business practices, including **corporate governance**, **monitoring** and **reporting**, **leadership**, and **social responsibility**.

## BEYOND THE OFFICE

This section explores **green building** and **event greening**.



Make sure you review all the sections of the handbook. Use the tabs on the right hand side for quick navigation between chapters. The publication name in the page footer below will take you back to the contents page, or you can proceed to the next section.

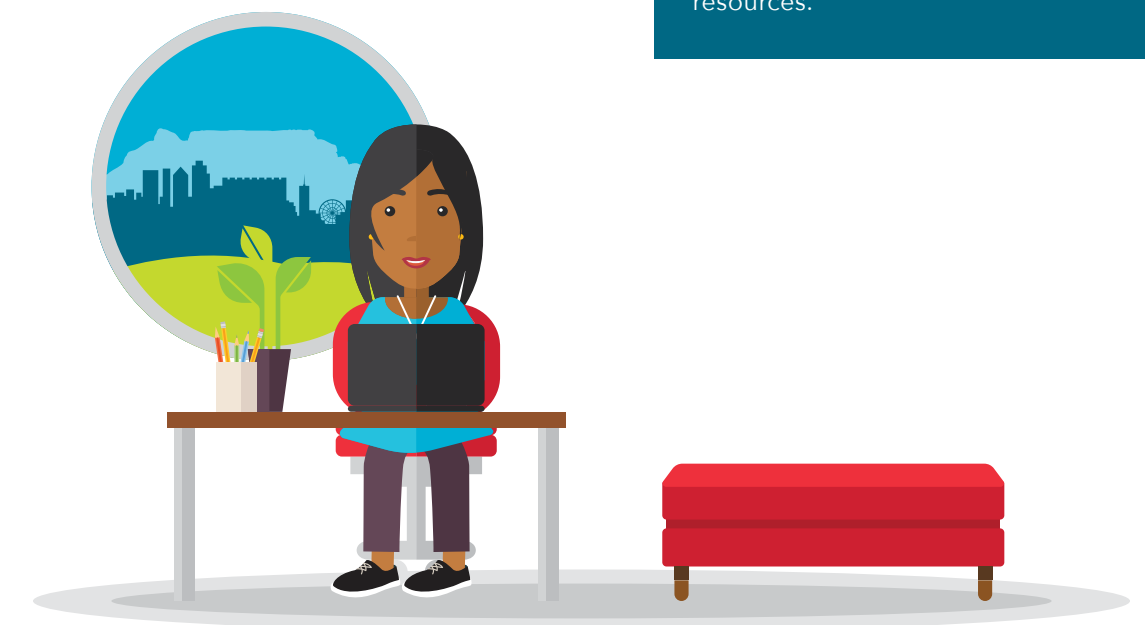
## RESOURCES

**Additional resources** available as part of the toolkit include:

- ✓ Posters and stickers that you can use for communication
- ✓ Checklists that you can use when doing scoping audits
- ✓ Links to additional resources and information
- ✓ Guidelines for the development of environmental policies or audits



"This handbook was developed during the COVID-19 pandemic, when office life changed dramatically across the world. Some of these changes will have long-lasting effects (see transport section on flexible working), while others affect office hygiene and wellness. **Click here** for information on safe office protocols and other COVID-19 resources."





# CARBON NEUTRAL BY 2050

The City of Cape Town has undertaken the ambitious goal of carbon neutrality and climate resilience through the [Carbon Neutral 2050 Commitment](#). The impacts of climate change currently being experienced are projected to worsen, which means that it is in our best interests to take bold action now. Our commitment extends the former set of emission reduction targets, the Energy2040 goal, to meet this heightened level of ambition required. This will support South Africa to meet its Nationally Determined Contributions in terms of the Paris Agreement and importantly, demonstrates the City's commitment to harness the opportunities of a new green economy.

Carbon neutrality means introducing new technologies to completely clean up the fuels and activities that currently cause carbon emissions, but also enhancing our social, economic and environmental goals.

The City of Cape Town is committed to show climate leadership through vision, planning, engagement, regulatory innovation, infrastructure development and the running of its utilities and internal operations. But we need your help in areas such as appliance choice, responsible and efficient travel, recycling, energy and water efficiency, use of solar panels (if affordable), tree planting and also advocacy and consumer action.

Alongside the Carbon Neutral 2050 Commitment, Cape Town is also part of the C40 South Africa Buildings Programme that aims for net zero carbon emissions from new buildings and all municipal buildings by 2030 and for all existing buildings by 2050. In Cape Town, both residential and commercial buildings account for a large proportion of the city's carbon emissions and energy consumption. With the City's building stock expected to continue to grow rapidly until 2050, aggressive action must be taken to address the efficiency and carbon intensity of our buildings.

The impact of the Covid-19 pandemic has forced the adoption of new ways of working to ensure the health and safety of employees while ensuring business continuity and productivity. However, it also offers the opportunity to re-imagine office and work life after Covid-19. The shift to working from home in many industries and the uptake of videoconferencing and other forms of digital collaboration means that less office space may be required. This shift has also significantly reduced the time spent commuting, which can also contribute to mitigating the impacts of climate change.

It is only through working together that we can create a city that is cleaner, healthier, safer and more equitable, with decent employment opportunities and sustainable economic development.



## OUR CARBON NEUTRAL 2050 COMMITMENT BRIEF SHOWS HOW ALL RESIDENTS, BUSINESSES, ORGANISATIONS AND GOVERNMENT HAVE A ROLE TO PLAY.



# KEY CONCERNS



This section provides an overview of what the international concerns and consequences are, and why sustainability needs to be addressed in the workplace. It considers the triple bottom line approach of people, planet and prosperity.

International concern about the consequences of increasing deterioration of the human environment and the depletion of natural resources on economic and social development began to grow in the 1970s.

The Brundtland Commission, formally known as the World Commission on Environment and Development (WCED), was convened by the United Nations (UN) in 1983 to address this growing concern.

The UN General Assembly recognised that environmental problems were global in nature, and that it was in the common interest of all nations to establish co-operative policies and long-term strategies for sustainable development.



"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

– *Our Common Future*, also known as the Brundtland Report

## CLIMATE CHANGE

Over the years, governments, global leaders and scientists have come together to discuss the effects of climate change and global warming, and the necessary actions that must be taken. The evidence – in the form of increased temperatures, extreme weather conditions, the threatened extinction of animal and plant species, and many other factors – confirms that global warming is a reality and that it is caused by human activities, landing us in what is termed anthropogenic global warming.

For Southern Africa, subcontinental warming is predicted to be greatest in the northern regions. Temperature increases in the range of between 1 °C and 3 °C can be expected by the mid-21st century, with the largest increases occurring in the most arid parts of the country. Of greater consequence for South Africa, as a semi-arid country, is the prediction that a broad reduction in rainfall (in the range of 5 to 10%) can be expected in the summer rainfall regions.

This will be accompanied by increasing incidence of both droughts and floods, with prolonged dry spells being followed by intense storms. A marginal increase in early winter rainfall is predicted for the winter rainfall region of the country.<sup>2</sup>

<sup>2</sup> South African National Climate Change Response Strategy, September 2004



The rate of warming is increasing. In 2019, the average temperature across global land and ocean surfaces was 0,95 °C above the 20th-century average of 13,9 °C, making it the second-warmest year on record. The five warmest years in the 1880-2019 record have all occurred since 2015, while nine of the 10 warmest years have occurred since 2005.<sup>3</sup>

South Africa has a considerable carbon footprint because most of our energy is generated from fossil fuels, while our biodiversity is being threatened by extreme weather conditions. Changing weather patterns are also a concern in terms of access to sufficient water; there's an increasing tendency towards floods and droughts.



The terms 'smart' and 'green' are used interchangeably with 'sustainable' or 'eco' in this toolkit, bearing in mind the triple bottom line approach of people, planet and prosperity. A few of the main environmental concerns of our times are outlined to give you some encouragement as to why it's important to green your business and home.

## ENERGY CONSUMPTION

Because South Africa has large coal resources, and some of the cheapest electricity in the world, many people are still careless about electricity consumption, and our systems are not very efficient. Our dependence on low-grade coal has further increased our carbon emissions.

Steep electricity tariff increases is one of the biggest incentives for companies to cut down on energy consumption through implementing more efficient technologies and raising awareness about energy saving.

Around 30% of the energy used in commercial and industrial buildings is used inefficiently or unnecessarily. If the energy efficiency of our commercial and industrial buildings was improved by 10%, it would equal a reduction in greenhouse gas emissions equal to taking 30 million cars off the road. The largest energy consumer in office buildings is generally the heating, ventilation and air conditioning (HVAC), as well as lighting.

Only about 10% of the energy used by an 'old' incandescent light bulb creates light, while the other 90% creates heat - compared to an energy-efficient compact fluorescent light (CFL) or light-emitting diode (LED) bulb, which gives off very little heat. It makes financial sense to replace incandescent lights with energy-efficient lights.

## WASTE

Around 95% of our solid waste is disposed of in landfills that are now almost full.

Every year, some 45 000 tonnes of plastic waste is dumped into the world's oceans, killing an estimated one million seabirds and 100 000 marine mammals.

Factories also release over three million tonnes of toxic chemicals into the land, air and water annually. This leads to the loss of over 60 700 km<sup>2</sup> of productive land every year. This pollution leads to respiratory complications and other health problems in humans.

## WATER

Less than 3% of all the water on Earth is fresh water, and less than 1% of the world's fresh water is accessible for direct human use.

Harsh cleaning materials and chemicals used or disposed of down a drain usually end up in our rivers and oceans, which has a negative impact on the natural ecosystems. These same cleaners and chemicals can cause harm to septic systems and wastewater treatment plants. The effects of polluted water on human health, on aquatic ecosystems and on various sectors of the economy, including agriculture, industry and recreation, can be disastrous.

The UN estimates that 48 nations (including South Africa), with a combined population of 2,8 billion people, will face freshwater 'stress' or 'scarcity' by 2025.

## CONSUMPTION

Every product or service we use - at home or as a business - requires natural resources in some form or another. It is widely acknowledged that the world's natural resources and ecosystem services are being degraded and lost at an alarming rate, leading to resource scarcity on the one hand, and excessive waste on the other.

The Global Footprint Network (GFN) estimates that we now consume resources that would require 1,7 planets to produce these resources sustainably.

Annually, we produce enough steel to make a beam that could circle the Earth nearly 100 times, and pour enough concrete to make a car park the size of England. In our lifetimes, plastic production has increased twentyfold, of which only 10% has been recycled. Every year 500 billion plastic bottles are used - around one million every minute. There could be more plastic than fish in the oceans by 2050.



Earth Overshoot Day marks the date when humanity's demand for ecological resources and services in a given year exceeds what the Earth can regenerate in that year. The date has been tracked since the 1970s. The accompanying #MoveTheDate campaign aims to literally move that day back by five days per year so we can be under one planet by 2050. For more information, visit [www.overshootday.org](http://www.overshootday.org).

<sup>3</sup> [www.climate.gov/news-features/understanding-climate/climate-change-global-temperature](http://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature)

ONLY ABOUT **10%** OF  
THE ENERGY USED BY AN  
'OLD' INCANDESCENT  
LIGHT BULB CREATES  
LIGHT, WHILE THE OTHER  
**90%** CREATES HEAT.



As such, resource scarcity is becoming one of the fundamental drivers for many corporate sustainability initiatives. Eco-procurement is a practical way in which to source responsibly to ensure the future availability of resources – and reduce your waste at the same time.

## TRANSPORT

Efficient transport is an essential requirement for a thriving economy; people moving indicates active and vibrant urban spaces.

With more people come more cars and, inevitably, congestion. Traffic, therefore, also carries the added costs associated with reduced productivity because of the (longer) time employees spend on their commute, higher prices for goods and services due to inflated transport costs, and the cost of carbon emissions.

In short, inefficient transport wastes fuel, time and money.



Transport is the fastest growing source of carbon emissions in the world and is already responsible for nearly a quarter of all carbon emissions.

## ENVIRONMENTAL IMPACT

The Cape Floristic Region is the smallest of the six floral kingdoms on Earth, and the one with the highest density of plant species. It has over 9 000 different plant species and many animal species, and is also a global biodiversity hotspot. Over 70% of the plant species here are found nowhere else on Earth. The Cape Peninsula mountain chain alone supports 2 285 plant species in 471 km<sup>2</sup>, of which 90 species are endemic.

Cape Town contains remnants of the threatened renosterveld vegetation, of which only 3% of its original extent remains, making it one of the most endangered vegetation types in South Africa, if not the world. Over 250 bird species live in Cape Town, of which 10 are endangered, with at least three having become extinct in recent years. 41 mammal species remain in Cape Town; six recently became extinct.

The Cape Town lowlands have the highest concentration of threatened plants per area of remaining vegetation in the world. The area supports more than 1 466 plant species in 1 874 km<sup>2</sup>, of which 76 are endemic and 131 are Red Data Book species. South Africa has the second-highest number of plant extinctions in the world.

## SOCIAL IMPACT

The triple bottom line of business considers people, planet and profit, yet it is so easy to forget the social impact. The Sustainable Development Goals (SDGs) specifically address good health and well-being, quality education and gender equality as key development goals that need to be addressed.

Today, **work-life balance** ranks as one of the most important workplace attributes – second only to compensation – and workers who feel they have a better work-life balance tend to work harder than employees who feel overworked.

When employees feel a greater sense of control and ownership over their own lives, they tend to have better relationships with management and are able to leave work issues at work and home issues at home. Balanced employees tend to feel more motivated and less stressed out at work, thereby increasing company productivity and reducing the number of conflicts among co-workers and management.

Companies who gain a reputation for encouraging work-life balance have become very attractive to workers and will draw a valuable pool of candidates for new job openings. These companies also tend to enjoy higher employee retention rates, which results in less time-consuming training, more loyalty, and a higher degree of in-house expertise.

## GOING GREEN

The mentioned concerns all impact on our daily activities – and will ultimately also impact on our business, when scarce resources become even more expensive, or we cannot access sufficient energy. While we go about our business as usual, our local biodiversity reflects the delicate balance between humans and nature – it can be compared to a ‘canary in a coal mine’, warning us of impending disaster.

The Smart Office Toolkit has been developed by the City of Cape Town, with assistance from corporate sponsors, to provide a practical resource that enables both office managers and employees to implement effective greening or sustainability programmes and practices in the workplace.

Big or small businesses, as well as government or non-profit organisations, can use the toolkit because the principles, practices and processes remain the same for any type or size of office.

**TODAY, WORK-LIFE  
BALANCE RANKS AS ONE  
OF THE MOST IMPORTANT  
WORKPLACE ATTRIBUTES**



# BASICS OF GREENING YOUR OFFICE



This section provides an overview of the implementation process for going green at your office. It provides five easy steps that you can follow and link to the various practices in the other sections.

## SDG

### SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) are a collection of 17 global goals designed to be a 'blueprint to achieve a better and more sustainable future for all'.

Each section will refer to specific SDGs, but for more information, refer to the section on sustainable development in business or visit <https://sustainabledevelopment.un.org/sdgs>.



**SDG 5** addresses the need to achieve gender equality and empowerment of all women and girls. It aims to end discrimination, violence and other harmful practices. It also aims to ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life. Finally, it aims to adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.



**SDG 8** promotes sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all. Progress is needed to increase employment opportunities, particularly for young people, reduce informal employment and the gender pay gap, and promote safe and secure working environments to create decent work for all.



**SDG 9** addresses the need to build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation. Transportation of goods and services are key infrastructure requirements that need to be addressed. Developing countries specifically need to increase the access of small-scale industrial and other enterprises to financial services, including affordable credit, and their integration into value chains and markets. The proportion of the population covered by a mobile network is one of the key indicators.

Once you understand WHY you need to implement more sustainable business practices at the office, you need a strategy for HOW to do it.

A simple, yet effective, five-step process is outlined in this section for if you are just starting out, or if you are reviewing your current situation.

More specific details on practices to implement or practical actions to take at the office are given in the sections on energy, waste, water, eco-procurement, transport, and environmental and social impact. Following on this, you can also refer to the sections on general sustainable development in business and taking it beyond the office.



There are always people in the office who are really keen to 'do the right thing', but it's important to have a process in place to ensure long-term success. For this reason, it's also important to get top management to 'buy in' right from the start.

Here are a few simple steps that should be followed to ensure success.





# THINGS TO DO

These five steps are now described in more detail:

## STEP 1: GET LEADERSHIP BUY-IN

When planning an implementation programme and getting other people involved, make sure that you highlight some of the advantages of having a Smart Office, which could include the following:

- ✓ **Direct cost savings:** By saving resources (energy, water, paper and even ink), you will save money through a reduction in resource cost, e.g. reduced paper usage. Waste reduction and water conservation, as well as reduced energy and resource use, all result in financial savings.
- ✓ **Indirect cost savings:** Reduced waste to landfill will reduce long-term waste disposal costs, while reduced water consumption will reduce the strain on water resources. A reduction in transport costs can be achieved if eco-driving (smarter and more fuel-efficient driving) is implemented. Supporting the local economy will reduce poverty and unemployment.



It has been proven time and again that leadership is a critical element in the successful implementation of a greening programme in the work environment; it's just as important to have dedicated people who will roll out the programme.

- ✓ **Increased employee productivity:** There is a connection between meaningful work and productivity. Employees and management who are engaged in greening the organisation tend to be more productive and take pride in their work.
- ✓ **Staff health:** Well designed, healthy office spaces with good ventilation, natural light and views to the outside improve employee health and productivity. Environmentally friendly products (detergents, chemicals, paints, etc.) are better for staff health compared to hazardous chemicals and toxic substances. They also make the office environment more pleasant (fewer odours, less eye, nose and throat irritation), which has a positive impact on productivity.
- ✓ **Social benefits:** There is a strong link between environmental degradation and social problems. By ensuring that your office does not harm the environment, you contribute to a healthier society. If you invest in green corporate social responsibility (CSR) projects, it's even better.

With high-level support, you will soon be able to motivate the budget for training of staff, or to implement retrofits. Your office greening initiatives can be implemented in other areas of the business, too, such as in your fleet management or in hosting green events. Many large corporates are considering how to provide green buildings for their staff, which has financial, social and environmental benefits.

## STEP 2: DO AN ECO-AUDIT

Doing an eco-audit will give you a snapshot of the current situation within the office, and thus assist you in determining your priorities. The focus of an eco-audit is to establish how eco-efficient your office is and what impact you have on the environment. It can be used as a baseline to measure improvement over time.

An eco-audit can either look at all the different aspects simultaneously, or focus on one aspect at a time, e.g. doing an energy audit first and the rest at a later stage. The eco-audit should be used to determine where you can make the biggest impact and to help you consider options for making cost-effective improvements.

For example, an eco-audit can help you determine where your organisation is using the most energy or water. It will provide information for creating an action plan for making changes and savings. An eco-audit can also be used to look at the amount of waste your organisation produces, and how and where waste is generated, in order to put action plans in place for reduction and recycling of waste.

Don't assume that you already know the environmental impact of your office without gathering accurate baseline information – it could prove to be counterproductive and lead to practices that are not efficient or suitable for you.



### DOWNLOAD

[Click here](#) for additional tools such as the scoping audit to help you determine where to start and the eco-audit guidelines and templates.

The Smart Office Toolkit includes a **scoping audit**, which provides a quick overview of the current situation at the office and can assist you to determine what you need to focus on first. It is a quick process with yes or no answers, which calculates to a total score. It is simply a starting point and should not replace a full eco-audit.

Specific **eco-audit templates** have also been included in the toolkit. You can also do an eco-audit training course, where you will gain practical experience and meet other people who are also trying to green their offices.

A **guideline** has been provided to explain how the eco-audit process works, and there are also 'cheat sheets' that provide additional information for doing the eco-audit.

Once you have compiled your eco-audit, you will have a better understanding of the main areas on which you need to focus on. This will help to guide the development of your environmental policy and action plan.



## STEP 3: DEVELOP AN ACTION PLAN AND POLICY

This section provides a brief overview of the management process for establishing your sustainability team, defining your policy, planning your strategy, and determining baseline information through conducting an eco-audit.

### PREPARATION: ESTABLISHING A SUSTAINABILITY TEAM

Your environmental sustainability team or 'green team' will be responsible for driving the greening process in your office. The team should have representatives from all areas in the office, including management, maintenance, operations, facility management, etc. It is usually a good idea to include staff members who are passionate about the environment and sustainability. As mentioned before, management buy-in and commitment is crucial for the long-term sustainability of the team and for the success of the programme. As with anything else in life, if you do not live it from within, you cannot live it out!

**Some of the tasks for your environmental sustainability team could include the following:**

- ✓ Organise regular meetings.
- ✓ Brainstorm and research new ideas and technologies.

- ✓ Dedicate roles and responsibilities to individual team members and other stakeholders to ensure the effective implementation of the environmental sustainability strategy.
- ✓ Follow up on actions, take minutes at meetings, and ensure that all documentation is accessible to all staff (transparency).
- ✓ Organise environmental sustainability activities (movie screenings, nature walks, guest speakers, etc.) that add a bit of fun to the sustainability programme.
- ✓ Ensure that team members, staff and management are recognised for their efforts, and that efforts and achievements are communicated to everyone.

Commitment to the overall process is crucial and needs to come from all levels within the company. It should never be the responsibility of one person, but a team effort, with solid support from top management.

### PLANNING: STRATEGY, POLICY AND ACTION PLAN

Your strategy provides the overall approach; however, once you have done your eco-audit and established a baseline, you need to put your vision into practice. You will need to decide on the main policy and principles that the organisation and its staff should adhere to. It is important that top management supports these principles and that the principles are in line with company policy.



An **environmental or sustainability strategy** is a high-level plan to achieve specific long-term environmental goals. This is done at the start of the process and will need to be reviewed as you go along.

