

EARTH 51.



ASSESS



ACT



DELIVER

LYRA feedback^(70%) **x** **EARTH 51** POV^(30%)



Weighted Average

QUALITATIVE



DELIVER A BETTER TOMORROW

ANALYSIS & FINDINGS

Lyra



CONTENT

01 BACKGROUND

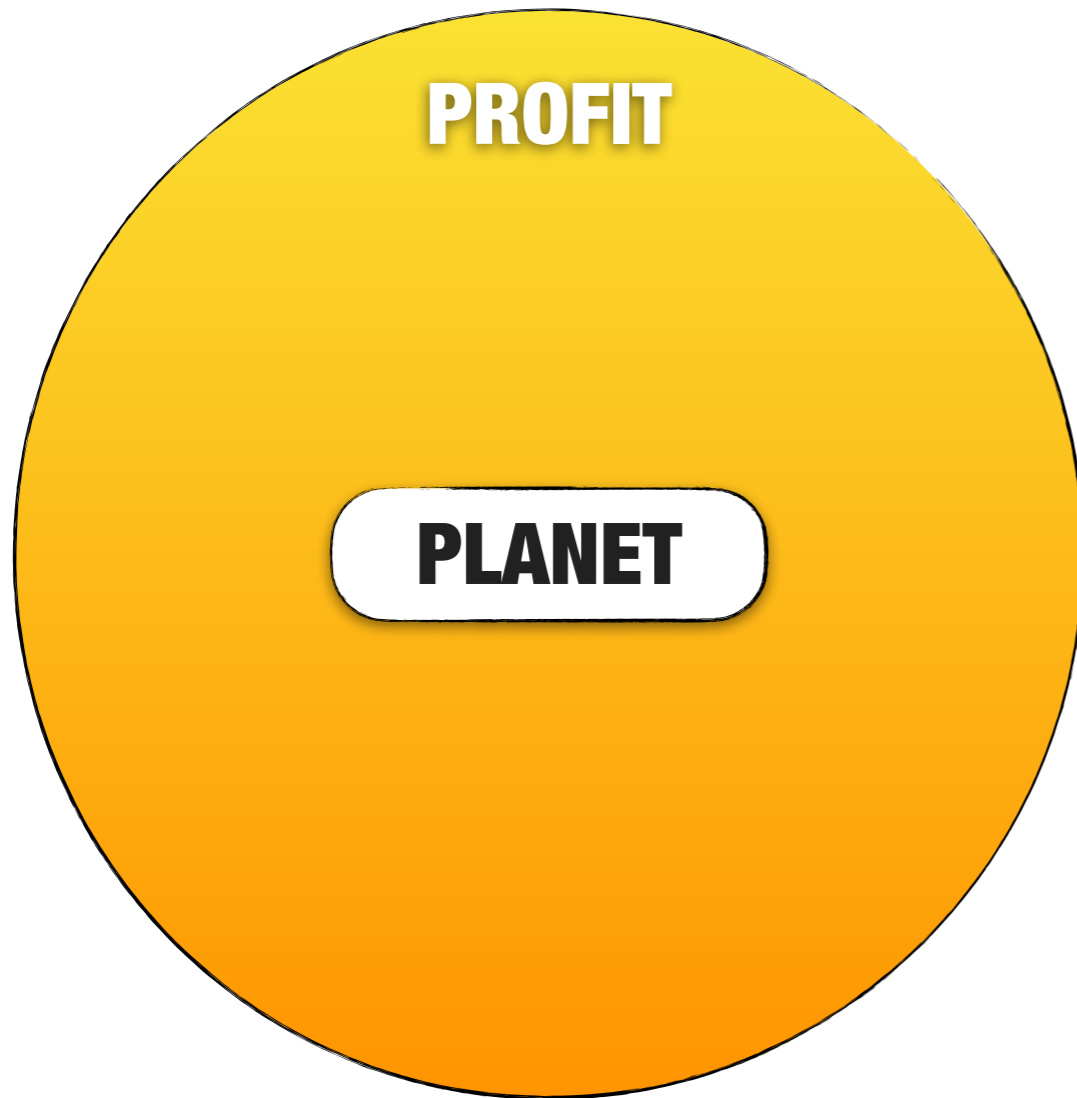
02 FINDINGS

03 ANALYSIS

04 NEXT STEPS

LYRA CAN HELP THE PRIVATE SECTOR

PERCEPTION



REALITY



ABOUT LYRA

Based in Iringa, Tanzania, LYRA is a 'Not for profit' organisation. It has a strong focus on both education & the social uplift of rural communities. They do this through a 2 pronged approach - help safeguard vulnerable young girls to ensure they stay in education upto a secondary level, and avoid unwanted pregnancies. This in turn ensures that they have the basic qualifications to earn a livelihood and exit a life below the poverty line.

