



## Introduction

Curro recognised the value of Environment, Social and Governance ('ESG') alignment and embarked on an environmental sustainability awareness journey during 2017 and 2018. Curro has submitted climate change data to the CDP since 2019. The CDP is a not-for-profit charity that runs the global disclosure system for investors, companies and regions to manage their environmental impacts. Due to the early stages of the program, Curro is aware that many lessons are to be learnt, experts to be consulted and sufficient program depth to be achieved.

Curro is committed to improving its environmental sustainability performance through:

- fostering a culture of sustainability and reducing Curro's ecological footprint;
- incorporating principles and the understanding of sustainability into teaching, student learning, research, consultancy and community engagement; and
- incorporating environmental sustainability key performance metrics alongside other key performance indicators of Curro.

Curro strives to achieve this by:

- promoting, developing and adopting environmentally sustainable practices;
- upholding the highest standard of governance;
- ensuring alignment with social practices in keeping Curro's employees and learners healthy and safe;
- $\bullet\,$  being a responsible and inclusive employer and client;
- engaging with all Curro stakeholders on sustainability issues; and
- ensuring alignment of the organisational core values with the United Nations Sustainable Development Goals ('UN SDG's') indicated in the far right column in the table below, and support Curro's license to operate.
- progressive alignment with the Task Force on Climate-Related Financial Disclosures ('TCFD').

## **Environment (E)**

Although Curro's operations is of low environmental impact in comparison with other sectors, it continues to focus on preventing or minimising negative effects on the environment.

Curro's actions to consider and mitigate its environmental impact are summarised in the adjacent table.

Significant activities and considerations in the group's transitioning journey are provided in the additional information section on pages 59 to 61 of Curro's annual integrated report 2021.

### Electricity

- Minimising and monitoring activities to continuously maintain and improve electricity efficiency
- Electricity efficiency, reducing natural resource dependence and affect Greenhouse Gas ('GHG') emission reduction
- Incorporating alternatives like renewable energy to replace electricity dependence and reduce emission impact
- Replacing older technology lights with modern efficient solutions in and around the buildings as well as on the sports fields

## 7 AFFORDABLE AI



#### Water

- General water dependence reduction throughout the organisation
- Installing artificial turf and lawns where appropriate on grounds and sports fields
- $\bullet\,$  Maintaining water-saving and responsible water use awareness campaigns at the schools
- Metering and monitoring activities to continuously maintain and improve water use efficiency
- Implementing water re-use projects for sports fields, gardens, cleaning and flushing of toilets
- Emphasising water issues in water-stressed areas







#### **Carbon emissions**

- Initiating the conversion of pool heating from electrical to gas systems, increasing energy and operational cost efficiency and reducing GHG emissions
- · Reduce reliance on artificial fertilisers
- Reducing business travel through digitisation
- Adopt evaporative cooling principles for air conditioning where appropriate
- · Promote and invest in low emission solutions where practical

## 15 UFE ON LAND



#### Other

- General natural resource consumption reduction
- · Promoting collective action on shared challenges
- Safely disposing of hazardous waste, e.g., fluorescent tubes
- Optimise paper recycling and reduce the impact on the resource through digitisation
- Recycling and reduction of e-waste
- Training employees, learners and facility managers on waste management and reduction of water and electricity consumption
- Endeavouring to ensure that suppliers in the Curro value chain are aligned with Curro's aspirations in environmental sustainability
- Increase alignment with UN SDG's











13 CLIMATE ACTION





- Recognising diversity and promote equal opportunity
- Eliminating discrimination and harassment
- Actively engaging with and supporting the communities in which Curro operates
- Practicing sustainable procurement through the engagement of suppliers supporting Curro's code of conduct and sharing commitments to human rights
- Align with UN SDG's



### Governance (G)

Social (S)

Curro manages

and sustains its

following ways:

social impact in the

Curro has adopted and implemented several policies to achieve sustainable governance, including:

- Code of ethics and anti-corruption
- Good business
- · Privacy and whistleblowing
- Processing of personal information in line with the Protection of Personal Information Act
- Data and information technology privacy and security

Detailed information on governance at Curro can be found on pages 78 to 86 of Curro's annual integrated report 2021.