An **environmental or sustainability policy** is a formal commitment from a company or organisation about its approach towards the environment in which it operates. It is the cornerstone of its intent to reduce resource consumption (e.g. water, energy, paper) and waste generation (solid waste, air or water pollution, and carbon emissions), with the aim to increase positive impact on people and the natural environment.

An **action plan**, sometimes referred to as an Environmental Management Plan (EMP), outlines the specific activities that need to be done to ensure that the policy is implemented. Your action plan should build on your strategy and policy, but drill down to the details on what needs to be done by when, and by whom.

Ongoing **monitoring and evaluation** is important to ensure ongoing improvement. The aim is to provide recommendations and lessons to the project managers and implementation teams that have worked on the projects, and for the ones that will implement and work on similar projects.



To put the process into context, we can say the following:

- Your **strategy** outlines what needs to be done to implement your policy.
- Your **policy** provides the motivation for why you need to do it and sets out your goals.
- Your **action plan** provides details on how you will reach your goals.
- **Monitoring** shows your progress



#### DOWNLOAD

**Click here for additional guidance, including:**

Doing a **scoping audit**

Guideline and templates for **eco audit**

Compiling an **environmental strategy**

Examples of various **environmental policies**

Compiling an **environmental policy**

Compiling an **action plan**

An action plan or EMP should be able to answer the following questions:

- ✓ **What** specific actions need to be done?
- ✓ **Who** needs to take responsibility for each action?
- ✓ By **when** does it need to be done?
- ✓ What is the current **status** of the action?

Although it is good to keep it simple, it also helps to consider up front what resources might be needed and how you can measure your progress.

Your action plan can also indicate if you have achieved your goal, and list any lessons learnt during the process. It is a document that should be updated with each green team meeting.

Starting small is advisable. You will need to review and update your plan constantly. It is important to follow up and evaluate your actions so that the action plan is not too static, as it may have to be revised as the greening takes shape.

Continuous meetings, follow-up and report-back to staff, management and stakeholders are central to implementation. It is important to keep your momentum once things get going.

Monthly or quarterly feedback is advised; where possible, it should be included in staff performance evaluations or key performance indicators to provide an additional incentive for dedicated implementation.

## STEP 4: MAKE IT HAPPEN

The successful implementation of your action plan depends on both the team driving the initiative, and the buy-in and support of the staff in general. The importance of the green team has been discussed under Step 3. Step 4 looks at the importance of communicating your policy, strategy and action plan, both internally and externally. This will include staff training, but also a marketing strategy to showcase what your team is doing.

### COMMUNICATION

To ensure the successful rollout of your action plan, you will need to ensure that all staff members participate actively. Adequate and engaging communication is fundamental to the success of your strategy and action plan. People need to understand why and how their office is implementing greening, and they need to understand their own environmental impact.

Not even the most advanced strategy will succeed if the staff are unaware of it, if they don't feel part of the process, or if they don't understand it. Research has shown that 50 to 60% of the benefits gained from a retrofit are related to behaviour change, which goes to show how critical it is to have an effective training programme. Greening is also a relatively new subject for many of us; even today, sustainability has not been fully integrated into the school curriculum.



It's necessary to have clear and simple communication with all role players, including:

- ✓ Management team
- ✓ Staff from all the different departments
- ✓ Suppliers and service providers (such as outsourced cleaning or security staff)
- ✓ Customers or clients

You can plan different ways of doing this, but effective tools include: your newsletter, internal management and/or staff meetings, notice boards, your website, your intranet, social media, special events, etc. Any company would benefit from involving their communications or public relations teams in this process, and including them on the green team.

It is very important that not only your organisation but also your suppliers are moving towards sustainable business operations. You can include greening criteria in requirements when contracts are signed with service providers (this is known as eco-procurement). Cleaning and security staff are often outsourced and thus excluded from the general staff training programmes, yet it is important that they are integrated into the process so that they can assist with the implementation. Ensure that you include all the relevant service providers in your communication strategy.

## TRAINING

It is important that your environmental sustainability or green team understands sustainability principles and practices, and is fully committed to the rollout of the strategy. If necessary, they should attend training on sustainability principles and practices. Staff members need to understand what is expected of them and why it is important, or else they will not comply with the greening principles.

An effective training strategy is to focus on what staff members can do at their homes, so that they can see the personal benefit and understand why greening is important. This then needs to be transferred to the work environment so that they feel involved in the process. Many of us spend more time in the office than at home, which offers great potential to make a huge impact.

Communication and training are therefore crucial at the initial stages of the process. This can happen throughout the process, with interactive talks, or reminders during staff meetings. Environmental sustainability issues should be incorporated into the normal staff training and induction programmes.

New information can also be placed in office newsletters or on the website, and should cover aspects of the greening interventions that are implemented at your office. Notices can be placed at strategic places in the office.

You can hold lunch-hour talks for clients and service providers to convey what you aim to achieve and why it is important to your company. Ensure that your communication is clear and channels are open, and that everybody knows where they can ask for support or for additional information.

## MARKETING

Your marketing strategy is an excellent tool or process for communicating with and informing your customers and clients about your environmental performance in creative ways. A proper marketing strategy requires research, planning and commitment. Due to growing consumer demand for green goods and services, it will also increase the value of investments. It is important to avoid 'greenwashing' by always being as specific and genuine as possible.



### DOWNLOAD

[Click here](#) for guidelines on compiling your action plan.

## STEP 5: MONITORING AND REPORTING

It is important that you continuously review your progress and update your targets. This section of the toolkit provides more information about the management process to assist you and your sustainability team with the important work that you are doing at your office.



'Greenwashing' is the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service. This may happen where there is no proof of a claim, or a claim is vague, or it may be that there is a hidden trade-off where it is suggested that a product is green, based on a narrow set of attributes – without paying attention to other important environmental issues. (Refer to the section on eco-procurement for more information on greenwashing.)

– TerraChoice

Make sure that you have a monitoring system in place that will provide you with feedback on the success of your action plan. Each point of your action plan should have an indicator that can be measured and a target that you are aiming for. This could include the amount of waste (in kilograms or as a percentage) that was originally sent to landfill but is now recycled, or the amount of energy consumed per month. The first eco-audit can be your baseline; over time, you can compare your indicators to the baseline.

The monitoring of your progress needs to be done continuously and it is advised that the data are reviewed quarterly. An annual evaluation of the whole situation will assist with reviewing the indicators and setting new targets.

You will need to review your action plan based on the feedback received to see how you can improve, or when you need to look at the next steps that need to be implemented. Remember that it is a closed-loop system and you need to continuously improve and strive for better results – go back to Step 1 again and repeat the process.

## GETTING STARTED

Now that you have an overview of the five main steps that you need to follow, you can start with the actual implementation.

The different sections of this toolkit assist you along your journey. There are templates for doing an eco-audit, examples of an environmental policy, PowerPoint presentations for training, and much more.

The different sections also focus on specific aspects such as energy efficiency, water conservation, waste reduction, eco-procurement, transport and environmental and social impact. We have also provided an introduction to concepts such as sustainability leadership, corporate governance and reporting, social impact, green building and event greening.



### DOWNLOAD

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Doing a **scoping audit**

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# ENERGY EFFICIENCY



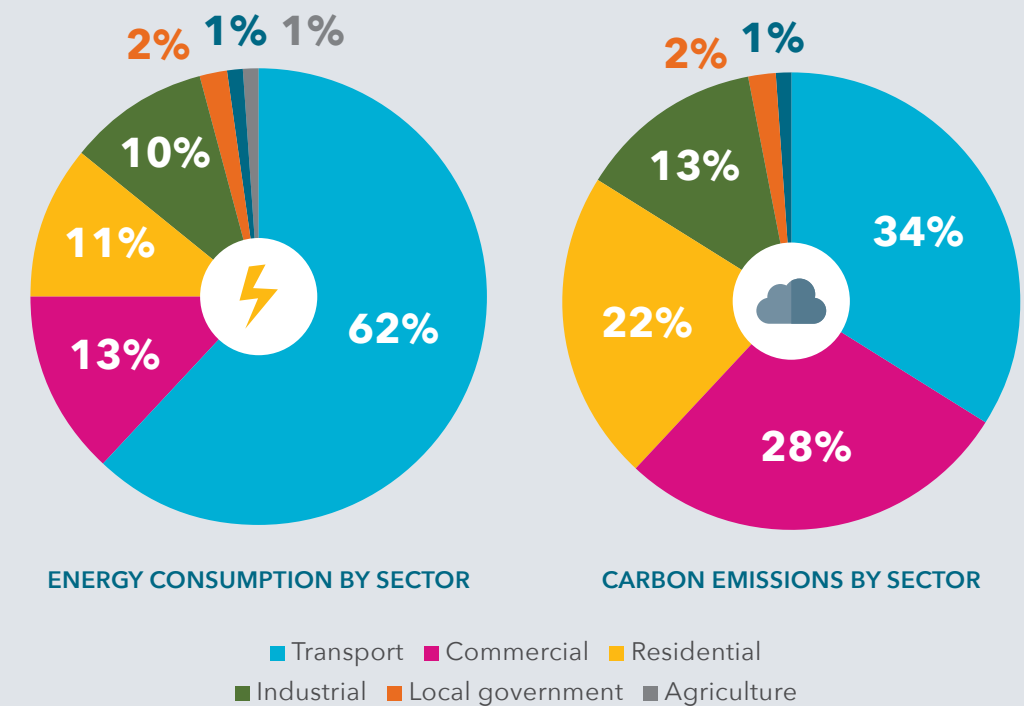
This section provides an overview of the concerns and practices relating to energy efficiency. The focus is on electricity, although there are other forms of energy such as gas, petrol and renewable energy sources.

The cost of electricity has increased significantly in South Africa over the last few years. However, our history of 'cheap' electricity has resulted in inefficient systems. Most of the electricity generated in South Africa comes from non-renewable resources such as coal. The burning of these fossil fuels results in high levels of air-polluting emissions and greenhouse

gases (GHGs), which, in turn, contribute to climate change.

The Greenhouse Gas Inventory (CCT, 2017) shows that the commercial sector consumes 13% of the energy in Cape Town, while it contributes 28% of the carbon emissions because the electricity in South Africa is carbon heavy.

## CAPE TOWN'S ENERGY CONSUMPTION BY SECTOR (LEFT) AND CARBON EMISSIONS BY SECTOR (RIGHT).



Source: City of Cape Town Greenhouse Gas Inventory 2017

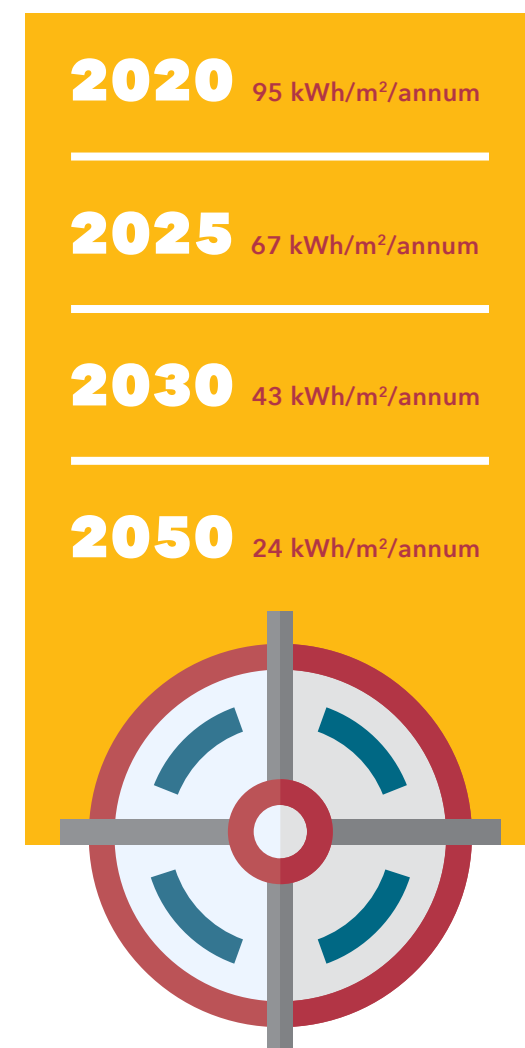
The 10 years between 2008 and 2018 saw the cost of electricity more than double from 40c/kWh to 89c/kWh. In 2020, the cost is at 105c/kWh and this is set to increase even more in the future, specifically if compared to other cities around the world.



# COMMERCIAL SECTOR BUILDING EFFICIENCY TARGETS

In order to meet Cape Town’s future target of net zero carbon new buildings by 2030 and all buildings net zero carbon by 2050, great ambition in energy efficiency and onsite renewable energy will be required.

The proposed targets for energy intensity in new buildings are:



These targets are met through passive design, highly energy efficient lighting, water heating, cooling and heating. Onsite or offsite renewable energy generation will need to meet the energy demand to achieve net zero carbon in operation.

Every time you have a cup of coffee, a cold drink from the fridge, a hot shower, watch television or switch on a light, you consume energy, which contributes to GHG emissions. By using electricity with care, you will be able to reduce your consumption, save money, and have a positive impact on the environment.

SDG



**SDG 7** aims to ensure access to affordable, reliable, sustainable and modern energy for all, with a stronger focus on renewable energy options and energy efficiency.

It is important to understand that although energy savings are possible, they are usually also linked to energy investments. It costs money to replace old lights with more efficient lights, or to install renewable energy options such as a solar water heater or photovoltaic (PV) panels.

We recommend that you first do an energy audit to determine what quick wins can be implemented and where investment is needed.



## QUICK START



**ENERGY AUDIT:** Do an energy audit to determine what items are using most of the energy and focus on simple ways you can address these. It is important to have a baseline so that you can measure the impact of your interventions. Check that you are on the most suitable electricity tariff to help you manage your electricity costs.



**ACTION PLAN:** Based on your strategy and policy, you need to identify specific energy goals that you want to achieve, and ensure that they are linked to your action plan. Your green team should actively participate in this process to ensure success.



**BUDGET:** Ensure that you have management buy-in for your audit and retrofit plan, so that there is budget available to cover implementation costs such as replacing light bulbs or installing a hot water cylinder timer-switch.



**INVEST TO SAVE:** Remember to consider ‘payback times’ when motivating for retrofits, so that you can determine potential savings and return on investment.



**AWARENESS:** Ensure that employees understand why it is important to save energy and what is expected of them. This might require an internal awareness campaign.



**ECO-PROCUREMENT:** As part of your long-term strategy, you need to ensure that energy efficiency is included in the procurement of goods and services. Include energy costs in ‘total cost of ownership’ calculations when evaluating equipment purchases and comparing with current equipment.

# THINGS TO DO

Here are some suggestions of things that you can do at your office to promote energy efficiency.

## CARBON FOOTPRINT

Human activity is driving climate change, mostly due to the burning of fossil fuels, deforestation and, increasingly, intensive agriculture. Different actions in our daily business operations (such as goods transportation, employee travel, using electricity, etc.) contribute to the increase in GHG emissions.

We need to explore more renewable energy options to reduce both our reliance on coal and the major impact it has on accelerating climate change.

Your office can reduce its carbon footprint through these simple, easy interventions:

- ✓ Allow staff to work from home and reduce the need to travel.
- ✓ Encourage lift clubs, avoid unnecessary trips, and stick to the speed limit.
- ✓ Ensure that your fleet has low-emission and fuel-efficient requirements.
- ✓ Reduce unnecessary air travel and encourage Skype, Zoom, Teams or video conferencing.
- ✓ Reduce your electricity consumption through good management such as switching off unused equipment and using energy-efficient appliances.
- ✓ Ensure regular maintenance of air-conditioning units and that they are used correctly.

- ✓ Raise awareness about the impact of carbon emissions with staff, customers and suppliers, and suggest what they can do to reduce their carbon footprint.
- ✓ Consider the use of renewable energy (such as biodiesel, solar, or wind energy) as a supplement to, or partial replacement of, conventional energy sources.
- ✓ Calculate and publish your business's carbon footprint.

## EQUIPMENT AND APPLIANCES

- ✓ Switch equipment off rather than using standby mode whenever possible, and specifically after office hours.
- ✓ Save 10% on your air-conditioning electricity bill by turning the thermostat down 1 °C in winter and up 1 °C in summer.
- ✓ Dress according to the weather to avoid the use of the air conditioner, or ensure that it is set on a timer so that it is only used when the office is occupied.
- ✓ Screensavers don't save energy, especially not fancy animations; rather enable the hibernation-mode setting for computers, or turn off your computer screen completely.
- ✓ Laptops use significantly less energy than desktops. Liquid crystal display (LCD) screens are more energy efficient than the older cathode-ray tube (CRT) screens.
- ✓ Photocopy in batches, as less starting up of the copying machine reduces energy consumption.

- ✓ Use centralised printers instead of a printer for each desk.
- ✓ Unplug all chargers and adapters when not in use (or switch off at the wall).
- ✓ Use rechargeable instead of disposable batteries where possible.
- ✓ When procuring new computers, electrical equipment or appliances, ensure that you state in your 'request for quotation' that they need to be energy efficient. Energy Star is a certification system for electrical equipment to indicate energy efficiency.



### DOWNLOAD

The [Smart Living Handbook](#) has additional tips on no-cost, low-cost and invest-to-save options.

## LIGHTING

- ✓ Turn off non-essential lighting: Make an honest assessment of how and where you need to use electrical lights, while considering where you can use daylight instead.
- ✓ Install energy-efficient or energy-saving light bulbs such as LEDs or CFLs. They use significantly less energy than the 'old' incandescent bulbs and they last much longer. Incandescent bulbs are identifiable by their wire filament which heats up and glows, whereas LEDs and CFLs don't have this.

- ✓ Make sure that lights, light fittings and windows are kept clean for making the most of natural and electrical lights. Dirty windows and light fittings reduce the lighting effect and require more energy input to get the desired light.
- ✓ Consider the installation of motion sensors in areas not used frequently (e.g. storerooms) so that lights will turn on and off automatically.
- ✓ Ensure that your outdoor lighting is fitted with energy-saving light bulbs (LEDs or CFLs) and make use of timers, daylight sensors and motion detectors to avoid having the lights on when they aren't needed. Solar path lights are a good option for lighting your outdoor walkways.
- ✓ Lower the light fixtures or install reflectors in fluorescent light fittings to increase efficient use of existing lights.
- ✓ Replace conventional 'exit' signs and other continuously lit signage with LED lights.
- ✓ Use task lighting for direct illumination of work areas instead of area lighting.
- ✓ Make all staff aware of what can (and should) be switched off when not needed: It's a good idea to organise your lighting so that it is easy to turn off all the lights at a single convenient point.



Remember, you don't just pay when you buy the light bulb, you pay for the energy every time you switch on a light. Calculate the true cost of the light bulb.



## RESTROOM OR WASHING FACILITIES

- ✓ Set the hot water cylinder temperature to the recommended temperature of 60 °C. Consider whether you really need hot water at the office.
- ✓ Consider the installation of a faucet heater, which heats the water that comes out the tap only when it is needed. This works well for small office kitchens.
- ✓ Do not wash one cup at a time under the hot tap; stack the dirty dishes and wash them together in the sink at the same time.
- ✓ Insulate the hot water pipes and hot water cylinder.
- ✓ Showers should have water-efficient showerheads with a maximum flow of 10 litres per minute. This can save up to 50% of water used for showering and reduces the cost of heating water.
- ✓ Consider the installation of motion sensors for lighting in bathrooms.



**If you can't measure it, you can't manage it!**

Ensure that you have mechanisms in place to measure your monthly electricity consumption.

## KITCHEN OR CANTEEN

- ✓ Make sure that fridges, stoves, microwaves and other appliances are working properly. Perform regular maintenance and check that door seals are functioning so that they close properly.
- ✓ Do not leave the fridge door open, and ensure that freezers are defrosted regularly.
- ✓ When using a kettle, do not fill it right to the top if you only intend on making one cup of tea; rather, only boil the amount you need.
- ✓ Store excess hot water from the kettle in a vacuum flask for the odd cup of coffee or for washing up later.
- ✓ If you still have an urn, replace it with a hydro-boiler, which is much better insulated and provides boiling water throughout the day. Remember to switch off the hydro-boiler at night and over weekends.
- ✓ Place a lid on the pot when cooking, and ensure that the size of the pot is appropriate to the size of the stove plate.



## REALITY CHECK

With the increase in electricity costs in South Africa, these energy-efficiency measures can provide a significant **financial saving** for your business. However, you must realise that it will require **time and money** to ensure that the most effective system is implemented. Make sure that your action plan includes both **technical** and **people-driven solutions**.

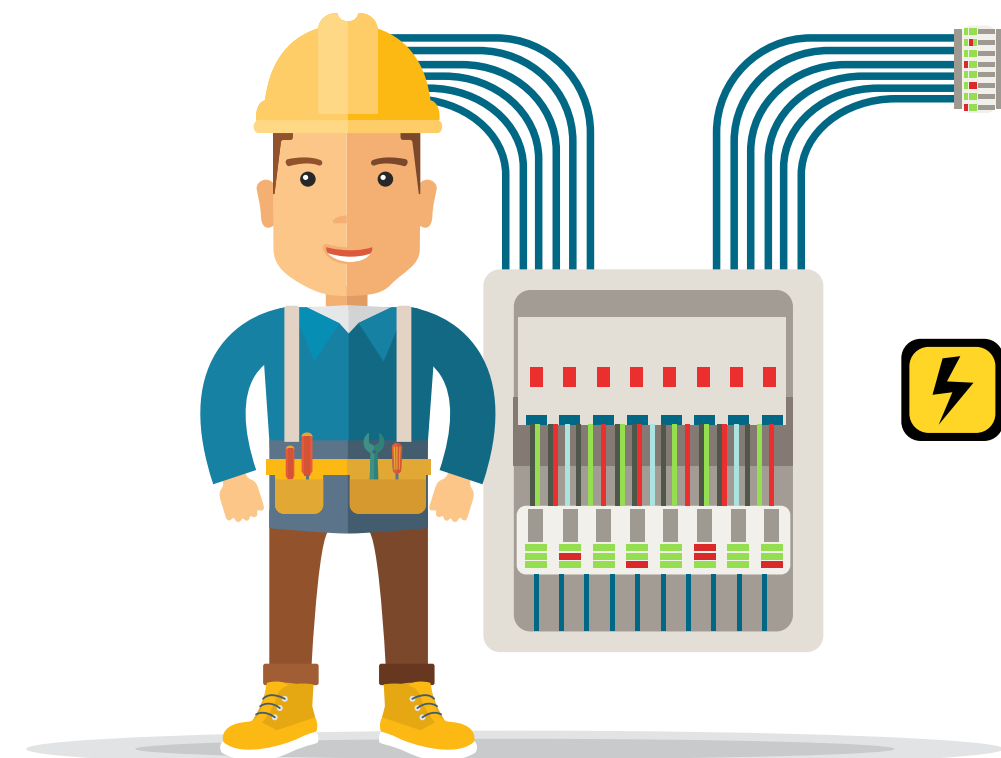


If a CFL breaks, ensure that the room is well ventilated because they contain mercury vapour. Remember to dispose of used CFLs correctly and handle them with care.