In addition, LYRA has a strong focus on community education by bringing in Digital Learning into rural Tanzania. Over the past 5 years, they have helped over 2,500 girls in education and over 5,000 young children - both boys and girls in building both educational and vocational skills.

CONTEXT OF DISCOVERY

As part of its strategy to grow sustainably, LYRA has seriously considered the positive impacts that SDGs would have on its overall operations and business value chain.

They were particularly interested in a proactive methodology that goes beyond limiting the negative impacts of a business and embrace a model which encourages businesses to use its influence to create a better place for its employees, customers and consumers.



APPROACH & METHODOLOGY

At EARTH 51, we take the time to understand the current state of an organisation from a sustainability standpoint. We measure the contribution both intrinsically as well as the impact on the ecosystem they operate in.

An added advantage is that our framework covers critical areas such as gender diversity, health, climate action, hunger, poverty, water, sanitation, education and others. This approach allows organisations to thread sustainability into their organisational DNA and provides a holistic view on real impacts both in and outside of the organisation.

Through this process, we are able to define the current sustainability index called the “Earth Score[®]” & work with organisations on focussed areas of improvement, hand-hold them through the process of integrating metrics into the value chain and finally, deliver a publicly reportable performance summary of the organisation’s efforts towards threading sustainability into their strategy. The backdrop to this approach is framed in the UN SDGs. These are a set of goals for the world to ensure that we move our planet forward in a way that is comprehensively sustainable.

In this report, we have completed the scoring of the following UN SDGs - **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16 & 17** which included a discovery, assessment of the organisational capabilities on sustainability, focussing on specific areas to improve upon and integrating incremental methods of improvement into their organisational value chain. .



BENEFITS OF REPORTS

It is key for us to provide LYRA with a view of their performance in its entirety which highlights both areas of positive actions as well as those needing improvements. Whilst this gives LYRA a platform to start working with, our findings help add visibility and lend clarity on the progress to the extended touch-points of their organisation.

The ability to do this right also has a tremendous impact on their brand equity, their reputation and makes their organisation a far more marketable entity as customers and employees gravitate to be part of an organisation that has a longer-term vision of creating a better organisation for a better world.

One of the key advantages of having this information to hand is the ability to share it with key stakeholders - employees, industry, investors, local government and partners across the value chain.

Finally, very often organisations showcase their areas of strong performances but rarely do they allow others a glimpse into areas that they are working on trying to make improvements in. Providing this level of transparency builds trust with the various groups an organisation is associated with and is a critical step in moving up the maturity curve.



FINDINGS

- Tanzanian SDG report (2019 Release)
- Performance overview
- High performing areas
- Focus goals
- Earth Score[®]