Additional notable	9
information	

## Description

### Sustainability-Linked Loan

Curro received support for its environmental sustainability journey through a sustainability-linked loan in 2019 and pricing of the recent revolving credit facility.

The following key performance indicators are monitored in terms of the loans:

- Learner diversity
- Employee diversity
- Attaining bachelor's degree pass rate targets
- Installation and measurement of water and electricity consumption devices

It involved a baseline risk assessment through an independent agency and Curro's first climate change reporting to the CDP in the reporting year.

# Transparent sustainability and climate change reporting

Curro's aim is to be accountable for its contribution to climate change and the climate-related risks and opportunities. These are reported to the CDP and in 2021 Curro achieved a rating of B, improving from a C in the previous year. This score is in line with the global average.

Curro specifically managed to improve ratings in the categories of energy, governance, and climate-related risk and opportunity management and disclosure.

## Communication

Curro identified in broad terms the following stakeholders:

- Management and local management committees
- Parents and school advisory bodies
- Teachers and supporting employees
- Learners
- Investors, funders and sponsors
- Government
- Business
- Community
- Supply chain

Curro promotes sustainability communication to all stakeholders by:

- Creating awareness and educating employees and learners on sustainability and the importance of preserving resources for the future; and
- Promoting events and have awareness campaigns to get surrounding communities to participate and support the organisation's sustainability efforts.

	Risk	Description	Financial impact*
	Capital Expenditure	Climate-related risks and opportunities have influenced financial planning in terms of both capital expenditures and direct costs.	
		Examples of indirect costs are insurance claims due to damage from floods, extreme weather conditions that have caused strong winds and rainfall.	
		The following capital expenditures are relevant with impact on expenses estimated where possible:	
		Capital for solar photovoltaic installations	Not calculated
		Capital for lower carbon emission generating heating solutions for schools with indoor swimming pools	Potential additional capex of R0.4m – R3m
		Capital for the installation of gas heating solutions at all schools with swimming pools	Intervention capex per school not viable at present relative to the saving in expenses. We continue to monitor solutions in this area.
		Capital for water harvesting systems for both sport and sanitation facilities at schools in drought prevalent areas	Expense saving potential: Estimated as much as R24m per annum (based on a target number of installations at 25% of campuses by 2025).
			Intervention capex estimated to achieve this saving of cR100m.
		Efficient lighting	Expense saving potential: cR5m - R10m per annum over medium term with capex ongoing as we refurbish and replace.
	Products and services	Upon realising the importance and significance of climate change, Curro embraced the opportunity to influence and equip the next generation through an appropriately adapted curriculum	Not quantified
	Investment in research and development	Curro invested in research and development and the ongoing installation of inline battery banks and electronically controlled supercapacitors (ECSC') at schools, with further investigation into the possibility of installing solar PV and battery solutions at campuses across South Africa  Curro's DigiEd schools provide a progressive, technologically advanced, and innovative education for learners. The curriculum is enhanced with a project-based deep-learning approach that has an emphasis on Science, Mathematics, and Technology. Learners are equipped for future readiness with the necessary skills to ensure resilience in an uncertain future and a continuous transitioning economy	Not quantified
	Operations	The following impacted on the operations:	
		<ul> <li>Cost of content creation (salaries and tools required to develop content)</li> <li>Investment in digital platforms and digital education learning tools</li> <li>Infrastructure (hardware and software requirements)</li> </ul>	Intervention capex estimated of R10m Expense savings potential of R2m per annum based on printing savings potential if all schools transition to digital curriculum content.
		Extreme weather events	Estimated operating loss of as much as R300m (based on a scenario if up to 25% of campuses are forced to close suddenly for up to six months, <b>excluding</b> potential insurance claims for damages and loss of income).