## RESOURCES

Below are some additional energy related resources:

- ✓ For more information and useful tips on electricity saving or go to [www.savingelectricity.org.za](http://www.savingelectricity.org.za)
- ✓ For the energy section of the *Smart Living Handbook* or go to: [www.capetown.gov.za](http://www.capetown.gov.za) > Resources > Documents > Smart Living Handbook or <https://bit.ly/Smartliving2020>
- ✓ [Click here](#) to download Nedbank's *Energy Efficiency Guide*
- ✓ [Click here](#) to download *Green IT for Dummies*.



# WASTE REDUCTION



This section provides an overview of the concerns and practices relating to waste management. The focus is firstly to reduce the waste created and consider how items can be re-used, then to ensure that items are recycled (or composted), and as a last resort ensure that they are safely disposed of if they can't be recycled or composted.

## **"90% OF BIODIVERSITY LOSS AND WATER STRESS ARE CAUSED BY RESOURCE EXTRACTION AND PROCESSING."**

- INTERNATIONAL RESOURCE PANEL, 2015<sup>4</sup>

Business activities require that we use products that are extracted from the Earth in one way or another. From trees made into paper, to oil made into plastic, or the extraction of metal used for making equipment - all these products create waste when manufactured and when discarded.

Every time we buy something for our office, we need to consider where it comes from and the impact that it will have on the environment, so that we can avoid waste creation where possible.

We currently generate enormous amounts of waste, and the pressure on our landfill sites is becoming difficult to handle. Due to population growth and increased wealth, we are experiencing a growing demand for resources, so we have no choice but to become more resource efficient. If we re-use or recycle our waste, we save landfill space and delay the building of costly new landfill sites.

Our natural resources (water, oil, trees, etc.) are valuable and should not just be thrown away. It is much easier and less energy intensive to recycle a glass bottle or tin can than to extract raw materials to make a new product. Recycling reduces the need to constantly extract or mine new resources. Extraction of resources often has significant negative environmental impacts.

<sup>4</sup> <https://www.resourcepanel.org/reports/global-resources-outlook>

SDG



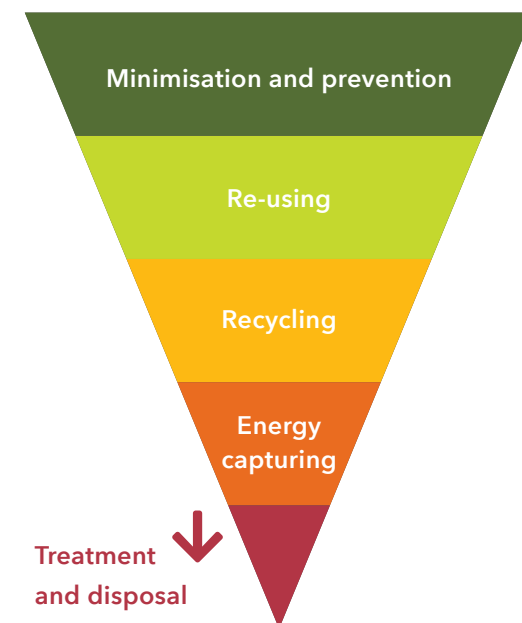
The aim of SDG 12 is to ensure sustainable consumption and production patterns. Worldwide material consumption has expanded rapidly, as has material footprint per capita, seriously jeopardising the achievement of SDG 12. Urgent action is needed to ensure that current material needs do not lead to the over-extraction of resources or to the degradation of environmental resources, and should include policies that improve resource efficiency, reduce waste and mainstream sustainability practices across all sectors of the economy. Indicators include the amount of food waste, hazardous waste, recycling and procurement options.

# INTEGRATED WASTE MANAGEMENT

Integrated solid waste management is a comprehensive waste prevention, recycling, composting, and disposal programme. It needs to consider how to prevent, recycle, and manage solid waste in ways that most effectively protect human health and the environment.

The biggest focus should be on waste minimisation and prevention, with only a small portion of the waste sent to landfill to be disposed of as a last option.

**The integrated waste management hierarchy:**



**Integrated waste management has multiple benefits:**

- ✓ It will reduce the cost to your company if waste is charged by the frequency and amount of waste removed, such as the number of wheelie bins.
- ✓ Recyclables can be collected separately; sometimes companies even get paid for their recyclable waste, or they can negotiate a better rate for waste collection.
- ✓ Recycling contributes to environmental awareness among staff members, as it is one of the most visual practices in offices and affects all staff.
- ✓ It will reduce the pressure on landfills, which will help to avoid high costs relating to development of new landfill sites situated further away from the city.
- ✓ It can improve the company's green profile and contribute to job creation if it is well managed and linked to well-planned recycling services. It is relatively easy to measure if the right processes are in place.



## QUICK START



**WASTE AUDIT:** Do a waste audit to determine what types of waste are generated in different areas. You need this information to set up an effective recycling system. Find out who collects your waste and how you are billed for this. Check to see if there are local recycling and composting companies that can collect your waste, and then try to negotiate a saving because of your recycling and composting initiative.



**ACTION PLAN:** Based on your strategy and policy, you need to identify specific waste goals that you want to achieve, and ensure that they are linked to your action plan. Your green team should actively participate in this process to ensure success.



**BUDGET:** Ensure that you have management buy-in for your waste management plan, so that there is budget available to set up a suitable waste management system, as you will need suitable bins with clear labels.



**INVEST TO SAVE:** Remember to consider 'payback times' when motivating for retrofits so that you can determine potential savings and return on investment.



**AWARENESS:** Ensure that staff members understand the reason why they need to re-use and recycle, and what is expected of them. This will require an internal awareness campaign and dedicated recycling bins with clear labels.



## QUICK START (CONTINUED)



**INTEGRATED SYSTEM:** Ensure that a holistic approach is implemented:

- ✓ Avoid creating the waste, e.g. drink tap water instead of bottled water.
- ✓ Reduce the amount of waste created, e.g. set the printer to print double-sided, thus reducing the amount of paper needed, or promote re-usable items instead of disposable items (such as using coffee mugs instead of paper cups).
- ✓ Consider the re-use of products in their current form rather than recycling these products, e.g. re-use paper boxes for storage or filing purposes, and refill ink cartridges.
- ✓ If you can't reduce or re-use an item, recycling is the next option. A large percentage of waste that goes to landfill can actually be recycled. Easy items to consider for recycling include glass, paper, plastic and tin cans.
- ✓ If you can't do any of the above and you must dispose of waste, ensure that this is done in a safe and responsible manner that avoids waste pollution.



**RECYCLING SYSTEM:** It is critical to ensure that a recycling system is set up at your office to encourage integrated waste management:

- ✓ Start with a three-bin system, if possible. This means separating your dry waste (recyclables), organic/biodegradable waste (for composting) and wet waste (rubbish for landfill). Note that biodegradable does not always mean compostable.
- ✓ Have clearly marked bins for your recyclables, organics and rubbish.
- ✓ Try to keep your glass separate, as it can break and contaminate the other recyclables. Glass is heavy, so a 'skinny' wheelie bin (140 litres) is best.
- ✓ Store recyclables undercover until you can access a recycling collection or drop-off site.
- ✓ Organic waste can be treated with bokashi to manage odours.

## THINGS TO DO

Here are some suggestions of things that you can do at your office to promote waste reduction.

### AT YOUR DESK

- ✓ Re-use envelopes, paper clips and wrapping paper.
- ✓ Use paper made from recycled products that is chlorine-free and that is certified by a reputable body such as the Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC) or Sustainable Forestry Initiative (SFI).
- ✓ Set your printer to print both sides by default and re-use paper that has been printed on one side only.
- ✓ Become a paperless office. Explore eliminating the use of paper in your office, or using paper more efficiently. Use electronic databases instead of storing hard copies. Don't print emails and encourage others not to do this, too.
- ✓ Sign documents with digital signatures if possible, and preview documents before printing to avoid having to reprint.
- ✓ Do not print agendas and minutes for meetings. Rather opt to use electronic equipment such as data projectors for meetings so that all meeting members have access to the agenda, and distribute minutes electronically.
- ✓ When you buy stationery, consider environmentally friendly alternatives.

- ✓ Use refillable ink cartridges and ensure that old cartridges are disposed of safely.
- ✓ Ensure that your electronic waste (anything with a plug or battery) is disposed of safely.

### KITCHEN, CANTEEN OR CATERING

- ✓ Avoid disposable cups and plastic lids in your office: Everyone should have their own mug, and a small number of re-usable cups and glasses can be purchased for visitors.
- ✓ Avoid bottled water at your office. Bottled water is expensive and uses large quantities of fossil fuel (both for the manufacturing of the bottle itself and the energy required to treat the water) and water to produce. Plastic bottles add to the problem of our overfilled landfills and take up to 500 years to degrade.



Bokashi is inoculated sawdust that converts food waste and similar organic matter into a soil amendment that adds nutrients and improves soil texture. The input matter is fermented by specialist bacteria, not decomposed. It is a practical way to manage organic waste at the office.



- ✓ Use cutlery and crockery made from stainless steel and ceramic instead of disposable plastic. When disposable cutlery or crockery is required, ensure that it is made from biodegradable materials, e.g. bagasse, corn starch or bamboo.
- ✓ If practical, make sure that organic waste goes into compost. It is easy to start a countertop compost bin at your office, especially if you have an outside area.



A typical office environment will have large quantities of paper or cardboard waste, with some plastic – often related to packaging – and some hazardous or electronic waste. The office kitchen or canteen will mostly include packaging waste such as paper, plastic, polystyrene, glass, tin cans and organic waste.



## RECYCLING MADE EASY

- ✓ Your waste audit should provide you with information about the main type and volume of waste that is generated at the office.
- ✓ Find out if there is a local collection point for your recyclables such as glass, plastics, cans, paper, and e-waste, or find out if there is a recycling and/or compost collection company that can collect from your office.
- ✓ Check your current waste management service contract to get a better understanding of what you might be able to influence. You need to decide what you will recycle; however, first you need to find out the following from your waste management or proposed recycling company:
  - What recycling do they take?
  - Do you need to clean or sort your recyclables?
  - When do they collect and what is the potential frequency?
  - Do they provide bags and/or recycling bins?
  - How much will they charge weekly or monthly?
  - Can they provide statistics on the amount of waste diverted from landfill?

You can decide how you want to do your recycling in the office, but it is important to remember the following:



- ✓ Your waste audit will tell you how much waste can be recycled, and this will determine the size, number and location of your recycling bins.
- ✓ Some recycling companies provide recycling bins or containers for free. This is specifically useful for organic compost when full bins are exchanged for empty bins on collection.
- ✓ Always put recycling bins at strategic points (close to the source of the waste), i.e. close to printers, photocopiers, canteens, exit doors, communal leisure areas, etc.
- ✓ Clear signage needs to be provided at the recycling points to ensure that people understand what is required of them.
- ✓ Put recycling bins and normal waste bins next to each other, i.e. always in a set.
- ✓ Ensure that your bin colours stay the same throughout the building, e.g. green for recyclables and red for non-recyclables, blue for organics, while paper could be orange.
- ✓ Provide clear guidance and training to cleaning staff members who need to empty bins. It is very frustrating if staff separate waste, simply to find cleaning staff putting it all in the same bin.
- ✓ Make information on recycling available to your staff or provide training.



- ✓ Different types of paper should go into different recycling containers, because white office paper is more desirable for recycling companies.
- ✓ Flatten cardboard boxes before placing in the recycling bin, as this saves space and is preferred by the recycling collection company.
- ✓ If you plan to have a large back-of-house recycling centre, then you should consider the following: location, space, access, health and safety issues, equipment needed, staffing your centre, finances to set it up, removal schedule, etc.

Ensure that your bins are clearly labelled and placed next to each other as a set.

If you want to reduce your waste, consider what you are buying. Refer to the section on eco-procurement to understand how you can reduce your waste through better procurement.



## REALITY CHECK

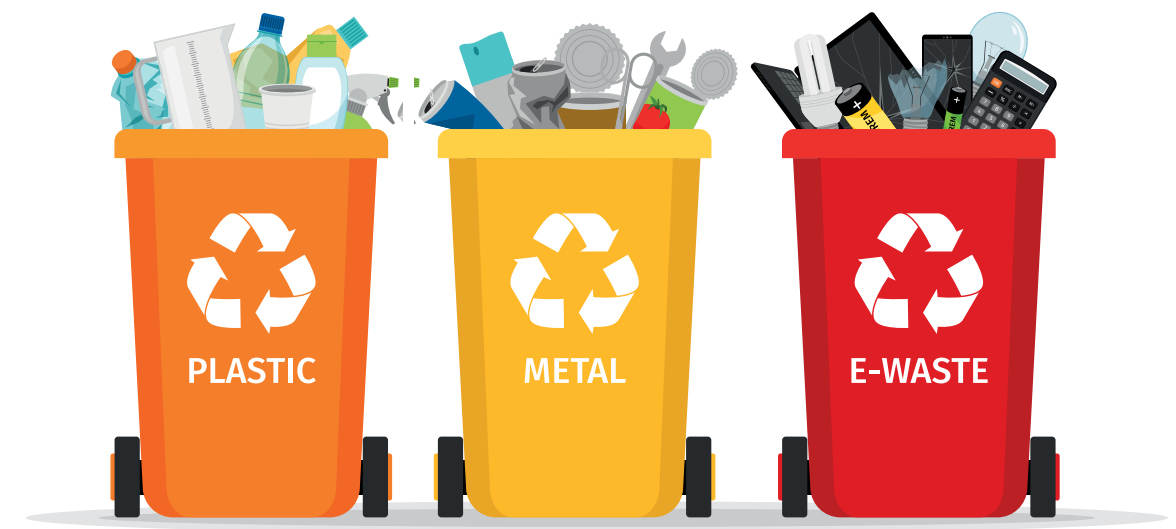
The implementation of a recycling programme at the office can have a significant impact and assist with awareness-raising in a very visual way, yet it is not the easiest thing to do. It is very important to ensure that your support staff are trained and take ownership of the process.

Ensure that recycling bins are clearly labelled and correctly placed – it is advisable to monitor this and adapt if needed. It is important to appoint a service provider who can collect your recyclables and organic waste, ensure that it is dealt with responsibly, and provide details on the quantity of waste diverted from landfill.

## RESOURCES

Below are some additional waste related resources:

- ✓ For the waste section of the *Smart Living Handbook* go to <https://bit.ly/Smartliving2020>
- ✓ [Click here](#) for download the 'Rethink, Reduce, Reuse, Recycle' brochure.
- ✓ [Click here](#) to download stickers for your recycling bins.





# WATER CONSERVATION



This section provides an overview of the concerns and practices relating to water conservation. Water is a scarce natural resource on which all life on Earth depends. We need to protect it and use it with care and respect.

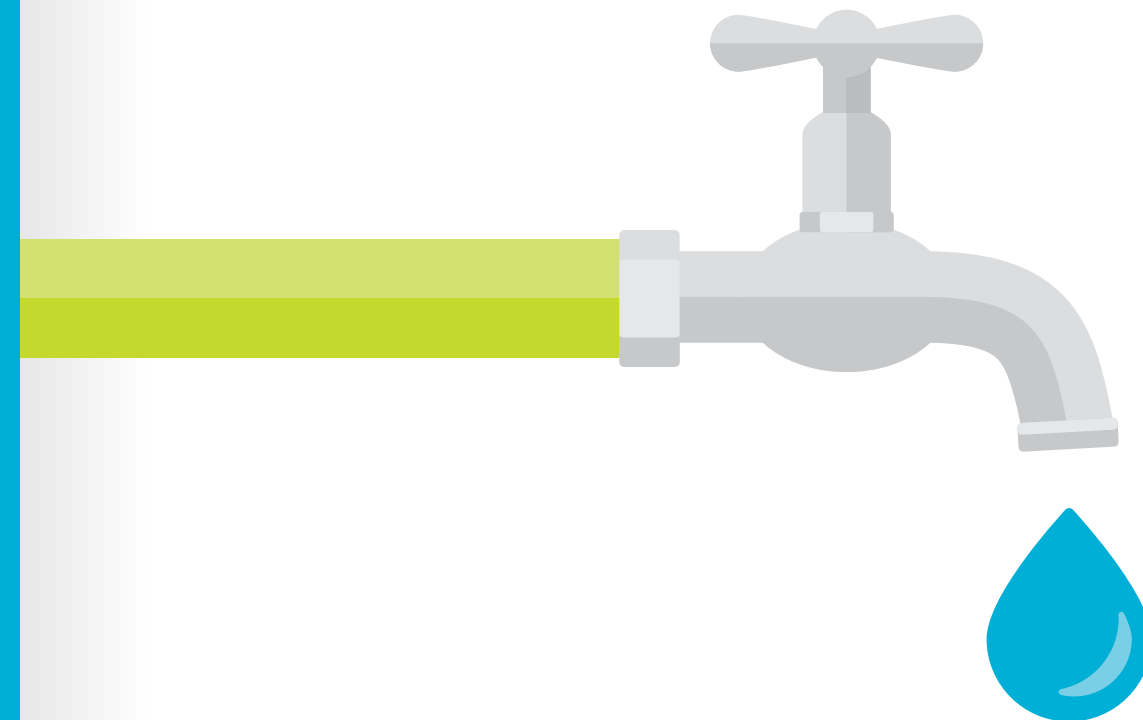
Water is a critical natural resource on which we all (humans, animals, plant life, sea life, etc.) depend. It is one of the most important life-support systems we have on our planet.

South Africa is a water-stressed country with limited renewable water resources. Cape Town is one of hundreds of cities across the world affected by water scarcity brought on by climate change, and we face an even drier future.

Providing fresh drinking water to a growing population is both challenging and costly. For greater water security, we can no longer solely rely on our rain-fed dams. This is why the City, too, is now getting its water from new sources, such as groundwater, recycled water and desalinated seawater, to ensure that we and generations to come have sufficient supply.

Water conservation is the implementation of one or several measures to reduce the amount of water used in your office, and the water used to produce the goods and services that your office uses. Implementing water conservation measures and promoting a water-wise office will have many benefits. It will result in cost savings (cheaper water bills); make the company more competitive; reduce the company's carbon and water footprints; and contribute to local, national and global water conservation.

If you reduce your company's water footprint, you will improve your company's social and environmental profile, and make it more competitive in an increasingly environmentally aware market. Increasing urban development and the impacts of climate change (such as drought and floods) will make water security a priority in South Africa.





**SDG 6** refers to the need to ensure availability and the sustainable management of water and sanitation for all. Despite progress, billions of people still lack safe water, sanitation and handwashing facilities. Data suggest that achieving universal access to even basic sanitation services by 2030 would require doubling the current annual rate of progress. More efficient use and management of water is critical to addressing the growing demand for water, threats to water security, and the increasing frequency and severity of droughts and floods resulting from climate change.



**SDG 14** addresses the need to conserve and sustainably use the oceans, seas and marine resources for sustainable development, which is essential in Cape Town. The expansion of protected areas for marine biodiversity and existing policies and treaties that encourage responsible use of ocean resources are still insufficient to combat the adverse effects of overfishing, growing ocean acidification due to climate change, and worsening coastal eutrophication. As billions of people depend on oceans for their livelihood and food source and on the transboundary nature of oceans, increased efforts and interventions are needed to conserve and sustainably use ocean resources at all levels.



QUICK START



**WATER AUDIT:** Do a water audit to identify which items use most of your water and focus on how you can address these. It is important to have a baseline so that you can measure the impact of the interventions.



**ACTION PLAN:** Based on your strategy and policy, you need to identify specific water goals that you want to achieve, and ensure that they are linked to your action plan. Your green team should actively participate in this process to ensure success.



**BUDGET:** Ensure that you have management buy-in for your audit and retrofit plan, so that there is budget available to cover implementation costs, such as replacing fixtures and fittings.



**MAINTENANCE:** It is very important to ensure that there are no dripping taps or toilets at the office, so ensure that this area is included into a monthly maintenance check as part of your action plan.



**AWARENESS:** Ensure that employees understand why it is important to save water and what is expected of them. This might require an internal awareness campaign.

## THINGS TO DO

Here are some suggestions of things that you can do at your office to promote water conservation.

### RESTROOM AND WASHING FACILITIES

- ✓ Fit flow restrictors and tap aerators on indoor taps to reduce the flow rate to less than six litres per minute.
- ✓ Install low-flow showerheads or fit a flow restrictor to your existing showerhead to reduce flow to a maximum of ten litres per minute.
- ✓ Reduce water pressure to your office property by turning your stopcock lower and/or installing a flow restrictor on the main pipe connection from your meter.
- ✓ Find and fix leaks on your office property.
- ✓ Use only non-toxic and biodegradable soaps.

### GARDEN OR OUTDOOR SPACES

- ✓ Use a broom and harvested rainwater to clean hard outdoor surfaces.
- ✓ Cover your topsoil with a layer of mulch to reduce evaporation. Mulch with materials like grass clippings, shredded leaves, bark chips or straw.