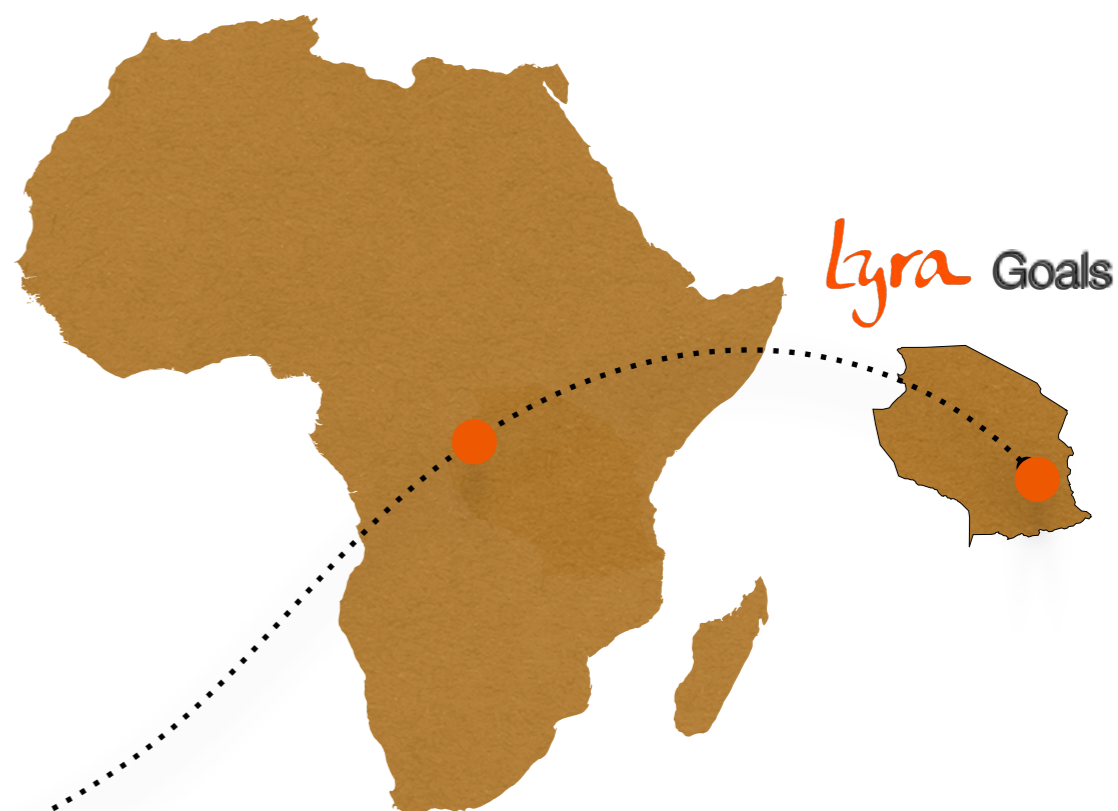


1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	 THE GLOBAL GOALS For Sustainable Development