Risk	Description	Financial impact*
Operations (continued)	Water re-use needed to survive droughts     Implementation of boreholes     Synthetic turf installed in play areas and on sports fields     Water harvesting systems and underground water storage systems	Intervention capex of as much as R134m, based on the installation of water harvesting solutions at 25% of the most at-risk schools.
TCFD	Curro aims to adopt scenario analysis principles to progressively align with TCFD reporting requirements over the next two years. This has the potential to change or add to the above list and will contribute to Curro's readiness for the transitioning environment to a low/zero carbon economy	Not quantified

<sup>\*</sup>All financial Impacts and relevant assumptions are stated in the 2021 CDP disclosure report which is available on: www.cdp.net

## GHG emission data:

EMISSION SCOPE	2020	2019	2018
SCOPE 1 (TONNES OF CO2E)	923	1 713	1 458
SCOPE 2 (TONNES OF CO2E)	13 506	14 053	11 630
TOTAL SCOPE 1 & 2 (TONNES OF CO2E)	14 429	15 766	13 088
SCOPE 3 (TONNES OF CO2E)	7 015		
TOTAL SCOPE 1, 2 & 3 (TONNES OF CO2E)	21 444		





# SUSTAINABLE **CHANGE:** a practical example

## Sustainable building practices in the year under review

- An extended life cycle

- Energy-efficient compliance (SANS XA)
- Incorporating plans for more water-saving and energy harvesting practices in future













Sustainable thinking and design culminated in the following:

## 1. Project partners

- The design of the building was outsourced to BPAS architects, a South African firm who incorporates a holistic methodology and sustainability principles in their design processes.
- The school is situated in the Groot Phesantekraal Estate in Durbanville, currently in a development phase, after Curro, the Rabie Property Group, and Trinity Projects joined forces to acquire the land.
- · Rabie is a Cape Town-based property developer committed to green building principles and practices and has developed six 5-Star Green Star rated buildings and seven 4-Star Green Star rated buildings in Cape Town to date.
- Trinity Projects is a Cape Town-based property development and management group who is committed to treating the environment and communities surrounding a development with respect, protecting existing green areas and incorporating greenbelts in its layouts.

## 2. Building site and design

- Constant environmental monitoring took place on the site due to its proximity to natural greenbelts.
- Throughout the design process, solar tests and analysis were done to ensure passive solar control elements were orientated correctly to ensure efficacy.
- · Passive energy control is incorporated in the building as architectural features, e.g. sunscreens, extended slab edges, and stairwells, which add to natural ventilation flows, and the 'heat chimney' effect.

#### 3. Construction material

- Clay brick was chosen as it is an inert and environmentally friendly material. It is made of clay and water and contains no complex components or chemicals.
- The clay brick was sourced from South African supplier Corobrik, whose newly developed and sound environmental manufacturing processes aim to lower the embodied energy in all materials produced. Six Corobrik factories are fired on natural gas with further conversions to natural gas under investigation.
- Robust elements and finishes with low maintenance requirements were considered to ensure the project life cycle has an overall lower embodied energy.
- The superstructure makes use of materials sourced from South African suppliers.

## 4. Features incorporated to improve eco-friendliness and sustainability

#### 4.1 Water

- Borehole water is predominantly used for garden and sport field maintenance and is approved and licensed by DWS.
- Wastewater usage: Stormwater runoff from all hard areas is 'polished' before being discharged into the precinct's overall stormwater attenuation pond, where the natural aquifers are replenished effectively and environmentally
- Minimal and sustainable solar geysers and solar collectors are used for water heating.
- Waterwise elements includes water conservating taps, fittings and fixtures used throughout the project.
- Waterwise gardens and artificial turf sport fields add to the overall water conservation strategies.
- · Garden waste: sufficient maintenance areas are kept promoting garden composting and recycling.
- Futureproofing for rainwater harvesting systems is incorporated throughout the building.

#### 4.2 Electricity consumption

- · Lighting: Low-voltage systems and LED lighting is used throughout the building with occupancy and daylight sensors
- Natural lighting: Skylights and windows optimise natural lighting while allowing for sufficient solar control to avoid direct solar heat gain. Low-E glass were used in skylights to further add to the reduction of solar heat gain in the building. Skylights were carefully considered in placement for optimisation.
- Water heating: Minimal and sustainable solar geysers and solar collectors are used
- Electricity generation: Future-proofing locations and cable reticulation routes for PV panels and battery-banks are accommodated in the design
- Temperature control: Roof insulation was incorporated in all areas, as well as sound-insulation in large public areas. Temperature control through natural passive ventilation techniques is incorporated throughout the building.

#### 4.3 Recycling and reuse

• Operational areas are designated for recycling and reusing initiatives.