Remove alien vegetation and replace with **water-wise** and indigenous plants.

- ✓ Modify your gutters and downpipes to collect rainwater in containers.
- ✓ Remove alien vegetation and replace with waterwise and local indigenous plants.
- ✓ Install rainwater tanks to harvest and store water for your office gardens, pot plants, cleaning, and flushing.
- ✓ Lay permeable paving on your office property to encourage natural drainage; hard surfaces contribute to water runoff and debris overflowing and blocking stormwater drains.

### KITCHEN, CANTEEN AND CATERING

- ✓ Avoid letting the tap run without using the water for anything – it sounds odd, but you’d be surprised how many people do this!
- ✓ Only boil the amount of water you need when using the kettle; if you boil too much, keep the rest warm in a flask to be used later.
- ✓ Reduce office-related water pollution to zero. Only use biodegradable cleaning products and make sure you do not dispose of hazardous waste in the sink or toilet.
- ✓ Use the economy cycle on your dishwasher and washing machine. Only run the dishwasher when full; when rinsing glasses, do so in a bucket or plugged sink rather than under a running tap.
- ✓ Switch from bottled water to tap water.

## GREYWATER

Greywater is untreated wastewater that comes from baths and showers (body washing) and handwash basins. Laundry water from washing machines or hand washing qualifies only if environmentally friendly detergents were used.

Greywater must be used within 24 hours and can be used for toilet flushing and some garden irrigation.

Greywater is **NOT** toilet water (which contains faecal matter and pathogens) or water from spas, jacuzzis and pools. Water from kitchen sinks and dishwashers contains grease, fats, oils, bacteria, food and other solid particles, and must therefore not be re-used.

## RAINWATER HARVESTING

Rainwater harvesting is the practice of capturing rain, usually from the roof, and storing it in large containers for uses such as flushing toilets, garden irrigation or cleaning vehicles, hard outdoor surfaces and windows.

A basic rainwater harvesting system with tanks usually relies on gravity to take the rainwater from your roof to water tanks via the gutters/downpipes.

## BOREHOLES AND WELLPOINTS FOR GROUNDWATER

Boreholes and wellpoints draw up underground water, which is generally used for irrigation. However, these must be registered, used moderately and in accordance with the City and national water restrictions and regulations.

In drought conditions, only very limited irrigation is allowed so that groundwater can be preserved. In times of serious water shortages, groundwater should be used for indoor essential use, such as toilet flushing as a priority, with appropriate treatment.



### DOWNLOAD

[Click here](#) for the *DIY Guide to Finding and Fixing water leaks*

[Click here](#) for the *Safe Use of Greywater*.



### REALITY CHECK

Water is a scarce resource, yet few people really use it consciously. We need to move beyond just closing the tap. We need to review business practices and ensure that the most effective water-saving principles are implemented and that staff members actively participate.

Here are examples of different products and the amount of water that they require during their manufacturing or production cycle:



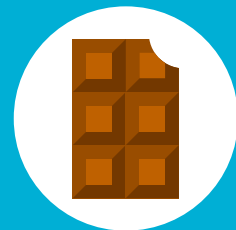
10

litres of water for one A4 sheet of paper



130

litres of water for one cup of coffee (250 ml)



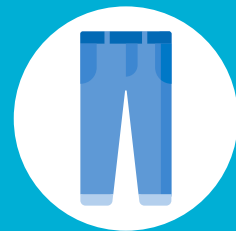
1 700

litres of water for a slab of chocolate (100 g)



2 500

litres of water for one cotton shirt (250 g)



8 000

litres of water for one pair of jeans (800 g)

## WATER FOOTPRINT

The **water footprint of a product** is defined as the total volume of fresh water that is used directly (actual footprint) or indirectly (virtual footprint) to produce a product or service. It is estimated by considering water use in all steps of the production chain.

About 18 900 litres of water are needed to produce 1 kg of roasted coffee, taking into consideration the water needed to grow the plant and the process for roasting the coffee. For a standard cup of coffee (250 ml) we need 7 gram of roasted coffee, so a cup of coffee needs about 130 litres of water when you consider the whole process from plantation to cup.

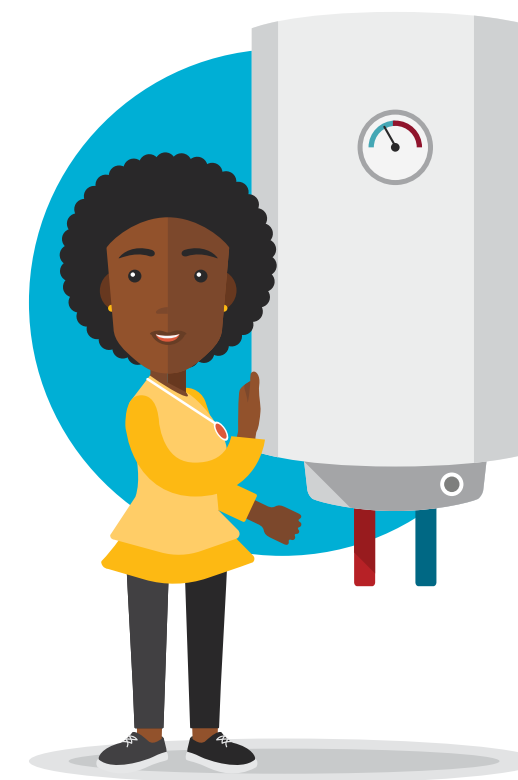
Eskom needs about 1,35 litres of water per kWh of electricity produced. This means that Eskom uses 27 litres of water to provide you with enough energy to run one energy-efficient light bulb of 20 watt for an hour. Saving electricity also saves water.

Your company can reduce its operational water footprint by saving water in its own operations and reducing water pollution to zero. For most businesses, however, the supply-chain water footprint is much larger than the operational footprint. It is therefore crucial that your company address that as well. Achieving improvements in the supply chain may be more difficult – because it is not under your direct control – but it may be more effective.

## RESOURCES

Below are some additional water related resources:

- ✓ For the water section of the *Smart Living Handbook* go to <https://bit.ly/Smartliving2020>.
- ✓ [Click here](#) to download the *DIY Guide to Finding and Fixing Leaks*.
- ✓ [Click here](#) to download the *Alternative Water Resources* pamphlet.
- ✓ [Click here](#) to download Nedbank's *Water Savings Guide*.



# ECO- PROCUREMENT



This section provides an overview of the concerns and practices relating to eco-procurement, also known as sustainable, responsible or green procurement. It considers how the products you buy or services you engage in the office and as a business – including in your supply chain – impact resource availability and carbon emissions, as well as how to improve your practices.

The growing focus on sustainability will impact organisations and companies of all sizes. As buying decisions have a ripple effect far beyond the organisation or company, eco-procurement firstly reduces waste, and is also the key to unlocking the growth of the green economy by increasing demand for responsible products and services.

Eco-procurement refers to economically, ecologically and socially responsible purchasing practices. It accounts for the full value of a product or service over its life cycle, including the costs of risk and opportunities, while still representing the same (or better) quality than the traditional alternative.

Procurement generally makes up a substantial part of an organisation's budget. What it buys, who it buys from, and how it uses the goods and services once bought can have a huge influence on everything from performance and employee well-being, to reputation and stakeholder relations. Often, this aspect produces more GHG emissions than internal operations.

For example, the typical consumer company's supply chain accounts for more than 80% of GHG emissions and more than 90% of the impact on air, land, water, biodiversity and geological resources.<sup>5</sup>

SDG



The SDGs identify that urgent action is needed to ensure that current material needs do not lead to the over extraction of resources or to the degradation of environmental resources, and should include policies that improve resource efficiency, reduce waste and mainstream sustainability practices across all the sectors of the economy. **SDG 12** aims to ensure sustainable consumption and production patterns.

By shifting procurement to more sustainable options – including 'greener' goods and services, locally manufactured products, ethically produced products, and goods and services that are compliant with environmental laws – all organisations, including businesses and governments, can help drive markets towards innovation and sustainability. This demand for responsible products and services helps drive the shift towards a green economy.

<sup>5</sup> [www.mckinsey.com/business-functions/sustainability/our-insights/starting-at-the-source-sustainability-in-supply-chains](https://www.mckinsey.com/business-functions/sustainability/our-insights/starting-at-the-source-sustainability-in-supply-chains)



**"MORE SUSTAINABLE USE OF MATERIAL AND ENERGY WOULD ADD AN EXTRA \$2 TRILLION TO THE GLOBAL ECONOMY BY 2050." – INTERNATIONAL RESOURCE PANEL, 2015**



## QUICK START

Sustainable procurement can help organisations save costs and manage risks. At the heart of successful implementation is building trust with suppliers and being transparent about procurement's expectations and the disclosures required by partners.



[Click here](#) to download Six tips to drive sustainable procurement in your organisation.

Useful tools to drive practical implementation of sustainable procurement include having:

- ✓ a specific contract clause relating to sustainability
- ✓ a supplier code of conduct
- ✓ a sustainable procurement policy

## PROCUREMENT PRINCIPLES

The following eco-procurement principles can help guide your decision making:

### RESOURCE EFFICIENCY

Procurement decisions should ensure that products and services consider the need for resource efficiency, both in terms of services and the day-to-day operations. Resource efficiency includes electricity, water and fuel efficiency, and waste avoidance. The first opportunity in sustainable consumption is avoiding unnecessary purchases.

### LIFE-CYCLE APPROACH

Avoid products or services that may represent a short-term saving at the expense of long-term negative environmental impacts, or those that have the potential to create significant negative externalities.



### Life-cycle approach:

- ✓ Purchase price and associated costs such as delivery, installation, insurance, etc.
- ✓ Operating costs, including energy, fuel and water use, spare parts, and maintenance
- ✓ End-of-life costs such as recycling, disposal, etc.
- ✓ Costs of externalities such as GHG emissions

## CIRCULAR ECONOMY

The traditional, linear economy is based on a process of 'take, make, and dispose'. But in terms of sustainable procurement, it is important to consider the whole cycle, from acquisition and performance through to disposal. The three principles of circularity include: 1) design out waste and pollution; 2) keep products and materials in use by purchasing for durability, re-use, remanufacturing, and recycling; and 3) regenerate natural systems.





## PREVENTING, MINIMISING AND MITIGATING NEGATIVE IMPACTS

Procurement decisions should ensure that any potential negative environmental and social impacts of a product or service to be procured are prevented, and where these cannot be completely prevented, minimised or mitigated, it should adhere to the polluter pays principle.



**Life-cycle assessment (LCA)** is a science-based tool to measure the environmental impacts of products, services and business models. The circular economy (CE) is an inspirational strategy for creating value for the economy, society and business, while minimising resource use and environmental impacts through reducing, re-using and recycling. Both take a long-term view of responsible resource use and together they provide a holistic systems approach to procurement.



**Cradle-to-cradle design** is an approach to industrial products and processes that supports a circular economy. It is a term used in life-cycle assessments to indicate that all the materials used in a product can be recycled or reclaimed through a biological or technical system so that there is no waste.

## BENEFITS

Responsible procurement supports the concept of local economic development through the procurement of **locally produced goods and services** due to reduced transport costs, as well as preferential procurement for small businesses (SMMEs) and broad-based black economic empowerment (B-BBEE) in South Africa. The benefits of working towards sustainable procurement are also the key drivers.

An obvious benefit is that the process **reduces risk** in terms of direct economic cost (disruptions in supply), as well as indirect risk to your reputation (brand damage) from bad practices in your own company and in your supply chain.

Conversely, being proactive about establishing sustainable procurement practices – also in your supply chain – and using that in your marketing will result in an estimated 15 to 30% measurable brand **value increase** thanks to improved reputation.



### POLLUTER PAYS PRINCIPLE

The principle according to which the polluter should bear the cost of measures to reduce pollution according to the extent of either the damage done to society, or the exceeding of an acceptable level (standard) of pollution.

– Organisation for Economic Co-operation and Development

Sustainable procurement practices could **reduce costs** by 9 to 16%<sup>6</sup> while simultaneously **increasing resource efficiency**. These result from lower total cost of ownership linked to reduced energy costs, reduced overspecification, reduced consumption, and reduced compliance costs.

Additional benefits can include better **access to capital** and lower cost of capital along with competitive advantage, as you have invested in the long-term future of your supply chain to protect it against future scarcity.

## THINGS TO DO

Green procurement principles can be implemented through the following practices; however, this should all be done within the constraints of maintaining the competitiveness of suppliers, and adhering to sound procurement practices in terms of legal and policy frameworks.

- ✓ **Ask if you really need it:** Firstly decide whether the product or service is required at all, or in the quantities being proposed.
- ✓ **Reduce the impact:** Consider and reduce the negative environmental consequences of a product or service at all life-cycle stages.
- ✓ **Change behaviour:** Aim to change the behaviour of suppliers, consumers and contractors to further promote resource efficiency and reduce negative environmental impacts.
- ✓ **Reduce waste:** Minimise waste and hazardous substances.
- ✓ **Keep it real:** Ensure appropriate legal liabilities for any non-compliance detected.

<sup>6</sup> World Economic Forum: Beyond sustainable procurement.



The **Sustainable Procurement Pledge (SPP)** commits procurement individuals across the world to use their decision-making power for good in a ground-up initiative aimed to support government and institutional frameworks. These five statements are derived from the 10 principles of the United Nations Global Compact (UNGC) and the Sustainable Development Goals. Individual signatories pledge to stand up for people and the planet, to work together to change the world, to start with themselves, to share knowledge and listen to others.

For more information, visit [www.linkedin.com/company/sustainable-procurement-pledge/](https://www.linkedin.com/company/sustainable-procurement-pledge/) or <https://spp.earth/>.

## REVIEW YOUR TENDERS

When preparing and evaluating tenders, the following criteria should be taken into account:

- ✓ **Specify the function:** Specify the function of the product and not the description of the product or its trade name. This will allow the manufacturers and sellers of 'greener' alternative products to tender.

✓ **Give preference to local products:**

Source stock items locally (100 km), then regionally (500 km) and then nationally (2 000 km). Products that are sourced locally will have lower carbon emissions associated with their distribution and it supports the local economy.

✓ **Check resource efficiency:** Source products that are resource efficient. Stock items with lower water and energy use than their competitors during manufacture and use, or that are partially made of recycled content. This will result in lower environmental impacts associated with the product, which generally translates into cost savings during use.

✓ **Check eco-labels:** Request proof of environmental certification (ISO 14000, FSC, Energy Star, etc.) or eco-label where relevant. Certifications and eco-labels provide a degree of certainty in terms of the product's 'green credentials' and environmental performance, and avoid false advertising, which is commonly known as 'greenwashing'.

✓ **Check durability:** Select products with a long anticipated life expectancy or life span. Products need to be manufactured to be durable and outlast their competitors when in use. Products with a longer life expectancy will inherently increase the time needed between replacements and reduce the volume of worn-out products, which need to be disposed of.

✓ **Maintenance:** Select products that can easily be repaired or maintained. Replacement of components will ensure that products are used for a longer period of time, reducing the need for replacement and saving replacement and disposal costs.

✓ **Poly-logo:** Where plastic is used, the plastic should clearly be marked with plastic identification codes. These codes identify the type of plastic that the item is made of. This allows recyclers to easily identify the type of plastic and ensure that it enters the right stream/process. If plastic is not clearly marked and easily identifiable, recyclers will dispose of it to landfill rather than take the risk of it contaminating the material being recycled.

✓ **Toxins:** Avoid toxic or banned substances and minimise the use of hazardous substances. These substances can have negative impacts on the environment and human health throughout the life cycle of the product, i.e. from manufacture, during use, and disposal. Toxic and hazardous chemicals will have higher disposal costs, require separate storage, additional safety and personal protective equipment (PPE) for users, and will have considerably higher impacts in the events of spills and accidents.



ISO 20400 Sustainable Procurement is the world's first international standard for sustainable procurement, which aims to help organisations develop and implement sustainable purchasing practices and policies.

## ECO-LABELS

Eco-labelling is a voluntary method of environmental performance certification and labelling that is practised around the world. An eco-label identifies products or services proven to be environmentally preferable within a specific category. Social labels usually cover issues such as human rights, workers' rights, ban of child labour, payment of a fair price to producers in developing countries, etc.



**Greenwashing** is the act of misleading consumers about the environmental practices of a company, or the environmental benefits of a product or service. This could take different shapes such as hidden trade-offs, a lack of proof, vagueness, irrelevance or lies. To avoid greenwashing, it helps to use certified goods and services.

## GREENING THE CITY'S SUPPLY CHAIN

Cape Town joined the Global Lead City Network on Sustainable Procurement in 2015. The network is a group of cities committed to drive a transition to sustainable consumption and production by implementing sustainable and innovative procurement. All participating cities act as ambassadors of sustainable procurement to lead to a resource-efficient, low-carbon and socially responsible society.



The City of Cape Town's Smart Procurement Model promotes access to markets and training for SMMEs, while providing them with a platform to showcase their products and services, as well as a mentorship programme where entrepreneurs are guided on their specific business needs. This is supported by The Business Hub, the City's 'one-stop shop' where entrepreneurs can receive business and financial advice. This service aims to reduce barriers faced by small business owners by minimising the procedures, time and costs associated with starting a business. Contact The Business Hub on [business.support@capetown.gov.za](mailto:business.support@capetown.gov.za) or 021 417 4043.

The concept of fair trade ensures that the people who put the effort into making the product receive a fair wage and fair working conditions. This started in the 1940s with a focus on products such as coffee, cocoa and bananas, but has spread to include various other products, handcraft and even tourism.

Eco-labels can, however, be expensive and another route that is becoming more popular is the Participatory Guarantee System (PGS). It is a locally focused quality assurance system that certifies producers based on the active participation of stakeholders. It is built on a foundation of trust, social networks and knowledge exchange. It is a complementary alternative to third-party organic certification for smallholder farmers and producers worldwide, and locally it is co-ordinated by the South African Organic Sector Organisation (SAOSO).

## CASE STUDY: PALM OIL

This edible vegetable oil comes from the fruit of oil palm trees. Oil palm trees are native to Africa but were brought to South-East Asia just over 100 years ago as an ornamental tree crop. While Indonesia and Malaysia now make up over 85% of global supply, there are 42 other countries that also produce palm oil.

Palm oil is in nearly everything. It's in close to 50% of the packaged products we find in supermarkets - everything from pizza, doughnuts and chocolate, to deodorant, shampoo, toothpaste and lipstick. It's also used in animal feed and as a biofuel in many parts of the world.

Palm oil is extremely versatile and has many different properties and functions that make it so useful and so widely used. It's semi-solid at room temperature and so can keep spreads spreadable; it's resistant to oxidation and so can give products a longer shelf life; it's stable at high temperatures and so helps to give fried products a crispy and crunchy texture; it's also odourless and colourless and so doesn't alter the look or smell of food products. Palm oil is used widely as cooking oil.

Palm oil has been and continues to be a major driver of deforestation of some of the world's most biodiverse forests, destroying the habitat of already endangered species like the orangutan, pygmy elephant and Sumatran rhino.

This forest loss coupled with conversion of carbon-rich peat soils are releasing millions of tonnes of greenhouse gases into the atmosphere and contributing to climate change. There also remains some exploitation of workers and child labour. These are serious issues that the whole palm oil sector needs to address because it doesn't have to be this way.

Palm oil can be produced more sustainably and things can change. The Roundtable of Sustainable Palm Oil (RSPO) was formed in 2004 in response to increasing concerns about the impact palm oil was having on the environment and on society.

(Source: [www.wwf.org.uk/updates/8-things-know-about-palm-oil](http://www.wwf.org.uk/updates/8-things-know-about-palm-oil))



**Click here** to learn more about the story of palm oil.



**Play this video** *Rang-tan in my bedroom* by Greenpeace for a short, yet powerful message.

**Play this video** *Follow the Frog* by Rainforest Alliance showing how selecting eco certified products help make a different.

## RESOURCES ECO LABELS

Here are some examples of trusted eco-labels:

- ✓ [EcoStandard](#)
- ✓ [Ecospecifier](#)
- ✓ [Energy Star](#)
- ✓ [Forest Stewardship Council](#)
- ✓ [Fairtrade Label South Africa](#)
- ✓ [Fair Trade Tourism South Africa](#)
- ✓ [Marine Stewardship Council](#)
- ✓ [Participatory Guarantee System \(PGS\)](#)
- ✓ [Programme for the Endorsement of Forest Certification \(PEFC\)](#) -
- ✓ [South African Bureau of Standards](#)

## RESPONSIBLE SUPPLIERS

Below are some additional procurement related resources:

- ✓ [Click here](#) for information about the Sustainable Purchasing Leadership Council.

- ✓ [Click here](#) to download WWF Canada's *How-to guide: Buying responsibly*.
- ✓ [Click here](#) to download WWF-SA's *Moving towards sustainable performance-based procurement in the Western Cape: A guidebook for supply-chain managers and policy makers*.
- ✓ [Click here](#) to access the Circular Economy Practitioner Guide.
- ✓ [Click here](#) to find out more about the SA Plastics Pact.
- ✓ [Click here](#) to download the EU *Buying Green handbook*.
- ✓ [Click here](#) to download the UNDP *Environmental Procurement Practice Guide*.
- ✓ [Click here](#) to download the WWF's *Guide to Buying Paper*.

Directories provide a good place to start searching for responsible suppliers:

- ✓ [Eco Atlas](#)
- ✓ [Ecolabel Index](#)
- ✓ [Green Database](#)

## GREENWASHING

Use eco-labels and certifications to avoid greenwashing:

- ✓ [Click here](#) to download *Seven sins of greenwashing* and greenwashing poster.