GLOBAL SDGs



COUNTRY GOALS





TANZANIA

OVERALL PERFORMANCE

Index score

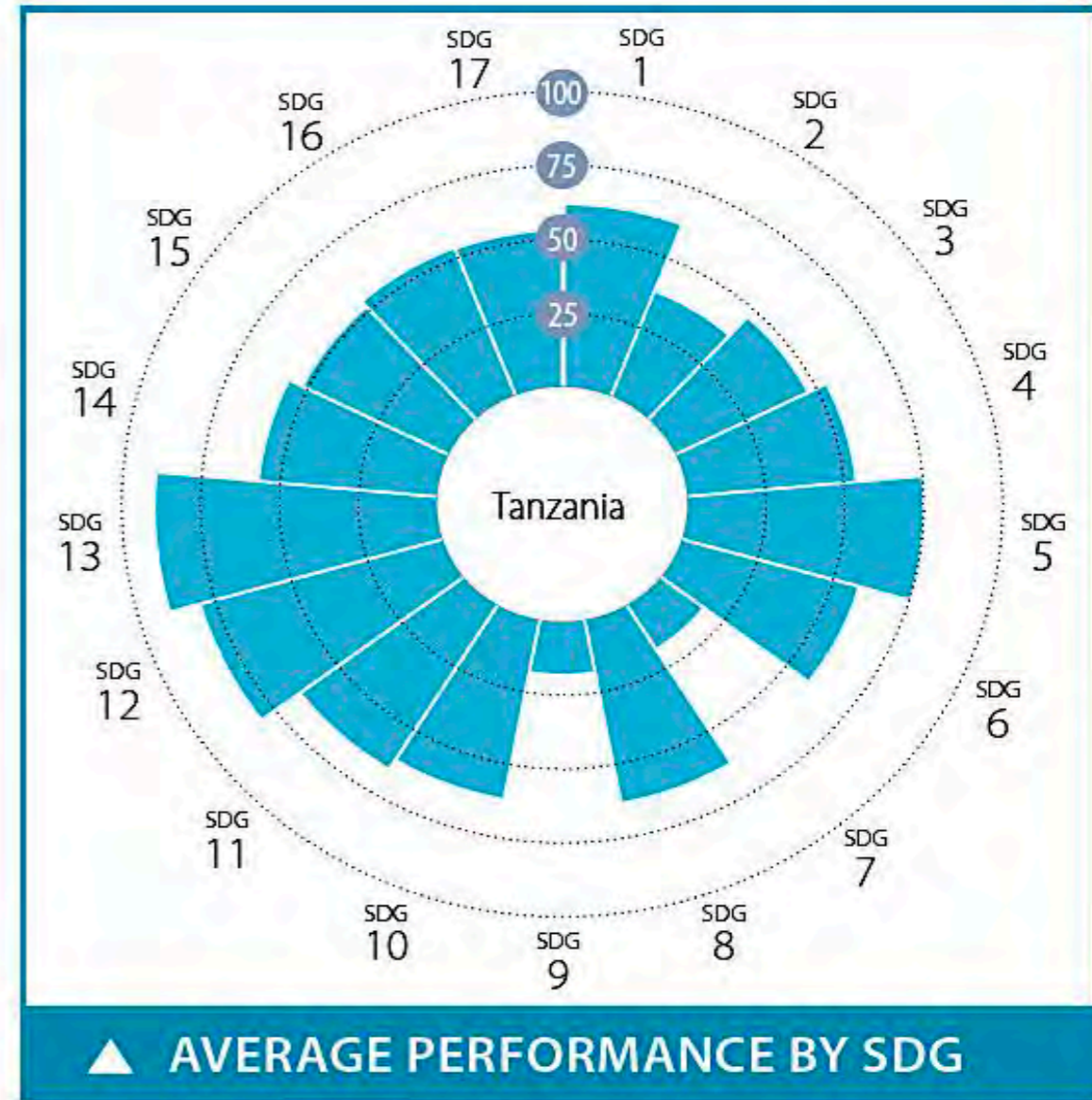


Regional average score



SDG Global rank

123 (OF 156)





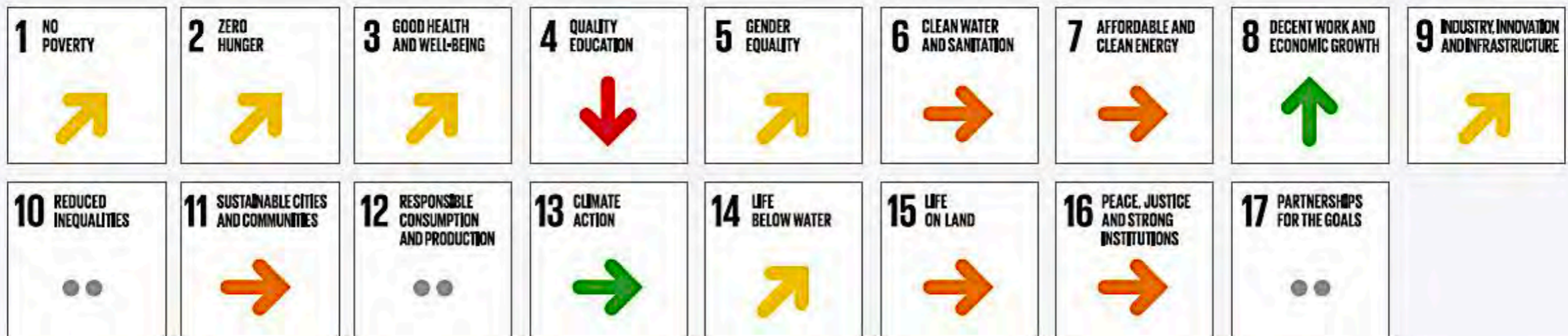
TANZANIA



▼ CURRENT ASSESSMENT – SDG DASHBOARD



▼ SDG TRENDS





SDG1 – End Poverty

	Value	Rating	Trend
Poverty headcount ratio at \$1.90/day (% population)	37.7	●	↗
Projected poverty headcount ratio at \$1.90/day in 2030 (% population)	14.8	●	→

SDG2 – Zero Hunger

	Value	Rating	Trend
Prevalence of undernourishment (% population)	32.3	●	→
Prevalence of stunting (low height-for-age) in children under 5 years of age (%)	34.8	●	↗
Prevalence of wasting in children under 5 years of age (%)	6.6	●	↗
Prevalence of obesity, BMI ≥ 30 (% adult population)	8.4	●	→
Cereal yield (t/ha)	1.5	●	↓
Sustainable Nitrogen Management Index	0.9	●	→

SDG3 – Good Health and Well-Being

	Value	Rating	Trend
Maternal mortality rate (per 100,000 live births)	398.0	●	↗
Neonatal mortality rate (per 1,000 live births)	21.7	●	↗
Mortality rate, under-5 (per 1,000 live births)	56.7	●	↗
Incidence of tuberculosis (per 100,000 population)	287.0	●	↗
HIV prevalence (per 1,000)	1.6	●	↗
Age-standardised death rate due to cardiovascular disease, cancer, diabetes, and chronic respiratory disease in populations age 30–70 years (per 100,000 population)	17.9	●	↓
Age-standardised death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	94.1	●	→
Traffic deaths rate (per 100,000 population)	33.4	●	↓
Healthy Life Expectancy at birth (years)	61.8	●	↗
Adolescent fertility rate (births per 1,000 women ages 15-19)	116.6	●	→
Births attended by skilled health personnel (%)	63.7	●	→
Surviving infants who received 2 WHO-recommended vaccines (%)	90.0	●	↗
Universal Health Coverage Tracer Index (0-100)	49.1	●	→
Subjective Wellbeing (average ladder score, 0-10)	3.3	●	↗

SDG4 – Quality Education

Net primary enrolment rate (%)			
Mean years of schooling			
Literacy rate of 15-24 year olds, both sexes (%)			

SDG5 – Gender Equality

Unmet demand for contraception, estimated (% women married or in union, ages 15-49)			
Female to male mean years of schooling of population age 25 + (%)			
Female to male labour force participation rate (%)			
Seats held by women in national parliaments (%)			

SDG6 – Clean Water and Sanitation

High-income countries: population using safely managed water service			
Other countries: population using at least basic drinking water services			
High-income countries: population using safely managed sanitation service			
Other countries: population using at least basic sanitation services (%)			
Freshwater withdrawal as % total renewable water resources			
Imported groundwater depletion (m ³ /year/capita)			

SDG7 – Affordable and Clean Energy

Access to electricity (% population)			
Access to clean fuels & technology for cooking (% population)			
CO ₂ emissions from fuel combustion / electricity output (MtCO ₂ /TWh)			

SDG8 – Decent Work and Economic Growth

Adjusted GDP Growth (%)			
Slavery score (0-100)			
Adults (15 years +) with an account at a bank or other financial institution with a mobile-money-service provider (%)			
Unemployment rate (% total labour force)			

SDG9 – Industry, Innovation and Infrastructure

Proportion of the population using the internet (%)	13.0	●	→
Mobile broadband subscriptions (per 100 inhabitants)	8.9	●	→
Quality of overall infrastructure (1= extremely underdeveloped; 7= extensive and efficient by international standards)	3.6	●	↗

	Value	Rating	Trend
Logistics performance index: Quality of trade and transport-related infrastructure (1=low to 5=high)	2.8	●	→
The Times Higher Education Universities Ranking, Average score of top 3 universities (0-100)	2.5	●	→
Number of scientific and technical journal articles (per 1,000 population)	0.0	●	→
Research and development expenditure (% GDP)	0.5	●	→
SDG10 – Reduced Inequalities			
Gini Coefficient adjusted for top income (1-100)	41.6	●	→
SDG11 – Sustainable Cities and Communities			
Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5) in urban areas (µg/m ³)	23.3	●	↓
Improved water source, piped (% urban population with access)	58.9	●	↓
Satisfaction with public transport (%)	56.0	●	↗
SDG12 – Responsible Consumption and Production			
Municipal Solid Waste (kg/day/capita)	0.3	●	→
E-waste generated (kg/capita)	0.5	●	→
Anthropogenic wastewater that receives treatment (%)	1.4	●	→
Production-based SO ₂ emissions (kg/capita)	0.5	●	→
Net imported SO ₂ emissions (kg/capita)	0.4	●	→
Reactive nitrogen production footprint (kg/capita)	NA	●	→
Net imported emissions of reactive nitrogen (kg/capita)	NA	●	→
SDG13 – Climate Action			
Energy-related CO ₂ emissions per capita (tCO ₂ /capita)	0.2	●	→
Imported CO ₂ emissions, technology-adjusted (tCO ₂ /capita)	0.2	●	→
Climate Change Vulnerability Index	0.1	●	→
CO ₂ emissions embodied in fossil fuel exports (kg/capita)	1.3	●	→
SDG14 – Life Below Water			