# TRANSPORT

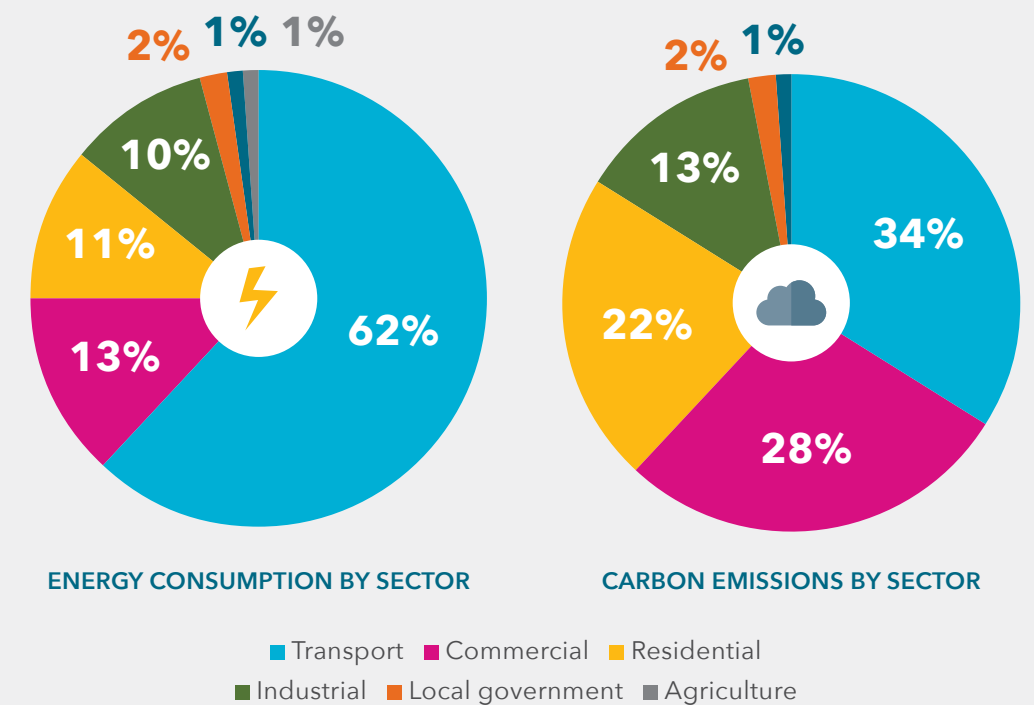


This section provides an overview of the concerns and practices relating to transport. The focus is on technology and practices for transport that reduces GHG emissions. Commuting to work, along with company travel, contribute to this high impact area. Offices of all sizes should consider how they can help to reduce their negative impact.

**“THE TRANSPORT SECTOR IS THE BIGGEST ENERGY CONSUMER IN CAPE TOWN.”**

- CITY OF CAPE TOWN GREENHOUSE GAS INVENTORY 2017

CAPE TOWN'S ENERGY CONSUMPTION BY SECTOR (LEFT) AND CARBON EMISSIONS BY SECTOR (RIGHT).



Source: City of Cape Town Greenhouse Gas Inventory 2017

Transport is a vital part of modern-day society, enabling communication, trade and other forms of exchange between people.

For business, it is an essential requirement for getting employees to work and to move resources from one location to another, enabling people and societies as a whole to produce and prosper.

An estimated 38% of Capetonians rely on public transport to get around the city while the majority use private transport. As Cape Town and its economy grow, traffic congestion increases along with the duration of peak traffic.

This wastes time and money in fuel costs, increases emissions, strains the transport system and infrastructure, and even impacts your employees' well-being and potentially your bottom line.



The City realises that an efficient public transport system and an integrated transport network is the best way to ease congestion on Cape Town's roads. To this end, the administration is building urban transport systems and networks that are fuel efficient, inclusive, safe, space saving and healthy.

This is supported by the *Smart Travel* guide, which provides employers with a useful tool to create a mindshift among – and provide information to – their staff members to:

- ✓ Increase the use of more sustainable travel options
- ✓ Reduce single-occupancy vehicle use
- ✓ Reduce vehicle emissions

SDG



SDG 9 addresses the need to build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation. Efficient transportation services are key drivers of economic development, and more than 80% of world merchandise trade by volume is transported by sea, making maritime transport a critical enabler of trade and globalisation.



## QUICK START

Your office can reduce its transport footprint through these simple interventions:

- ✓ Allow staff to work from home or work flexibly to reduce travel during peak traffic times.
- ✓ Encourage lift clubs and the use of public or non-motorised transport.
- ✓ Reduce the need to travel – including unnecessary air travel – by encouraging video conferencing via Skype, Zoom or Teams.
- ✓ Ensure that your fleet meets low-emission and fuel-efficient requirements.

## THINGS TO DO

Here are some suggestions of things that you can do at your office to promote sustainable transport.

## CONSIDER YOUR BUSINESS TRAVEL

- ✓ Review the necessity for attending out-of-office meetings in person, including out-of-town meetings that require flights; rather have a video conference via Skype, Zoom or Teams and make use of online shared documents and desktops.
- ✓ Use public transport when viable, such as the MyCiTi airport service from central Cape Town.

- ✓ Opt for low-impact, fuel-efficient rental cars or zero emission such as electric vehicles and/or choose a car hire company with a sustainability policy, e.g. one that measures and offsets all GHG emissions.
- ✓ Instead of hiring a vehicle when on a work trip in another city, consider e-hailing (such as Uber or Bolt) as cars collect riders closest to them, using geolocation technology.
- ✓ Do route planning to cut down on unnecessary driving and avoid congestion, and share rides with colleagues to site or client meetings where possible.

## CHANGE THE WAY YOU COMMUTE

- ✓ Start a lift club at work, with incentives for participants, e.g. gift vouchers or a monthly payback scheme or preferential parking at the door. In a large organisation, it can be a good idea to have a vehicle available in case of a home emergency, such as a sick child who might require a parent to leave work early or sponsored e-hailing or taxi rides.
- ✓ Provide preferential parking for cars with more than one occupant, hybrid or electric vehicles. The latter is increasingly available in South Africa, and forward-looking landlords are installing electric vehicle charging stations. These should ideally be paired with solar panels to limit GHG emissions from our coal-based electricity supply.
- ✓ Inform staff about local transport options to get to the office.
- ✓ Share eco-driving tips with staff.

- ✓ Provide safe parking for bicycles and shower facilities for staff to encourage them to cycle to work. Healthy staff members are happy staff.



### DOWNLOAD

[Click here](#) for *Your guide to beating traffic, together.*

[Click here](#) for tips for your lift club.



## PARK AND RIDE

When attending or organising a major event, encourage the use of park-and-ride facilities. These are parking facilities located close to public transport interchanges so that travellers complete the journey on public transport. There are approximately 68 park-and-ride facilities around Cape Town.

## CHANGE THE WAY YOU WORK

- Consider implementing a flexible work programme (FWP) in the form of flexi-time, a compressed work week and/or remote working.
- ✓ Flexi-time allows employees to begin and end work outside the peak periods, within limits set by management.
  - ✓ With a compressed work week, employees are allowed to work their weekly hours in fewer than five days a week, subject to service and operational needs.



- ✓ With remote working, employees may work from a satellite office, or from home, subject to management approval.
- ✓ Review the necessity for attending out-of-office meetings in person; rather have a video conference via Zoom, Skype or Teams.



The City is rolling out its own, organisation-wide flexible work programme (FWP). The overall aim is to enable employees to travel outside the peak period, which will reduce congestion and travel times, and the overall vehicle kilometres travelled. Going forward, the City will also be engaging actively with other large employers to encourage the wider rollout of the FWP.

## CONSIDER FLEET MANAGEMENT

- ✓ Train all fleet drivers in eco-driving principles/smart driving techniques, as it can have a significant impact on your running costs.
- ✓ Explore low-impact options in vehicle procurement and specifications. For example, a small vehicle with low fuel consumption and low carbon emissions that is made locally with a high percentage of recyclable materials will have the lowest impact.
  - Match the size of the vehicle to the purpose, e.g. consider the load it will be most used for.

- Compare several vehicles and choose the car with the best 'kilometre per litre' range in its particular category.
- Manual gear transmission cars weigh less and are more efficient (and cheaper) than automatic cars.
- Cruise control can reduce fuel use.
- Tinted glass helps the car stay cooler, requiring less use of the air conditioner.
- Light-coloured cars, and cars with light-coloured seats, have cooler interiors.
- ✓ Hybrid and electric vehicles are more expensive but significantly more energy efficient than petrol and diesel vehicles. One reason for their efficiency is their regenerative braking systems, which collect much of the energy from braking into batteries instead of wasting it as heat in brake pads. Electric vehicles are quiet, require little maintenance and produce no emissions while driving. It is, however, important to consider the energy source for charging the batteries. If the energy comes from the electricity grid, this would be coal based. Ideally, therefore, electric vehicles should be charged using renewable energy.

## ENCOURAGE ECO-DRIVING

Here are some eco-driving tips for staff, when commuting in their own cars, and for fleet drivers:

- ✓ Keep the car well serviced and check the fluid levels regularly (badly maintained vehicles can increase fuel usage – and therefore carbon emissions and costs – by as much as 50%).
- ✓ Check tyre pressure monthly. Under-inflated tyres can increase fuel consumption by up to 40%, and they can also lead to accidents.
- ✓ Remove unnecessary weight from the vehicle.
- ✓ Close your windows (and sunroof) at higher speeds and remove empty roof racks to reduce wind resistance.

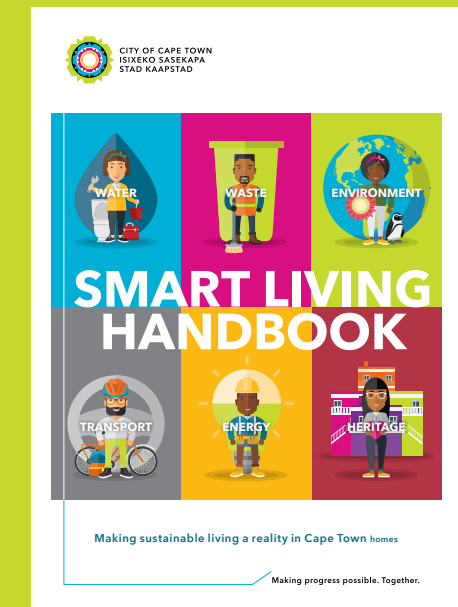


The City of Cape Town's *Smart Travel* guide is about working towards sustainable transport. This refers to any means of transport with low impact on the environment, which connects and revitalises communities. It includes public transport-oriented initiatives, active mobility (also known as non-motorised transport and includes walking, cycling and skateboarding), lift clubs, low-emission vehicles, and building or protecting urban transport systems that are fuel efficient, inclusive, space saving and promote healthy lifestyles.

- ✓ Use air conditioning only when really necessary.
- ✓ Reduce idling – idling for more than 10 seconds already uses more fuel than it takes to restart the car.
- ✓ Avoid speeding and drive smoothly. Increasing speed from 100 km/h to 120 km/h can increase fuel consumption by 20%. The most fuel-efficient driving speed is 80 km/h.
- ✓ Change to the highest gear as early as possible.
- ✓ Try to anticipate traffic flow by looking ahead to avoid unnecessary stopping and starting.



[Click here](#) to download the *Smart Living Handbook* for additional tips on sustainable transport.



## CARBON FOOTPRINT

GHG emissions from transportation in vehicles owned or controlled by the reporting company are accounted for in different ways depending on their relevance. Calculations can be done either on the fuel consumed, the distance travelled, or amount of money spent. When preparing to calculate your carbon footprint, ensure that you can access the relevant data on a continuous basis.

The following table provides a quick summary of which scope the different transport activities fall under in terms of the GHG Protocol.

Refer to the section on sustainable development in business for more information on carbon footprint accounting.

Carbon footprint accounting for employee transportation across the value chain:

ACTIVITY	RELEVANT CATEGORY OF EMISSIONS
Emissions from transportation in vehicles owned or controlled by the reporting company	Scope 1 (for vehicles that consume fuel) Scope 2 (for vehicles that consume electricity)
Emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties	Scope 3, category 6 (Business travel)
Emissions from transportation of employees to and from work	Scope 3, category 7 (Employee commuting)
Emissions from leased vehicles operated by the reporting company not included in scope 1 or scope 2	Scope 3, category 8 (Upstream leased assets)

(Source: Technical guidelines for calculating scope 3 emissions, GHG Protocol)



### DOWNLOAD

Since 2013, the City of Cape Town has run a long-term **Smart Driver Programme** for all its fleet drivers. Benefits from the training include a reduction in fuel and maintenance expenses, insurance costs, carbon emissions, and fewer incidents or accidents.

[Click here](#) to download the *Smart Driving Training Manual* for fleet drivers.



### DOWNLOAD

Tourism is a pillar of Cape Town's economy, and transport is the lifeblood of tourism.

[Click here](#) to download the Sustainable Transport in tourism fact sheet.

## RESOURCES

Below are some additional travel related resources:

- ✓ [Arrive Alive](#)
- ✓ [Bicycle CPT](#)
- ✓ [Bicycling Empowerment Network](#)
- ✓ [Cape Town Green Map](#)
- ✓ [Metrorail](#)
- ✓ [MyCiTi bus or cycle lanes](#)
- ✓ [Pedal Power Association](#)
- ✓ Transport Information Centre for MyCiTi, Metrorail, Golden Arrow Bus Services, taxis, Dial-a-Ride, park-and-ride and kerbside parking facilities: **0800 65 64 63**

# ENVIRONMENTAL IMPACT



This section provides an overview of the concerns and practices relating to our local biodiversity and environmental protection. Offices, big or small, can contribute through considering their impact on the environment, both directly and indirectly.

Cape Town has a unique landscape, and is one of the most beautiful cities in the world. It is also one of the most diverse cities, from the perspectives of landscape, biodiversity, culture and heritage; these aspects are its key economic assets, making it (among other things) a popular tourist destination. The City of Cape Town aims to ensure that these qualities are retained for future generations.

When speaking of biodiversity, we refer to the variety of plant or animal life in a particular habitat. Cape Town is located within an area of globally significant biodiversity and unique conservation value. The Cape Floristic Region has approximately 9 600 species of indigenous plants, of which 70% are endemic and 1 406 are listed in the Red Data Book. It is one of Conservation International's global biodiversity hotspots, placing an international responsibility on our government to ensure its conservation.

The most significant threats to our natural environment are habitat loss (due to rapid development, especially urbanisation and urban sprawl), invasive alien plant and animal species, abnormal fires, overexploitation of natural resources, pollution, environmental degradation, and climate change. All these threats are human induced, and in order to reverse the current trend of biodiversity loss, we must change the way we do things and become more aware of how our actions impact upon the environment around us.

By engaging in environmental initiatives and promoting awareness of your local biodiversity, you will improve your company's green profile and attract environmentally and socially aware staff and clients.

SDG



**SDG 15** aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss. There are some encouraging global trends in protecting terrestrial ecosystems and biodiversity. Forest loss is slowing down, more key biodiversity areas are protected, and more financial assistance is flowing towards biodiversity protection. Yet, the 2020 targets of SDG 15 are unlikely to be met, land degradation continues, biodiversity loss is occurring at an alarming rate, and the illicit poaching and trafficking of wildlife continue to thwart efforts to protect and restore vital ecosystems and species.



'Biodiversity' refers to all the living organisms around us and the complex web within which they interact. When one part weakens, or disappears, every other part of the web is affected. Biodiversity includes species, genetic and ecosystem diversity in our rivers, wetlands, coastlines, oceans, mountains, hills, plains and dunes. It encompasses everything in nature. We are currently experiencing the sixth extinction, which is the sixth time in half a billion years when the diversity of life on Earth contracts suddenly and dramatically.



The **Cape Town Green Map** promotes a fresh view of the city's environment and aims to remind residents and visitors to enjoy the natural environment near their place of residence and work. It showcases ways and means to live, work and play that reduces their impact on the fragile ecosystems in the city. Cape Town's Green Map is available online at: [www.capetowngreenmap.co.za](http://www.capetowngreenmap.co.za).



## QUICK START

- ✓ Ensure that environmental initiatives are included in your overall sustainability strategy.
- ✓ Incorporate biodiversity into your procurement policy; make sure that the goods and services you use are biodiversity friendly and comply with environmental legislation and policies.
- ✓ Avoid products that are not biologically and environmentally safe: Avoid genetically modified produce or products that contain harmful chemicals that can severely threaten biodiversity and have negative impacts on human health.
- ✓ Making investments in the biodiversity sector or contributing to biodiversity conservation could form part of your company's corporate social responsibility or responsible investment programmes.



## THINGS TO DO

Here are some suggestions of things that you can do at your office to promote environmental protection.

### AT YOUR DESK

- ✓ When ordering stationery, consider goods that are locally produced and do not contain harmful materials, e.g. plastic rulers that contain no polyvinyl chloride (PVC), or pencils made from certified sustainably grown and harvested wood, and give preference to locally made products.
- ✓ Re-look at the procurement of furnishings and opt for sustainably grown and harvested timber options, locally manufactured modular units, carpets and paints with low volatile organic compounds (VOCs)... the list is endless, and innovative ideas can assist with implementation.
- ✓ Make sure that both indoor and outdoor spaces have suitable bins for waste disposal and recycling to avoid littering and pollution.

### IN THE GARDEN

- ✓ When establishing a garden at the office or home, consider using indigenous plants. Soils in Cape Town gardens are mostly suitable for fynbos or strandveld plants, provided the area is sunny throughout the year.

## ECO-FRIENDLY VENUES

Looking for a venue for your next strategy session?

The City of Cape Town has various **Environmental Education Centres** available for meetings and workshops, including the Biodiversity Showcase Garden Environmental Education Centre situated at the Green Point Urban Park. For more information, contact the City of Cape Town.

The **Intaka Island Eco Centre** is a multifunctional space that is ideal for small training workshops and events. Its appeal lies in the central location, but mostly in the elegant charm of the thatched-roof building overlooking the water and wetland. It can host between 30 and 80 people, and includes furniture, AV equipment, and access to a kitchen. For more information, visit [www.intaka.co.za](http://www.intaka.co.za).

For corporate events, consider function halls that have sustainability attributes such as The Vineyard Hotel, Mount Nelson Hotel, Spier or Hotel Verde at the airport.

The Green Database has been established to encourage companies to use more environmentally and social friendly options in the events industry: [www.greendatabase.co.za](http://www.greendatabase.co.za).

- ✓ When planting trees, ensure that the soil is as nutrient rich as possible by using compost, bone meal and rock dust. Depending on your area, soil should be mulched to protect it from the sun, as this prevents the roots from drying out.
- ✓ Planting a garden will help stabilise soil, prevent dust and sand from blowing into the building, create shade to cool the building, and provide a space for animals and plants to live.
- ✓ If you do not have a garden, consider container planting on your windowsill, balcony or even on your roof (if it is flat and protected). With big enough pots, you can also plant herbs and some food plants (such as peppers).
- ✓ The *Smart Living Handbook* provides a list of indigenous trees and shrubs that are suitable for planting in Cape Town.

## KITCHEN AND BATHROOM

- ✓ Use herbal or non-hazardous pesticides and herbicides, and environmentally friendly products that are also safe for human health.
- ✓ Plant locally indigenous plants and have indigenous pot plants. Live indoor plants also improve indoor environmental quality.

Use non-toxic and environmentally friendly pesticides, herbicides and cleaning chemicals at the office.



*Sansevieria trifasciata* (also known as the snake plant or mother-in-law's tongue) is an indoor plant with great air-filtering abilities. A study by NASA found that it is one of the best plants for improving indoor air quality by passively absorbing toxins such as nitrogen oxides and formaldehyde.<sup>7</sup>



### REALITY CHECK

Cape Town is a global urban biodiversity 'hotspot' without parallel. It has 15 vegetation types specific to the unique mix of soil, climate, topography, and oceanic influences found here. These vegetation types include high levels of species diversity and endemism, and unique ecological gradients found nowhere else in the world. Cape Town is also unusual in that an entire national park, Table Mountain, is situated within its boundaries.

## RESOURCES

Below are some additional environmental related resources:

- ✓ [Click here](#) for information about the City of Cape Town's nature reserves
- ✓ [Click here](#) for the biodiversity section of the *Smart Living Handbook*.

<sup>7</sup> <https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19930073077.pdf>

"NEVER DOUBT THAT A SMALL GROUP OF THOUGHTFUL, COMMITTED CITIZENS CAN CHANGE THE WORLD; IT IS THE ONLY THING THAT EVER HAS."

– Margaret Mead





# SOCIAL IMPACT



This section provides an overview of the concerns and practices relating to social development. A comprehensive approach to sustainability in the office environment includes strengthening the social dimension, for example, through education, equity and work-life balance.

The social dimension underpins and shapes the way we engage with the world – both as employers and employees. People are at the heart of every office or organisation. How an organisation provides and expands opportunity – and eliminates discrimination – in terms of education, equity and well-being (or work-life balance) is therefore an important part of a sustainable or triple bottom line approach.

**ULTIMATELY, THE GOAL OF THE GLOBAL DEVELOPMENT AGENDA IS TO LEAVE NO ONE BEHIND, BECAUSE DEVELOPMENT WILL ONLY BE SUSTAINABLE IF IT IS INCLUSIVE.**

Around the world, the benefits of social and economic progress have not been equitably shared, while differences in **religion, ethnicity, age, gender, sexual orientation, disability, and economic and migrant status** are used to exclude and marginalise. Therefore, extra attention needs to be paid to disadvantaged groups to eliminate lags in development, access and participation, discrimination, and to ensure inclusion and social justice for all.

In economics, the Gini coefficient, sometimes called the Gini index or Gini ratio, is a measure of statistical dispersion intended to represent the income or wealth distribution of a nation's residents, and is the most commonly used measurement of inequality.