15 GAPS ADDRESSED





SDG Score

> 93%

87% - 93%

79% - 87%

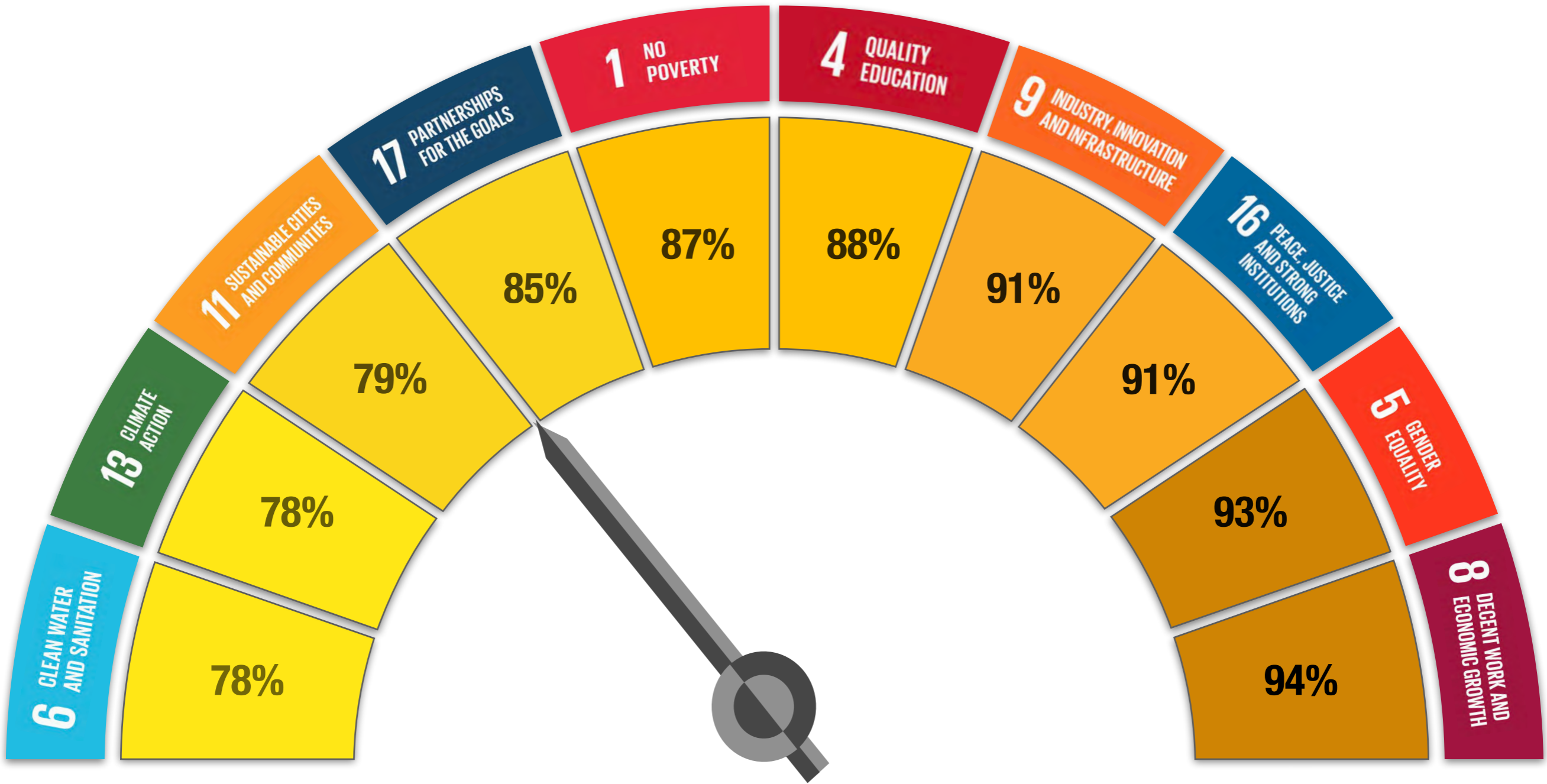
44% - 78%



HIGH PERFORMANCE AREAS



Lyra



CLOSING THE GAP

Lyra

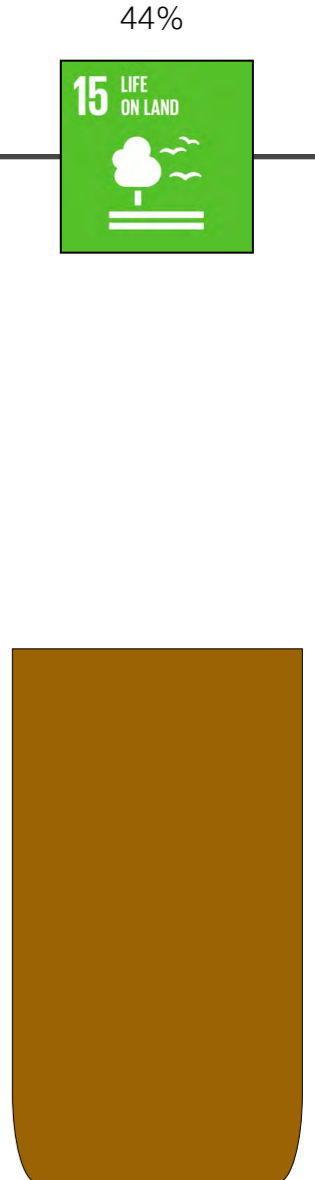
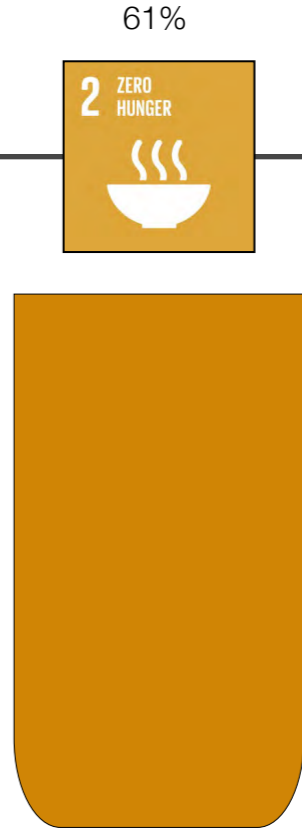
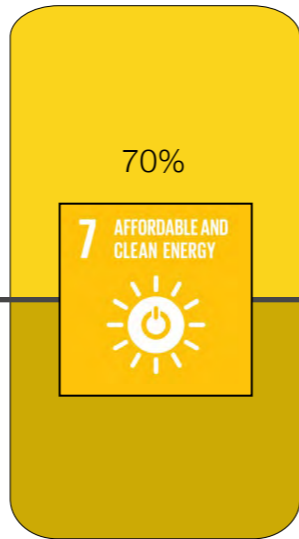
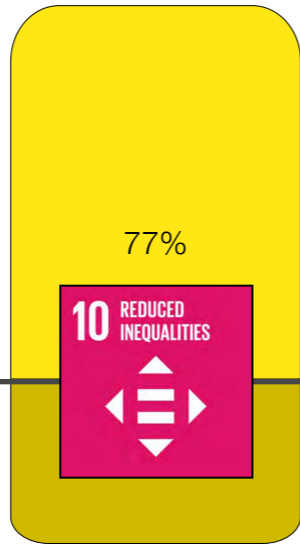