SDG

Social issues permeate the SDGs as an essential requirement for sustainable development, with a particular focus on the following:

- ✓ Ageing
- ✓ Civil society
- ✓ Co-operatives
- ✓ Disability
- ✓ Employment
- ✓ Family
- ✓ Indigenous peoples
- ✓ Poverty
- ✓ Social inclusion
- ✓ Youth



According to the World Bank,<sup>8</sup> South Africa remains a dual economy with one of the highest inequality rates in the world, with a consumption expenditure Gini coefficient of 0,63 in 2015. Inequality has been persistent, having increased from 0,61 in 1996. High inequality is perpetuated by a legacy of exclusion and the nature of economic growth, which is not pro-poor and does not generate sufficient jobs. Inequality in wealth is even higher: The richest 10% of the population held around 71% of net wealth in 2015, while the bottom 60% held 7% of the net wealth.



**The City of Cape Town has developed a strategy around social development, focused on five objectives:**

- ✓ Maximise income-generating opportunities for people who are excluded or are at risk of exclusion.
- ✓ Build and promote safe households and communities.
- ✓ Support the most vulnerable through enhancing access to infrastructure and services.
- ✓ Promote and foster social integration.
- ✓ Mobilise resources for social development.

## GOOD HEALTH AND WELL-BEING

**Feedback from the UN on SDG 3 indicates that major progress has been made in improving the health of millions of people, increasing life expectancy, reducing maternal and child mortality, and fighting against leading communicable diseases.**

However, progress has stalled or is not happening fast enough with regard to addressing major diseases, such as malaria and tuberculosis, while at least half the global population does not have access to essential health services and many suffer undue financial hardship, potentially pushing them into extreme poverty.

Concerted efforts are required to achieve universal health coverage and sustainable financing for health to address the growing burden of non-communicable diseases, including mental health, and to tackle antimicrobial resistance and determinants of health such as air pollution and inadequate water and sanitation.

**SOUTH AFRICA HAS ONE OF THE HIGHEST INEQUALITY RATES IN THE WORLD.**



<sup>8</sup> [www.worldbank.org/en/country/southafrica/overview](http://www.worldbank.org/en/country/southafrica/overview)

A NUMBER OF STUDIES  
SHOW HOW THE LEVEL  
OF **PRODUCTIVITY PER  
HOUR DECLINES** WHEN  
MORE THAN 50 HOURS  
ARE WORKED IN A WEEK.



## WORK-LIFE BALANCE

Today's unpredictable and fast-paced work environment places huge demands on employees. The pressure to maintain or increase productivity, always-on technology, long commutes, and more can make it harder to achieve work-life balance.

Much of 21st-century work drains you psychologically and emotionally. Think of your brain as a muscle, too, so just as your body needs a rest from physical work(outs), your mind also needs time to recuperate from strain. If not managed, this will take its toll both on your personal well-being and your performance at work.



The SDGs' emphasis on sustainability, equity and inclusion reminds us that pursuing development grounded in social justice will be fundamental to achieving a socially, economically and environmentally sustainable future.

*- Report on the World Social Situation 2016*



The **social enterprise** is a new form of business that is emerging: one which considers a business less as a 'company' and more as an 'institution', integrated into the social fabric of society. Social enterprises seek to maximise profits, while maximising benefits to society and the environment. Their profits are principally used to fund social programmes.

South Africa is one of the most challenging countries in which to achieve work-life balance, with more than 18% of South African employees working over 50 hours per week and spending less time than they should on personal care and leisure, according to the Better Life Index by the Organisation for Economic Co-operation and Development.

At the same time, a number of studies show how the level of productivity per hour declines when more than 50 hours are worked in a week. Instead of being a solution to increasing productivity, constantly working overtime, in fact, either points to poor time management, or an issue with staff capacity or resources.

### Why is maintaining a work-life balance important for your organisation?

- ✓ Being stressed and overworked puts employees' **physical and mental health** in danger, while also increasing safety incidents and absenteeism, making your business or organisation less efficient.
- ✓ A balanced office culture fosters an **engaged workforce**, so your employees are more likely to go the 'extra mile' and be loyal advocates for your brand and product.
- ✓ It is normal to get stressed out from time to time, but **workplace burnouts are avoidable**. They occur when we feel overwhelmed and unable to meet constant demands. The inability to separate work from home increases the chances of burnout.
- ✓ Businesses that gain a reputation for encouraging work-life balance are more attractive to talent and have **lower staff turnover**.

## WHAT CAN YOU DO?

A simple Google search will provide you with a range of tips and resources to help you with your work-life balance, but essentially it is up to each company and individual to implement these in a practical manner. The Covid-19 pandemic has led to various changes in the way we work, and provides an opportunity to evaluate 'business as usual' and consider a new way of working.

### Here are five tips for better work-life balance:

- ✓ Prioritise and track your time.
- ✓ Set clear boundaries and be consistent.
- ✓ Make time for yourself 'offline'.
- ✓ Balance sleeping, eating and exercising.
- ✓ Be present in what you do.

### If you want to support employees in their work-life balance, consider the following:

- ✓ Ask them what they need.
- ✓ Consider flexi-time or working from home.
- ✓ Consider their childcare needs, specifically for single parents.
- ✓ Provide occupational healthcare facilities.



Burnout has become an officially recognised disease, defined by the World Health Organization (WHO) in its International Classification of Diseases database in 2019, and cemented as an accepted condition affecting the lives of employees and the productivity of organisations. Described as a syndrome, WHO says burnout comes about from 'chronic workplace stress that has not been successfully managed'.

Company culture is an important factor in employees' views of achieving work-life balance, and includes encouraging small breaks during the day and regularly taking leave, to putting limits on the amount of work undertaken outside of business hours. It is a good idea to ask employees their opinion on how they can better reach balance and how the organisation can support them.

## EDUCATION

**Despite the considerable progress on education access and participation over the past years, 262 million children and youth aged 6 to 17 were still out of school in 2017, and more than half of children and adolescents are not meeting minimum proficiency standards in reading and mathematics, according to the UN progress on SDG 4.**

Rapid technological changes present opportunities and challenges, but the learning environment, the capacities of teachers, and the quality of education have not kept pace. Refocused efforts are needed to improve learning outcomes for the full life cycle, especially for women, girls and marginalised people in vulnerable settings.

Companies should consider the needs of their staff to encourage learners to attend school. This might require time off or flexible working hours for parents to attend to school related matters. Where possible, companies could consider bursary programmes to encourage quality education.

## CREATING A CULTURE OF SUSTAINABILITY

Employees play a crucial role in transforming your organisation's sustainability strategy into practice; equally, knowledge of sustainability practices can transform your employees' personal lives and speed up positive change in communities.

Therefore, providing sustainability training to employees is an important step towards creating a culture of sustainability.

### The following are useful tips and tools:

- ✓ **Core content:** Incorporate information on sustainability and the organisation's goals, practices and expectations into induction sessions for new employees. Conduct a workshop or a series of workshops to bring existing employees on board.
- ✓ **Ongoing messaging:** Support implementation with ongoing internal communications. Use your existing channels for employee communications. This can take the shape of extensive resources via digital platforms such as videos sent via emailers, WhatsApp groups or an online portal, to simply putting up relevant posters around the workplace (such as in the canteen and on staff notice boards), or hosting team debriefs, talks or debates.
- ✓ **Keep it relevant and reliable:** Make sure all messaging is relevant to the organisation's sustainability aims, that educational content is from a reliable source, and that it is delivered in a consistent manner, e.g. give it a specific identity and design to be eye-catching and interesting.

- ✓ **Get buy-in:** Incentivise employees through competitions, and affirm that achieving the organisation's sustainability goals is everyone's responsibility. (This is even more effective if embedded in their personal performance indicators.)
- ✓ **Get feedback:** Ask your employees, as their feedback will help shape and embed communication with impact.

### Here are some ways to engage employees in your company's sustainability journey:<sup>9</sup>

- ✓ Define the company's long-term purpose.
- ✓ Spell out the economic case for sustainability.
- ✓ Create sustainability knowledge and competence.
- ✓ Make every employee a sustainability champion.
- ✓ Co-create sustainable practices with employees.
- ✓ Encourage healthy competition among employees.
- ✓ Make sustainability visible inside and outside the company.
- ✓ Showcase higher purpose by creating transformational change.

## SUSTAINABILITY IS A JOURNEY, NOT A DESTINATION.

<sup>9</sup> [https://ssir.org/articles/entry/engaging\\_employees\\_to\\_create\\_a\\_sustainable\\_business](https://ssir.org/articles/entry/engaging_employees_to_create_a_sustainable_business)  
[www.cultivatingcapital.com/ways-increase-employee-engagement-sustainability](http://www.cultivatingcapital.com/ways-increase-employee-engagement-sustainability)



# GENDER EQUALITY

While some indicators of gender equality are progressing, such as a significant decline in the prevalence of female genital mutilation and early marriage, the overall numbers continue to be high. Moreover, insufficient progress on structural issues at the root of gender inequality, such as legal discrimination, unfair social norms and attitudes, decision making on sexual and reproductive issues, and low levels of political participation, are undermining the ability to achieve SDG 5, according to the 2019 progress report from the UN.

The South African Constitution protects the rights of all people and promotes equal protection, the benefit of the law, and freedom from unfair discrimination based on gender, sex, pregnancy and marital status. This is, however, easier said than done in a country that ranks among the highest female interpersonal violent death rates in the world.

Following changes implemented by President Cyril Ramaphosa in 2019, for the first time in South Africa's history, women made up half of the government's cabinet. More women, along with a number of younger politicians, have been appointed which reflects 'a good balance of youth, gender, geographical spread and experience'.<sup>10</sup> South Africa joins a list of 10 other countries that have achieved gender parity – or a female majority – in their cabinets.

<sup>10</sup> [www.weforum.org/agenda/2019/06/south-africa-s-cabinet-is-now-50-women-for-the-first-time-ever](http://www.weforum.org/agenda/2019/06/south-africa-s-cabinet-is-now-50-women-for-the-first-time-ever)

Yet, the majority of senior executives in South Africa are men. For more than 30 years, women have been earning more bachelor's degrees than men. They're asserting themselves in the workplace, negotiating salaries, asking for promotions, and staying in the workforce at the same rate as men. But, men are more likely to be successful.



A study on gender (dis)parity in South Africa done by Bain & Company uncovered that organisational and societal factors, not personal ones, limit women's ability to reach the top. Understanding, accommodating and celebrating diversity are challenging for all companies, but doing so pays off when done well.

Within organisations, diversity efforts must begin at the top, with CEOs spearheading the changes, targeting the middle layer of the company (the talent pipeline) and tracking and measuring progress. That said, everyone has a role to play in changing the status quo, be it in his or her capacity as an individual, as an organisational leader or as a member of society.

(Source: *Gender (dis)parity in South Africa: Addressing the heart of the matter*)



The City of Cape Town has committed to establishing a task team on **violence against women and children** in 2020. Initiatives include the following:

- ✓ The Women for Change Programme seeks to enable women to play a more active role in their local communities while developing learning skills.
- ✓ The Men's Programme is aimed at both young and adult men that aims to reflect on socialisation to reduce levels of violence in communities and improve relations between men and women.

## RESOURCES

Below are some additional social impact related resources:

- ✓ [Click here](#) for 12 ways to support a better work-life balance for your employees.
- ✓ [Click here](#) for the OECD How's Life 2020 report on measuring well-being.
- ✓ [Click here](#) to access Deloitte's 2020 *Special Report on Human Capital Trends*.
- ✓ [Click here](#) to access the UN's *Convention on the Rights of Persons with Disabilities*.

- ✓ [Click here](#) to download the *Human Rights Commission's Disability toolkit: A quick reference guide & monitoring framework for employers*.
- ✓ [Click here](#) to download the UN's *Report on the World Social Situation 2016*.
- ✓ [Click here](#) to download the World Economic Forum's action framework for companies interested in *Social Innovation: A guide to achieving corporate and societal value*.
- ✓ [Click here](#) to find out how each of the social issues are addressed across the SDGs.

**THE CITY OF CAPE TOWN HAS COMMITTED TO ESTABLISHING A TASK TEAM ON VIOLENCE AGAINST WOMEN AND CHILDREN IN 2020.**





# SUSTAINABLE DEVELOPMENT IN BUSINESS



This section provides a brief overview of some international best practice concerning corporate governance, reporting and responsible investment.

***“SUSTAINABLE DEVELOPMENT IS DEVELOPMENT THAT MEETS THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS.”***

*– OUR COMMON FUTURE, ALSO KNOWN AS THE BRUNDTLAND REPORT*

## BUSINESS FOR THE FUTURE

Over the past few decades, industry has realised that ‘business as usual’ is an outdated concept that needs revising in order to ensure the continued availability of resources, along with social and environmental stability – all critical requirements for continued economic stability.

This shift reflects the exponential escalation of business risk around the globe, and an acknowledgement that every business operates within and is part of a system – it is both affected by and can effect change on the system.

SDG



SDG 13 aims to take urgent action to combat climate change and its impact. With rising greenhouse gas emissions, climate change is occurring at rates much faster than anticipated and its effects are clearly felt worldwide. While there are positive steps in terms of the climate finance flows and the development of nationally determined contributions, far more ambitious plans and accelerated actions are needed on mitigation and adaptation. Access to finance and strengthened capacities need to be scaled up at a much faster rate, particularly for least developed countries and small island developing states.

***“OUR ECONOMIC SYSTEM, AS CURRENTLY CONFIGURED, IS UNDERMINING THE SOCIAL AND ENVIRONMENTAL SYSTEMS ON WHICH WE ALL RELY. TWENTY-FIVE YEARS OF CORPORATE SUSTAINABILITY HAS NOT HALTED, LET ALONE REVERSED, THIS TREND. IT’S TIME TO THINK - AND ACT - DIFFERENTLY.”***

– JOHN ELKINGTON,  
AUTHOR AND BUSINESS  
THOUGHT LEADER

## **SUSTAINABILITY: BALANCING THE ECOLOGY, ECONOMY AND SOCIETY**

Sustainability in organisations is as much about environmental responsibility as it is about contributing to economic and social development. A business that focuses on efficient use of energy, waste and water also makes financial sense, and can increase cost savings over the short and long term that has an immediate effect on the financial bottom line.

Embedding sustainability principles can make your business more resilient to both internal and external factors that may impact on your business operations, as well as systemic risk where interdependent factors cause the failure of one to trigger a cascading impact. Negative factors to consider are increased energy costs, loss of key staff, changing weather patterns, new environmental legislation, and changes in consumer behaviour. Carbon tax also needs to be taken into account as of June 2019.



“The centre of gravity of the sustainable business debate is shifting from public relations to competitive advantage and corporate governance ...”

“Covid-19 kicked off the Exponential Decade and has reminded us of the power of these events to shape our world – often for the worse. But there are many potentially positive exponential shifts ahead too, which could put us on a path towards economic, social and environmental regeneration. We call these ‘Green Swans’.”

– John Elkington, author and  
business thought leader



## **GREEN SWANS**

A ‘Green Swan’ is a profound market shift, generally catalysed by some combination of Black or Grey Swan challenges and changing paradigms, values, mindsets, politics, policies, technologies, business models, and other key factors.

A Green Swan delivers exponential progress in the form of economic, social, and environmental wealth creation. At worst, it achieves this outcome in two dimensions while holding the third steady. There may be a period of adjustment where one or more dimensions underperform, but the aim is an integrated breakthrough in all three dimensions.

## **TRIPLE BOTTOM LINE (TBL)**

The concept of the triple bottom line (also known as ‘people, planet and prosperity’) is an established approach to measuring sustainability. ‘People’ and ‘planet’ refer to human and natural capital, while ‘prosperity’ relates to long-term economic benefits.

When considering TBL, it is important to look at full-cost accounting, meaning that the real cost of a company’s inputs and outputs must be accounted for. It is not just about the direct financial cost of a specific product, but the full cost relating to that product, including, for instance, the social impact of child labour, or the environmental cost relating to pollution, resource depletion, environmental damage or health-related problems.

Sustainable development is the balance between social, environmental and economic elements, in order to ensure a bearable, equitable and viable society.

## **RESPONSIBILITY, RESILIENCE AND REGENERATION (3Rs)**

Having coined the term TBL in 1994, business thought leader and author John Elkington has since pointed out that it was only the first step. Even though many companies have embraced the concept, companies still operate in a single bottom line system. Instead, companies need to examine how they can be catalysts for systems change as the world moves through exponential, systemic challenges.

Following on from TBL, the 3Rs is the next stage in sustainable business, encompassing ‘responsibility, resilience and regeneration’. Companies still need to act responsibly, but there is now the added imperative and advantage of proactively contributing to the emergence of a more resilient and regenerative economy.

Resilient business and economies resist or recover from shocks, while regenerative business and economies are both viable in the current economy and become stronger from shocks, while simultaneously transforming the systems they operate in.

## CORPORATE GOVERNANCE

The King Report addresses corporate governance in South Africa. It was most recently updated in 2016, when the 75 principles contained in King III were reduced to 17 principles to make it easier to interpret and apply, while most of the substantive principles were retained.

In a word, King IV prioritises transparency. “An important change is therefore that, while King III called on companies to apply or explain, King IV expects that companies **apply and explain**, thereby reinforcing the position that sound corporate governance is essential to good corporate citizenship.”



“A business that adopts a **systems regeneration approach** ... begins to take responsibility not only for its own internal systems (such as accounting or production) and the systems in which it is immediately embedded (such as markets or distribution networks), but also for the larger social and natural systems that we depend on collectively ... In this way, a business is able to become much more strategically powerful within its markets and its industry, and in society at large.”

– Carol Sanford, *The Regenerative Business*

**“THE OVERARCHING OBJECTIVE OF KING IV IS TO MAKE CORPORATE GOVERNANCE MORE ACCESSIBLE AND RELEVANT TO A WIDER RANGE OF ORGANISATIONS, AND TO BE THE CATALYST FOR A SHIFT FROM A COMPLIANCE-BASED MINDSET TO ONE THAT SEES CORPORATE GOVERNANCE AS A LEVER FOR VALUE CREATION.”**

– PROFESSOR MERVYN KING

The accompanying King IV Code is also outcomes based, instead of rules based, and encourages mindful application that is appropriate for the company and the sector in which it operates, and then to report on these in an integrated manner. It includes supplements to help different types of organisations operating in different sectors to best implement the recommendations.

**Companies are encouraged to consider issues such as the following:**

- ✓ Workplace (including employment equity; fair remuneration; and the safety, health, dignity and development of employees).
- ✓ Economy (including economic transformation; prevention, detection and response to fraud and corruption; and responsible and transparent tax policy).

- ✓ Society (including public health and safety; consumer protection; community development; and protection of human rights).
- ✓ Environment (including responsibilities in respect of pollution and waste disposal; and protection of biodiversity).



### DOWNLOAD

Visit the website of the Institute of Directors in South Africa (IoDSA) to download the King Report: [www.iodsa.co.za](http://www.iodsa.co.za)



The incorporation of King into the listing requirements for the Johannesburg Stock Exchange (JSE) made it the first stock exchange in the world to mandate companies to move towards integrated reporting, or explain why they are not doing so.



## MONITORING AND REPORTING

The traditional focus of considering only the financial aspects of a business has been replaced with a broader triple bottom line approach – or even a regenerative approach – and in a similar manner the ‘old’ annual report is being replaced by or supplemented with sustainability or integrated reporting. Other initiatives, frameworks and tools have also been established within the business sector to encourage and support more transparent reporting, as outlined here.

## ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

Your company could select to have a formal Environmental Management System (EMS), or you can decide to have a simplified management system, which includes your policy, strategy and action plan. It is advisable to have a process in place that encourages continual improvement, based on the actions of ‘plan, do, check and act’.

**Examples of a formal EMS include the ISO 14000 family (Environmental Management) of standards related to environmental management that exists to help organisations do the following:**

- ✓ Minimise how their operations negatively affect the environment (i.e. cause adverse changes to air, water, or land).
- ✓ Comply with applicable laws, regulations, and other environmentally oriented requirements.
- ✓ Continuously improve in the above.



ISO 14001 was first published in 1996 and specifies the actual requirements for an Environmental Management System. It applies to those environmental aspects that the organisation has control over, and over which it can be expected to have an influence. This has been supplemented with various guidelines for implementation, including a phased approach, and for determining environmental costs and benefits.

The **ISO 9000 family (Quality Management)** is similar to ISO 14000 in that both pertain to the process of how a product is produced, rather than to the product itself. As with ISO 9000, certification is performed by third-party organisations rather than being awarded by ISO directly. The ISO 19011 audit standard applies when auditing for both 9000 and 14000 compliance at once.

ISO 14090 *Adaptation to climate change - Principles, requirements and guidelines* is the first in a range of ISO standards in this area and aims to help organisations **assess climate change impacts** and put plans in place for effective adaptation. It helps them identify and manage risks, as well as seize any opportunities that climate change may bring.

In addition, ISO 50001 provides a practical way to improve energy use, through the development of an **Energy Management System (EnMS)**.

#### ISO 50001 helps organisations do the following:

- ✓ Develop a policy for more efficient use of energy.
- ✓ Fix targets and objectives to meet the policy.
- ✓ Use data to better understand and make decisions about energy use.
- ✓ Measure the results.
- ✓ Review how well the policy works.
- ✓ Continually improve energy management.

ISO have easy-to-use checklists for small and medium-sized enterprises to achieve the benefits of implementing their systems. Working through the checklist format in a step-by-step manner will enable managers of an organisation to determine its present environmental performance, and will help them identify areas for improvement. For more information, visit [www.iso.org](http://www.iso.org).



## CASE STUDY: SMARTFACILITY

The City of Cape Town has over 1 300 immovable property assets registered and by 2015, the City had installed about 500 smart electricity meters within municipal facilities, but found it challenging to manually extract, analyse and monitor all the data from these meters on a monthly basis for reporting purposes.

Through a partnership with several internal departments, the City identified isolated sub-systems within the city's IT infrastructure that needed to be integrated and automated for intelligent data analysis and interpretation. A web-based data application, called SmartFacility, was developed that integrates all required data related to municipal facilities and their consumption. This application interprets the facility's electricity consumption data in a friendly, accessible manner, illustrating the data on several dashboards which are easily accessible by facility managers and management staff for proactive monitoring and management of municipal facilities consumption.