86% [AVERAGE]

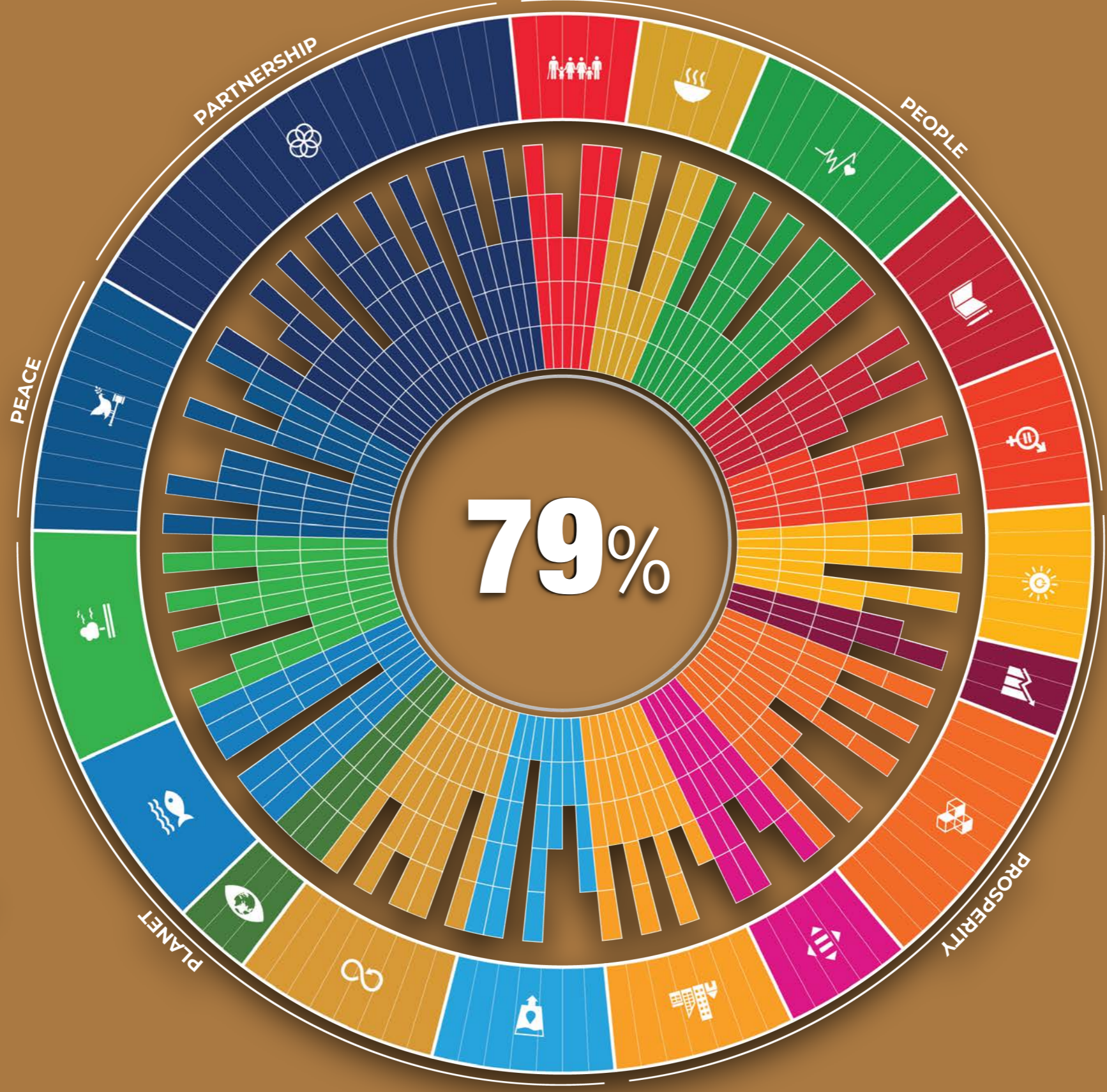
High Performance Goals

63% [AVERAGE]