#### The City has an ongoing electricity metering programme, allowing metered facilities to be viewed via the SmartFacility application and allows for:

- ✓ Near real-time consumption monitoring the performance of municipal facilities.
- ✓ Tracking and reporting savings achieved through implementation of energy efficiency and renewable energy interventions.
- ✓ Using the electricity savings data to further motivate for additional funds to continue with implementing these initiatives.

The tool has realised significant benefits which enables the City to identify energy efficiency opportunities, ranking and benchmarking facilities in the public sector and supporting data-led, evidence-based project and programme development and implementation, policy and strategy development to align with climate mitigation goals and targets.



## SUSTAINABLE DEVELOPMENT GOALS (SDGs)

The UN Sustainable Development Goals (SDGs) aim to end extreme poverty, fight inequality and injustice, and protect our planet. Companies of all sizes and in all industries can align with and help achieve (at least some of) these goals.



These 17 global challenges – ranging from climate, water and food crises, to poverty, conflict and inequality – are an urgent call for action by all countries in a global partnership. They recognise that ending poverty and other deprivations must go hand in hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

To this effect, the UN encourages companies to align their strategies, operations and reporting with the 17 SDGs as far as possible, in order to achieve these goals by 2030 as a way to make ‘global goals local business’.



Read about the SDGs explained for business and access the SDG toolbox for businesses:

[www.unglobalcompact.org/sdgs/about](http://www.unglobalcompact.org/sdgs/about)

Access the SDG Action Manager, a tool providing all types of businesses with an opportunity to learn about, manage, and directly improve their sustainability performance:

[www.unglobalcompact.org/take-action/sdg-action-manager](http://www.unglobalcompact.org/take-action/sdg-action-manager)

## UNITED NATIONS GLOBAL COMPACT (UNGC)

The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their strategies and operations with 10 universally accepted principles that cover the areas of human rights, labour, the environment and anti-corruption.

The UNGC encourages companies both large or small to do business responsibly, to pursue opportunities to solve global challenges through business innovation and collaboration, and to understand that good practices or innovation in one area cannot make up for doing harm in another.

The following two pages provide a summary of the ten principles of UNGC, as well as how they link to the SDGs.



# THE 10 PRINCIPLES

of the United Nations Global Compact

## HUMAN RIGHTS

## LABOUR

## ENVIRONMENT

## ANTI-CORRUPTION

- 1 Support and respect the protection of internationally proclaimed human rights.
- 2 Not be complicit in human rights abuses.
- 3 Uphold the freedom of association and the effective recognition of the right to collective bargaining.
- 4 Support the elimination of all forms of forced and compulsory labour.
- 5 Support the effective abolition of child labour.
- 6 Support the elimination of discrimination in respect of employment and occupation.
- 7 Support a precautionary approach to environmental challenges.
- 8 Undertake initiatives to promote greater environmental responsibility.
- 9 Encourage the development and diffusion of environmentally friendly technologies.
- 10 Work against corruption in all its forms, including extortion and bribery.



[Click here](#) to view videos to see how business leaders are taking action.



## GLOBAL REPORTING INITIATIVE (GRI)

The GRI is a sustainability-reporting framework that covers the key areas of economic, environmental, social and governance performance. It provides all companies and organisations with a comprehensive sustainability-reporting framework that is widely used around the world. A sustainable global economy should combine long-term profitability with social justice and environmental care.

This reporting framework enables all companies and organisations to measure and report their sustainability performance in a consistent manner. By reporting transparently and with accountability, organisations can increase the trust that stakeholders have in them, and in the global economy.

The GRI standards are available online and provide detailed guidance on specific indicators relating to the triple bottom line. There are also sector-specific guidelines relating to sectors such as mining, finance, real estate and media.



## GREENHOUSE GAS PROTOCOL

### GREENHOUSE GAS PROTOCOL (GHG PROTOCOL)

The GHG Protocol is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. The GHG Protocol builds on a 20-year partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). It works with businesses, governments, and environmental groups around the world to build a new generation of credible and effective programmes for tackling climate change.



#### DOWNLOAD

[Click here](#) for a guide to mapping business indicators against the SDGs (linking the SDGs and GRI standards).

The GHG Protocol provides the accounting framework for nearly every GHG standard and programme in the world – from the International Standards Organisation to The Climate Registry – as well as hundreds of GHG inventories prepared by individual companies.

It furthermore offers developing countries an internationally accepted management tool to help their businesses to compete in the global marketplace, and their governments to make informed decisions about climate change.

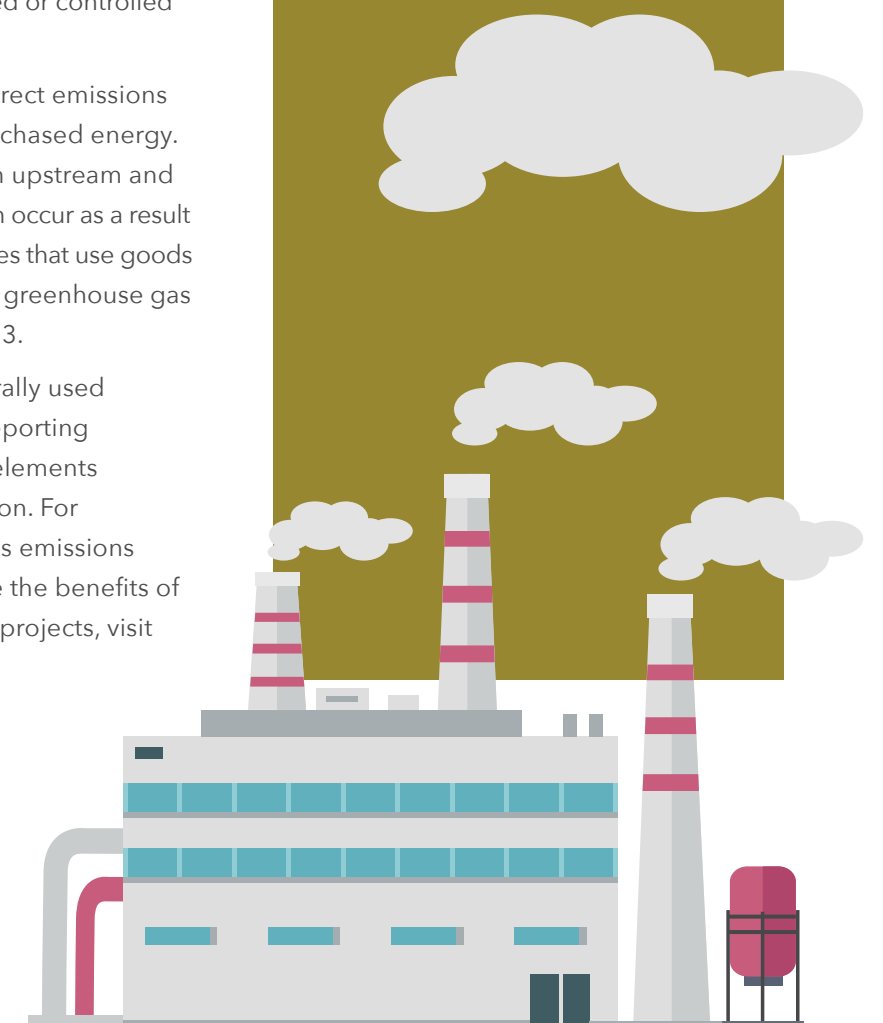
The GHG Protocol Corporate Standard classifies a company's GHG emissions into three 'scopes'. Scope 1 emissions are direct emissions from owned or controlled sources.

Scope 2 emissions are indirect emissions from the generation of purchased energy. All indirect emissions, both upstream and downstream activities, which occur as a result of facility or business activities that use goods or resources with potential greenhouse gas emissions fall under scope 3.

The GHG Protocol is generally used in association with other reporting frameworks as one of the elements that needs to be reported on. For more information, to access emissions calculators and to measure the benefits of climate change mitigation projects, visit [www.ghgprotocol.org](http://www.ghgprotocol.org).

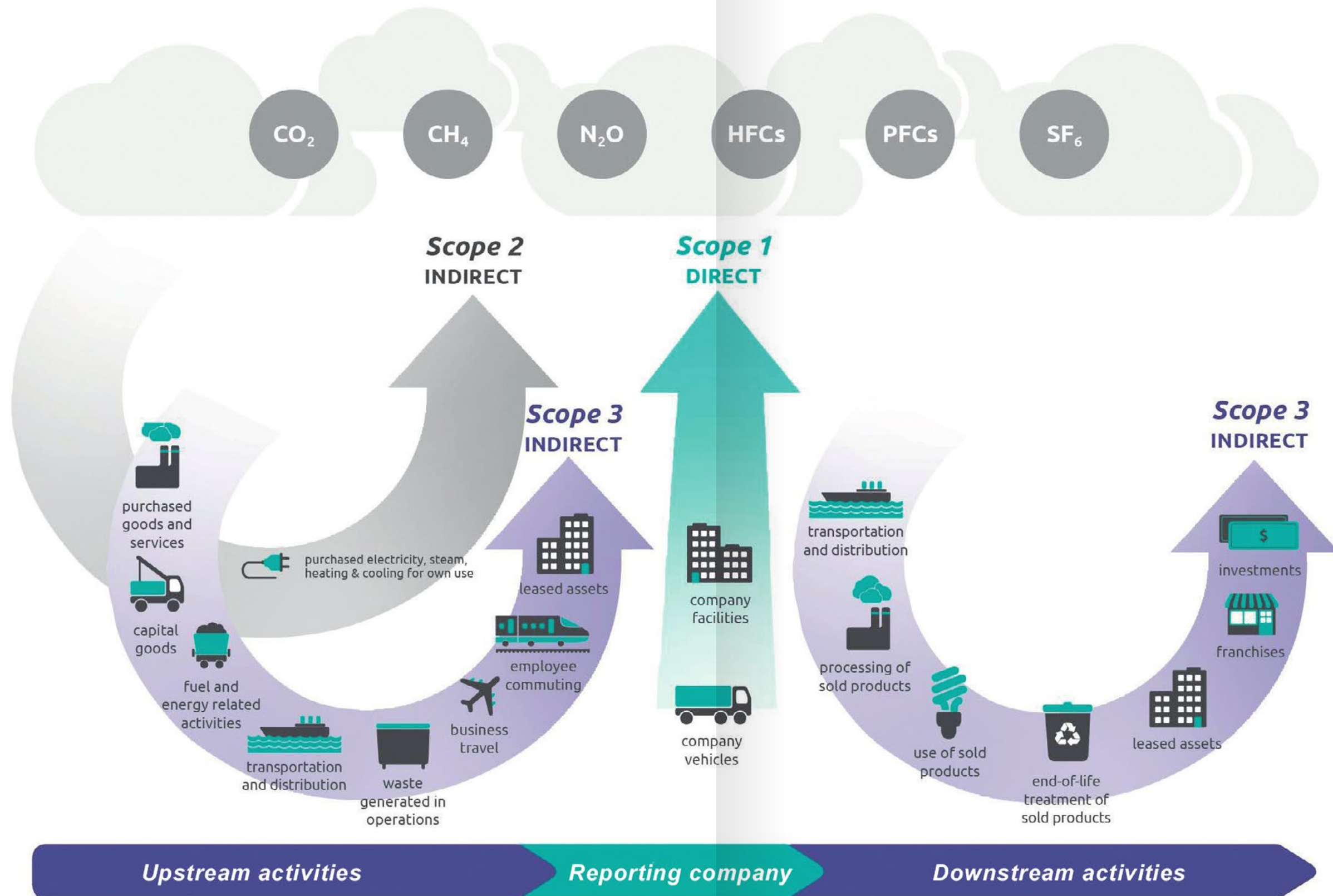


The **GHG Protocol Corporate Standard** provides standards and guidance for companies and other organisations preparing a GHG emissions inventory. It covers the accounting and reporting of the greenhouse gases covered by the UNFCCC/ Kyoto Protocol – carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>).





## GHG EMISSIONS PER SCOPE





## CARBON DISCLOSURE PROJECT (CDP)

The Carbon Disclosure Project (CDP) is a global initiative to collect and distribute high-quality information that motivates investors, corporations and governments to take action in an attempt to mitigate climate change.

The CDP seeks information annually on the business risks and opportunities presented by climate change, GHG emissions and water, by using data and the impact of operations from the world's largest companies and cities.

The CDP provides a transformative global system for thousands of companies and cities around the world to measure, disclose, manage and share environmental information. Consequently, the CDP remains the global standard for measurement and reporting of climate change information, and the biggest repository of self-reported GHG emission information from the business sector.

The type of information generated by the CDP attracts various stakeholders, including the media, government, universities, and international and local investors. Companies are requested to complete annual questionnaires, which are rated and presented in the Climate Leadership Disclosure Index.

### Some of the information the CDP requests:

- ✓ Disclosure of the company's carbon footprint (additional points are awarded if verification has taken place).
- ✓ Whether climate change is incorporated into the company's strategy, and for the highest level of responsibility for climate change within the company.
- ✓ Insight into the risks and opportunities identified within the company with regard to climate change.



For more information, visit [www.cdp.net/en](http://www.cdp.net/en).



Cape Town was one of 105 cities on the CDP's Cities A List for 2019. The number of cities on the A List has grown from 43 in 2018 to 105 in 2019, representing a combined global population of 170 million. In 2019, over 8 400 companies disclosed through the CDP – 20% more than the previous year. Reporting companies now represent over 50% of global market capitalisation. CDP's annual A List names the world's most pioneering companies leading on environmental transparency and performance.

## CARBON TAX (CBT)

Greenhouse gas (GHG) emissions is a major cause of climate change. Carbon tax (CBT) is a new tax in response to climate change, which is aimed at reducing GHG emissions in a sustainable, cost-effective and affordable manner.

CBT gives effect to the polluter pays principle and helps to ensure that firms and consumers take the negative adverse costs (externalities) of climate change into account in their future production, consumption and investment decisions. Therefore, the more action a company takes to reduce its emissions, or if it is by nature low carbon, the lower the carbon tax.

The CBT rate launched at R120 per tonne of carbon dioxide equivalent emissions for South Africa as from June 2012 for high-intensity industries. CBT is administered by SARS and more information can be found here: [www.sars.gov.za/ClientSegments/Customs-Excise/Excise/Environmental-Levy-Products/Pages/Carbon-Tax.aspx](http://www.sars.gov.za/ClientSegments/Customs-Excise/Excise/Environmental-Levy-Products/Pages/Carbon-Tax.aspx)



Once your company has calculated its carbon footprint, it can choose to compensate for these GHG emissions through **carbon offsetting**. This is a voluntary practice whereby GHG emissions are reduced in one place, for example through planting trees or purchasing renewable energy certificates, in order to 'offset' emissions that result from your business operations.

## LEADERSHIP IN SUSTAINABILITY

### PROJECT DRAWDOWN

The aim of Project Drawdown is to help the world reach 'drawdown' – the point in the future when levels of GHG in the atmosphere stop climbing and start to steadily decline, thereby stopping catastrophic climate change – as quickly, safely, and equitably as possible.

**It places equal emphasis on all aspects of the climate equation, calling for action in three connected areas:**

- ✓ Stopping the sources of GHG pollution and bringing emissions down to zero.
- ✓ Supporting and enhancing the sinks of carbon dioxide found in nature.
- ✓ Improving society by achieving broader transformations.

At its core, Project Drawdown uncovers, assesses and reviews the most effective and practical proven solutions to stop climate change, and communicates this to the world to accelerate take-up. It is a leading resource for industry and government at different levels.



For more information, visit <https://drawdown.org>.

## FUTURE-FIT BUSINESS

Future-Fit has created a free benchmarking tool and calculators for companies and investors to help any business understand and implement the SDGs, and articulate its contribution to them.

Drawing on leading science and third-party resources, the benchmark and its supporting guidance documents aim to support business leaders who want to go beyond causing no harm, by addressing systemic problems to usher in a socially just, economically inclusive and environmentally restorative future.



For more information, visit <https://futurefitbusiness.org>.

## PROJECT BREAKTHROUGH

In order to help businesses of different sizes and in different industries understand just how they can benefit from the market potential of aligning with the SDGs, Project Breakthrough was launched.

It unpacks the business mindset and characteristics required through interviews with innovators. It furthermore explains relevant business models and makes available a customisable pitch deck and user guide.



For more information, visit <http://breakthrough.unglobalcompact.org>.

## WE MEAN BUSINESS

We Mean Business is a global coalition of non-profit organisations working with the world's most influential businesses to take action on climate change. The coalition brings together seven organisations: BSR, CDP, Ceres, The B Team, The Climate Group, The Prince of Wales's Corporate Leaders Group and the World Business Council for Sustainable Development.



For more information, visit [www.wemeanbusinesscoalition.org](http://www.wemeanbusinesscoalition.org).

## SCIENCE BASED TARGETS

The science based targets initiative mobilises companies to set science-based targets and boost their competitive advantage in the transition to the low-carbon economy. It is a collaboration between the CDP, UNGC, WRI and the World Wide Fund for Nature (WWF), and one of the We Mean Business coalition commitments.

The initiative defines and promotes best practice in science-based target setting, offers resources and guidance to reduce barriers to adoption, and independently assesses and approves companies' targets.



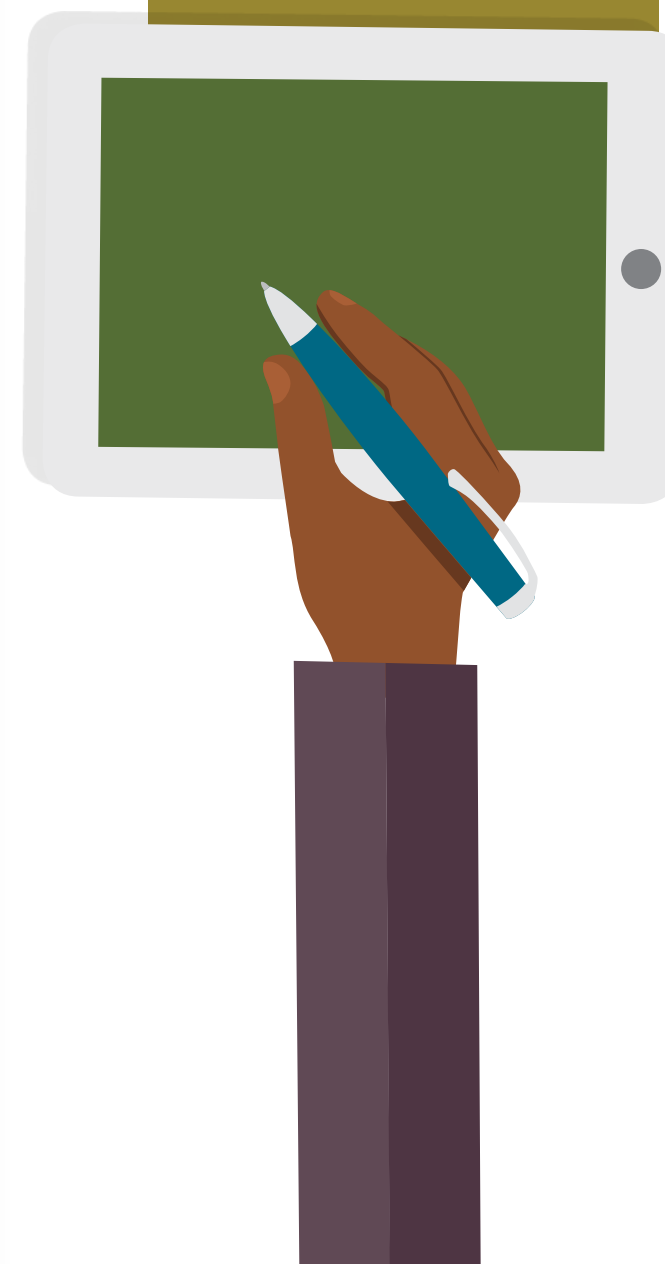
For more information, visit [www.sciencebasedtargets.org](http://www.sciencebasedtargets.org).



### GREENCAPE

GreenCape is a non-profit organisation that drives the widespread adoption of economically viable green economy solutions for the Western Cape. It works with businesses, investors, academia and government to help unlock the investment and employment potential of green technologies and services, and to support a transition to a resilient green economy.

To find out more, including accessing market intelligence reports, visit [www.greencape.co.za](http://www.greencape.co.za).



## SOCIAL RESPONSIBILITY

### CORPORATE SOCIAL RESPONSIBILITY (CSR)



Commitment to corporate social responsibility is another key ingredient for sustainability.

Corporate social responsibility (CSR) means that a company is responsible for social impacts related to its business activities. A company can invest in CSR projects or donate to charities as part of their CSR programme, but it must also take responsibility for its own production chain.

It is about promoting fair labour practices and safe working conditions. Staff members need to be treated with respect and have appropriate methods for raising concerns.

### SOCIAL PERFORMANCE INDICATORS

Reporting on indicators that illustrate social performance helps to avoid simply focusing on the economic or environmental aspects of business impact, by including a broad range of social aspects. Examples include human rights, labour practice and decent work, corruption and legal compliance.



## SOCIALLY RESPONSIBLE INVESTING (SRI)

In recognition of the growing importance of responsible and sustainable business behaviour, the Johannesburg Stock Exchange (JSE) has for many years embarked upon programmes that uphold and support sustainable development.

The JSE was the first emerging market, and the first stock exchange globally, to introduce a sustainability index in 2004. It is now known as the **FTSE/JSE Responsible Investment Index**, measuring companies on indicators related to environmental, social and governance (ESG) practices.

It is also a signatory to the United Nations-backed Principles for Responsible Investment (PRI – a global investor initiative that encourages consideration of ESG in investment decisions), and a founding partner of the Sustainable Stock Exchanges Initiative.



### DOWNLOAD

[Click here](#) for the PRI's blueprint for responsible investment.



## FOSSIL FUEL DIVESTMENT

Governments, universities, and companies around the world are increasingly committing to fossil fuel divestment – selling shares or bonds that had been bought in companies that cultivate, process, or sell fossil fuel. It is one of the most effective ways in which to stop future greenhouse gas emissions.

The City of Cape Town has amended its **Cash Management and Investment Policy** to ensure its funds are divested from companies that depend on income from fossil fuel-related assets.

## RESOURCES

Below are some additional sustainability related resources:

- ✓ [Click here](#) to download Green Impact's *Green Teams*.
- ✓ [Click here](#) to download Nedbank's *Carbon Footprinting Guide*.
- ✓ [Click here](#) to download Nedbank's *Greening Your Business*.
- ✓ [Click here](#) to download Nedbank's *Smart Living Guide*.
- ✓ [Click here](#) to download the *Green Office Guide*, Australia.
- ✓ [Click here](#) to download *Green Office Manual*, Toronto.
- ✓ [Carbon Disclosure Project](#).

- ✓ [Future-Fit Business](#).
- ✓ [Global Reporting Initiative](#).
- ✓ [GreenCape](#).
- ✓ [Greenhouse Gas Protocol](#).
- ✓ [International Organization for Standardization](#).
- ✓ [King IV Corporate Governance Report](#).
- ✓ [National Business Initiative](#).
- ✓ [Principles for Responsible Investment \(UN\)](#).
- ✓ [Project Breakthrough](#).
- ✓ [SARS Carbon Tax information](#).
- ✓ [Science Based Targets](#).
- ✓ [Sustainable Development Goals](#).
- ✓ [United Nations Global Compact](#).
- ✓ [We Mean Business Coalition](#).

THE CITY OF CAPE TOWN HAS AMENDED ITS CASH MANAGEMENT AND INVESTMENT POLICY TO ENSURE ITS FUNDS ARE DIVESTED FROM COMPANIES THAT DEPEND ON INCOME FROM FOSSIL FUEL-RELATED ASSETS.



# BEYOND THE OFFICE



This section considers what you can do once you have completed an eco-audit, compiled your environmental policy, done training and implemented your action plan.

The next steps at the office will be to address the procurement of goods and services, as well as hosting of events. Transport and buildings have a large impact on carbon emissions and should be taken into consideration.

This section explores a few things that you can do on your continuous journey towards sustainable business implementation:

- ✓ Green buildings encourage the construction or renovation of buildings to be more efficient, comfortable and healthy.
- ✓ Event greening promotes responsible hosting of events, meetings, festivals and exhibitions.

## GREEN BUILDING

Green buildings require a holistic approach to building design, construction and operation. It needs to be energy efficient, resource efficient and environmentally responsible. The design, construction and operational practices should significantly reduce or eliminate any negative impact on the environment and its occupants – or even improve the environment or impact on occupants.

BUILDINGS AND CONSTRUCTION TOGETHER ARE RESPONSIBLE FOR **36%** OF GLOBAL FINAL ENERGY USE AND **39%** OF ENERGY-RELATED CARBON DIOXIDE (CO<sub>2</sub>) EMISSIONS WHEN UPSTREAM POWER GENERATION IS INCLUDED.



People spend 90% of their time in buildings, and there is a consistent association between unhealthy indoor environments and negative human health impacts. Building design, construction and operations represent a significant opportunity to change to a more sustainable built environment that reduces energy consumption and carbon emissions, improves air quality and creates healthier places for people and communities.

#### Green buildings offer a range of benefits compared to normal buildings:

- ✓ Reduced operating costs, liability and risk.
- ✓ Increased productivity, property values and marketability.
- ✓ Responsible investing with higher returns on assets.
- ✓ Attracting and retaining tenants.

Refer to the *Smart Building Handbook* and *Resource Efficiency for Development guideline* for regulations and best practice regarding sustainable resource management, as well as more details about the guiding principles outlined below:

- ✓ Be locally appropriate.
- ✓ Conserve the natural environment.
- ✓ Use resources efficiently and effectively, and minimise waste.
- ✓ Implement sustainable procurement and use renewable resources.
- ✓ Utilise locally sourced materials and skills.

- ✓ Maximise the health and well-being of users.
- ✓ Allow real-time monitoring and evaluation.
- ✓ Leave a positive legacy.

## SMART BUILDING HANDBOOK

The City of Cape Town has developed the *Smart Building Handbook* in order to promote resource-efficient building practices, which will reduce the impact that buildings have on the environment and the operating costs of running them.

The *Resource Efficiency for Development Guideline* provides a summary of the regulations, policies and best practices to facilitate resource efficient developments.

Green building practices do not only benefit building professionals but also homeowners, communities and the environment, and afford everyone the opportunity to take the first steps towards a more sustainable future.



#### DOWNLOAD

[Click here](#) for the *Resource Efficiency for Development Guideline*

## GREEN RATING TOOLS

A green building rating tool sets standards and benchmarks for green building, and enables an objective assessment to be made as to how 'green' a building is. The rating system sets out a 'menu' of all the measures that can be incorporated into a building to make it green.

Points are awarded to a building according to which measures have been incorporated, and after appropriate weighting, a total score is arrived at that determines the rating. To achieve certification, building owners submit documentation to the rating authority, which employs independent assessors to assess the submission and score the building.

The GBCSA has launched a range of rating tools under Green Star SA for existing and new buildings, interiors and even precincts. There are also tools that focus on the socio-economy or electricity and water performance. EDGE is an online platform for residential buildings. Certification is awarded for 4-star (Best Practice), 5-star (South African Excellence) or 6-star (World Leadership) Green Star SA ratings.

## GREEN LEASE

The formalisation of environmental performance in commercial buildings is encouraged through drawing up a 'green lease'. The intention of this is to have a reciprocal agreement where the building owner and tenants undertake to disclose the energy, water and waste consumption of the building, and to identify measures and targets to reduce the environmental footprint. The GBCSA has produced a **Green Lease Toolkit**, which provides guidance for landlords and tenants, as well as a **Guide to costs and trends** (2019).



Green leases set out the shared responsibilities of landlords and tenants. It provides a platform for sharing the benefits of the enhanced performance of the building and balancing the respective costs between each party.



## GREEN BUILDING COUNCIL OF SOUTH AFRICA (GBCSA)

The GBCSA is an independent, non-profit, membership-based organisation that was formed in 2007 to lead the transformation of the property industry to environmental sustainability. It is a full member of the World Green Building Council and the official certification body of buildings under the Green Star SA rating system.

Their mission is to ensure that all buildings are built and operated in an environmentally sustainable way, so that all South Africans work and live in healthy, effective and productive environments. Over the last few years it has also expanded into Africa.

For more information, visit [www.gbcsa.org.za](http://www.gbcsa.org.za).





There are several rating systems in existence worldwide, including **LEED** from the United States, **BREEAM** from the United Kingdom and **Green Star** from Australia. After a process of industry and expert consultation, the GBCSA board decided to base the South African rating tool on the Australian Green Star system, and to customise this tool for South African use.



## THE LIVING BUILDING CHALLENGE

The Living Building Challenge is an international rating system that focuses on regenerative design: creating buildings that generate more energy than they use, capture and treat all water on site, and are made using healthy materials. For more information, visit <https://living-future.org/lbc>.



## WELL BUILDING STANDARD

WELL is an international tool for advancing health and well-being in buildings – the first to be focused exclusively on the ways that buildings, and everything in them, can improve comfort, drive better choices, and generally enhance, not compromise, people's health and wellness. For more information, visit [www.wellcertified.com](http://www.wellcertified.com).

## EVENT GREENING

Event greening is the process of incorporating socially and environmentally responsible decision making into the planning, organisation and implementation of (and participation in) an event. It involves including sustainable development principles and practices at all levels of event organisation, and aims to ensure that an event is hosted responsibly.

It represents the total package of interventions at an event, and needs to be done in an integrated manner. Event greening should start at the inception of the project, and should involve all the key role players such as clients, organisers, venues, subcontractors and suppliers.

The terms 'event greening' and 'green' refer to responsible, sustainable decision making and implementation, taking note of environmental, social and economic factors.

The principles and practices of event greening are similar to those required for running a sustainable business.

**If an event is hosted in a 'green' manner, the anticipated outcomes are as follows:**

- ✓ Increased economic, social and environmental benefits (triple bottom line)
- ✓ Improved resource efficiency
- ✓ Reduced negative environmental impacts, such as carbon emissions, waste to landfill, and effects on biodiversity
- ✓ Enhanced economic impact, such as local investment and long-term viability

- ✓ Stronger social impact, such as community involvement and fair employment
- ✓ Raised awareness about sustainability issues among all role players
- ✓ Clear measurable targets that are reported on

**Greening an event involves incorporating a combination of the following:**

- ✓ Environmental best practice
- ✓ Social and economic development
- ✓ Education on, and awareness of, sustainability issues
- ✓ Monitoring, evaluation and reporting on the event-greening initiatives
- ✓ Leaving a positive legacy

When hosting your next event, make sure it is done in a responsible manner.

## SMART EVENTS HANDBOOK

The City of Cape Town has produced the *Smart Events Handbook* to guide event organisers, venue staff and suppliers in planning and implementing events in a sustainable and responsible manner.

Events can have a large environmental footprint, and therefore it is important to understand the basic principles and reasons why we need to change our actions. This needs to become an integral part of planning and implementation at a micro level, but it is also important to understand the bigger picture and an event's relation to global warming.



## EVENT GREENING FORUM OF SA (EGF)

The EGF is an independent, non-profit, membership-based organisation that was formed in 2010 by role players and associations in the South African events industry.

The aim of the EGF is to promote and embrace sustainable and ethical business practices within the events industry in South Africa, with an initial focus on meetings, incentives, conferences, exhibitions and events. They also have a Green Database with links to suppliers of goods and services. For more information, visit [www.eventgreening.co.za](http://www.eventgreening.co.za).



### DOWNLOAD

[Click here](#) for the *Smart Events Handbook*.

## RESOURCES

Below are some additional resources for beyond the office:

- ✓ [Eco Atlas](#).
- ✓ [Energy Star](#).
- ✓ [Event Greening Forum](#).
- ✓ [Fair Trade Tourism South Africa](#).
- ✓ [Fairtrade Label South Africa](#).
- ✓ [Forest Stewardship Council](#).
- ✓ [Green Building Council of South Africa](#).
- ✓ [Heritage Association of South Africa](#).
- ✓ [Living Building Challenge](#).
- ✓ [Marine Stewardship Council](#).
- ✓ [Programme for the Endorsement of Forest Certification \(PEFC\)](#).
- ✓ [SA Plastics Pact](#).
- ✓ [SA Sustainable Seafood Initiative](#).
- ✓ [South African Bureau of Standards](#).
- ✓ [Sustainable Wine South Africa](#).
- ✓ [WELL Building Standard](#).

- ✓ [Click here](#) to download GBCSA's *Guide to Costs and Trends*
- ✓ [Click here](#) to download Nedbank's *Food Savers Guide*



"THE EARTH WILL NOT CONTINUE TO OFFER ITS HARVEST, EXCEPT WITH FAITHFUL STEWARDSHIP. WE CANNOT SAY WE LOVE THE LAND AND THEN TAKE STEPS TO DESTROY IT FOR USE BY FUTURE GENERATIONS."

– John Paul II



# GLOSSARY

The following section provides some of the most relevant environmental terms used in this handbook.

**adaptation:** The response to the changing climate to minimise the predicted impacts of climate risks through changing actions, i.e. adapting.

**anthropogenic (global warming):** (Global warming) caused by human activities.

**baseline:** A minimum or starting point used for comparisons.

**benchmark:** A standard or point of reference against which things may be compared or assessed.

**best practice:** The most efficient (least amount of effort) and effective (best result) way of accomplishing a task, based on repeatable procedures that have proven themselves successful over time for large numbers of people.

**biodiversity:** The rich variety of plants and animals that live in their own unique environment. Fynbos is a good example of rich biodiversity in the Cape.

**bokashi:** Inoculated sawdust that converts food waste and similar organic matter into a soil amendment that adds nutrients and improves soil texture.

**carbon footprint:** The total greenhouse gas emissions caused directly and indirectly by your (office) activities over a specific time period. It covers everything from staff commuting to the office, to the use of lights and office equipment, to recycling waste or using a courier service. Basically, anything that uses a carbon-based energy source (coal, oil, natural gas, etc.) adds to your carbon footprint.

**carbon offsetting:** When you do something proactively to balance out the carbon emissions created by your initial activities. This results in fewer greenhouse gases in the atmosphere than would otherwise have occurred. An example is planting trees or buying RECs.

**carbon tax (CBT):** A new tax in response to climate change, which is aimed at reducing greenhouse gas emissions in a sustainable, cost-effective and affordable manner.

**circular economy:** Works according to the 3R approach of 'reduce, re-use and recycle'. Materials are made from renewable sources and returned for re-use through composting biological material and recycling technical materials.

**climate change:** The gradual increase in global temperature due to change in the composition of the Earth's atmosphere. Humans have contributed to climate change, largely by burning fossil fuels, clearing land, and increased farming, which has exacerbated the greenhouse effect.

## corporate social responsibility (CSR):

Whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders.

**cradle to cradle:** When a product (and all the packaging it requires) has a complete 'closed-loop' cycle, so that every component will either return to the natural ecosystem through biodegradation, or be recycled indefinitely.

**eco-audit:** A detailed assessment to check if an organisation is following the law, its environmental policies and its Environmental Management System (EMS). The results of the audit help the organisation to improve its environmental policies and management system.

**eco-driving:** An important component of sustainable mobility, it contributes to climate protection and pollution reduction through smarter and more fuel-efficient driving.

**eco-label:** Identifies products or services proven to be environmentally preferable within a specific category.

**eco-procurement:** Giving preference to the procurement of products and services that have less of a negative impact on the environment.

**electronic waste/e-waste:** Items that have a plug or battery, and batteries themselves. Typical items in the production office include printer cartridges and batteries.

**eutrophication:** When an excessive richness of nutrients occur in water, it causes a dense growth of plant life and oxygen depletion.

## environmental, social and governance (ESG), broadly outlined as:

- ✓ **environmental:** climate change, resource consumption, biodiversity loss and ecosystem degradation, water management and pollution
- ✓ **social:** financial inclusion, human risks, emerging man-made health risks and ageing populations
- ✓ **governance:** regulations, disclosure, ethics and principles, and alignment of interests

**event greening:** The process of incorporating socially and environmentally responsible decision making into the organising, implementation of and participation in an event.

**flexible work programme (FWP):** An approach to reduce congestion and travel time for commuters through flexi-time, a compressed work week and/or remote working.

**Forest Stewardship Council (FSC):** A non-profit organisation devoted to encouraging the responsible management of the world's forests. Consumers wishing to support healthy forests and communities should look and ask for the FSC label when purchasing wood or paper products.

**fossil fuel:** A natural fuel, such as coal or gas, formed in the geological past from the remains of living organisms.

**Global Reporting Initiative (GRI):** A sustainability reporting framework that covers the key areas of economic, environmental, social and governance performance.

**global warming:** The increase in the average temperature of the Earth's surface and oceans. This, in turn, changes the climate and the long-term weather patterns. These changes may increase the frequency and intensity of extreme weather events, such as floods, droughts, heat waves, hurricanes and tornados.

**green economy:** The companies and individual professionals who supply products and provide services in a manner that reduces environmental risk and future resource scarcities, and supports the shift towards a lower-carbon economy.

**green lease:** A reciprocal agreement where the building owner and tenants undertake to disclose the energy, water and waste consumption of the building, and identify measures and targets to reduce the environmental footprint.

**Green Swan:** A profound market shift, generally catalysed by some combination of Black or Grey Swan challenges and changing paradigms, values, mindsets, politics, policies, technologies, business models, and other key factors.

**greenhouse gas (GHG) emissions:** Any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere.

**Greenhouse Gas Protocol:** An international accounting tool to understand, quantify, and manage greenhouse gas emissions.

**greening:** The actual application of sustainable living principles and practices, such as energy efficiency, waste reduction and water conservation.

**greenwashing:** The act of misleading consumers about the environmental practices of a company, or the environmental benefits of a product or service.

**hazardous waste:** Items that may carry a public health or environmental risk. The four hazardous waste characteristics include being flammable, corrosive, explosive or poisonous. Examples include solvent-based paint, polyurethane, batteries, motor oil, cleaning agents and other chemicals.

**landfill site:** A scientifically chosen, designed, engineered and managed location for the disposal of waste by burying it (informally referred to as a rubbish dump).

**life-cycle assessment:** Assessing environmental impacts associated with all the stages of the life cycle of a commercial product, process, or service.

**linear economy:** Works according to the 'take, make and dispose' step plan which has a negative connotation, as opposed to the circular economy.

**mitigation:** Action taken to permanently eliminate or reduce the long-term risk and hazards of climate change.

**non-renewable resource:** A natural resource that cannot be produced, regrown, regenerated or re-used on a scale that can sustain its consumption rate indefinitely; for example, coal.

**organic/biodegradable waste:** Waste that originates from plant or animal sources, and can be broken down by other living organisms such as leftover food or biodegradable food containers.

**Paris Agreement:** An agreement within the United Nations Framework Convention on Climate Change, dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, signed in 2016 in Paris.

**polluter pays principle:** According to which the polluter should bear the cost of measures to reduce pollution according to the extent of either the damage done to society, or the exceeding of an acceptable level (standard) of pollution.

**poly-logo:** The plastic identification logo that indicates the type of plastic, typically found in a triangle on plastic products.

**recyclable:** What can be recycled, such as glass, paper, cardboard, aluminium, steel, plastic, etc.

**recycled content:** When a product is partially made of recycled material, i.e. a portion of the content of the material has been recycled.

**recycling:** The processing of used materials (waste) into new products to prevent waste of potentially useful materials sent to landfill or other conventional waste disposal methods.

**regeneration:** The ability to restore, renew or revitalise own sources of energy and materials.

**renewable energy:** Energy that is generated from renewable resources such as wind, solar, geothermal, biofuels, etc.

**Renewable Energy Certificates (RECs):** A mechanism for purchasing green or renewable electricity in units of megawatt hours, in a manner that stimulates investment in renewable energy projects.

**resource efficiency:** The management of raw materials, energy and water in order to minimise waste, and thereby reduce cost. It is not just an environmental initiative; it is also an important business process that could save an organisation a lot of money.

**retrofit:** New technology or new features added to an existing system (building), which usually has a cost implication. For example, the replacement of light bulbs might require that the light fitting also needs to be replaced to ensure a suitable retrofit.

**sixth extinction:** The current situation whereby the diversity of life on Earth is suddenly and dramatically contracted (for the sixth time in half a billion years). It has been brought about by human actions and is predicted to be the most devastating extinction event since the asteroid impact that wiped out the dinosaurs.

**socially responsible investment (SRI):** The practice of investing money in companies and funds that have positive social impacts.

**sustainability:** The ability to meet the needs of the present without compromising the ability of future generations to meet their needs. The concept is composed of three pillars: economic, environmental, and social – also known as the triple bottom line of profit, planet, and people.

**Sustainable Development Goals (SDGs):** Adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030.

**sustainably harvested:** The process of growing and collecting crops without depleting future resources, such as not catching fish during their breeding season or if not sized correctly.

**systemic risk:** Risks imposed by interlinkages and interdependencies of ESG factors in a system where the failure of a single entity or cluster of entities can cause a cascading failure.

**tap aerator:** A small device on a tap to restrict water flow without reducing water pressure, thereby helping to conserve water.

**three-bin system:** The concept of having three bins next to each other for separate waste types, such as recyclable (dry), non-recyclable (wet) and organic items.

**triple bottom line (TBL):** An established approach to measuring sustainability that takes into account 'people, planet and prosperity'.

**water footprint:** The amount of water used to produce each of the goods and services we use.



# ACRONYMS/ ABBREVIATIONS

The following section provides a list of acronyms/abbreviations used in this handbook.

**3Rs** responsibility, resilience and regeneration

**3R approach** reduce, reuse, recycle

**B-BBEE** broad-based black economic empowerment

**BREEAM** Building Research Establishment Environmental Assessment Method (UK)

**CBT** carbon tax

**CDP** Carbon Disclosure Project

**CE** circular economy

**CFL** compact fluorescent light

**CO<sub>2</sub>e** carbon dioxide emissions

**CRT** cathode-ray tube

**CSR** corporate social responsibility

**EGF** Event Greening Forum

**EMP** Environmental Management Plan

**EMS** Environmental Management Systems

**EnMS** Energy Management System

**ESG** environmental, social and governance

**FSC** Forest Stewardship Council

**FWP** flexible work programme

**GBCSA** Green Building Council of South Africa

**GFN** Global Footprint Network

**GHG** greenhouse gas

**GRI** Global Reporting Initiative

**HVAC** heating, ventilation and air conditioning

**JSE** Johannesburg Stock Exchange

**LCA** life-cycle assessment

**LCD** liquid crystal display

**LED** light-emitting diode (or local economic development/low emission development)

**LEED** Leadership in Energy and Environmental Design (US)

**PEFC** Programme for the Endorsement of Forest Certification

**PGS** Participatory Guarantee System

**PPE** Personal Protective Equipment

**PRI** Principles for Responsible Investment

**PV** photovoltaic

**RECs** Renewable Energy Certificates

**PVC** polyvinyl chloride

**RSPO** Roundtable of Sustainable Palm Oil

**SANBI** South African National Biodiversity Institute

**SAOSO** South African Organic Sector Organisation

**SDGs** Sustainable Development Goals

**SFI** Sustainable Forestry Initiative

**SMMEs** small, medium and micro enterprises

**SPP** Sustainable Procurement Pledge

**SRI** socially responsible investment

**TBL** triple bottom line

**UN** United Nations

**UNGC** United Nations Global Compact

**VOCs** volatile organic compounds

**WBCSD** World Business Council for Sustainable Development

**WCED** World Commission on Environment and Development

**WHO** World Health Organization

**WRI** World Resources Institute

**WWF** World Wide Fund for Nature



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