Future focus areas

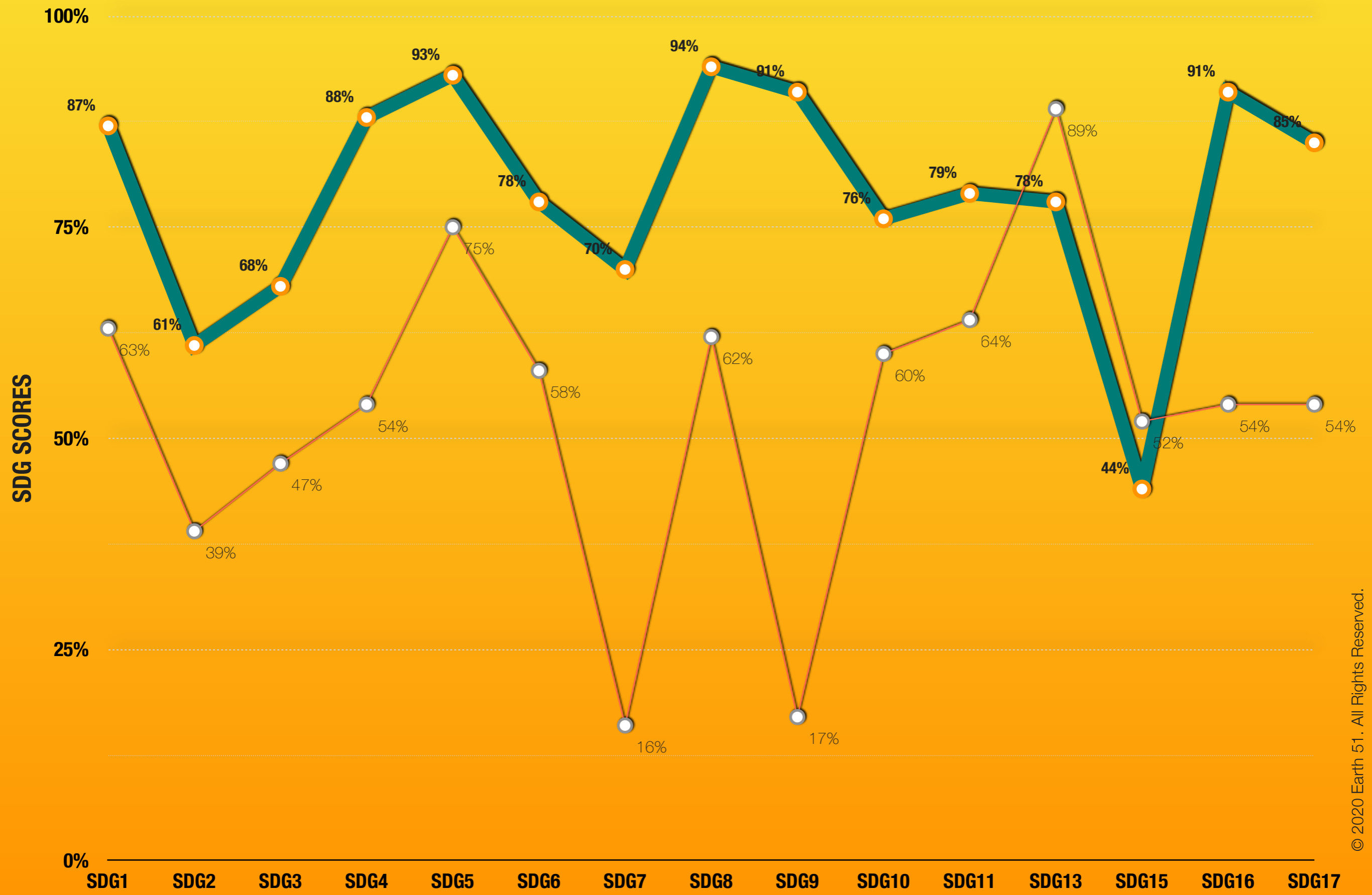


EARTH SCORE[®]
Lyra



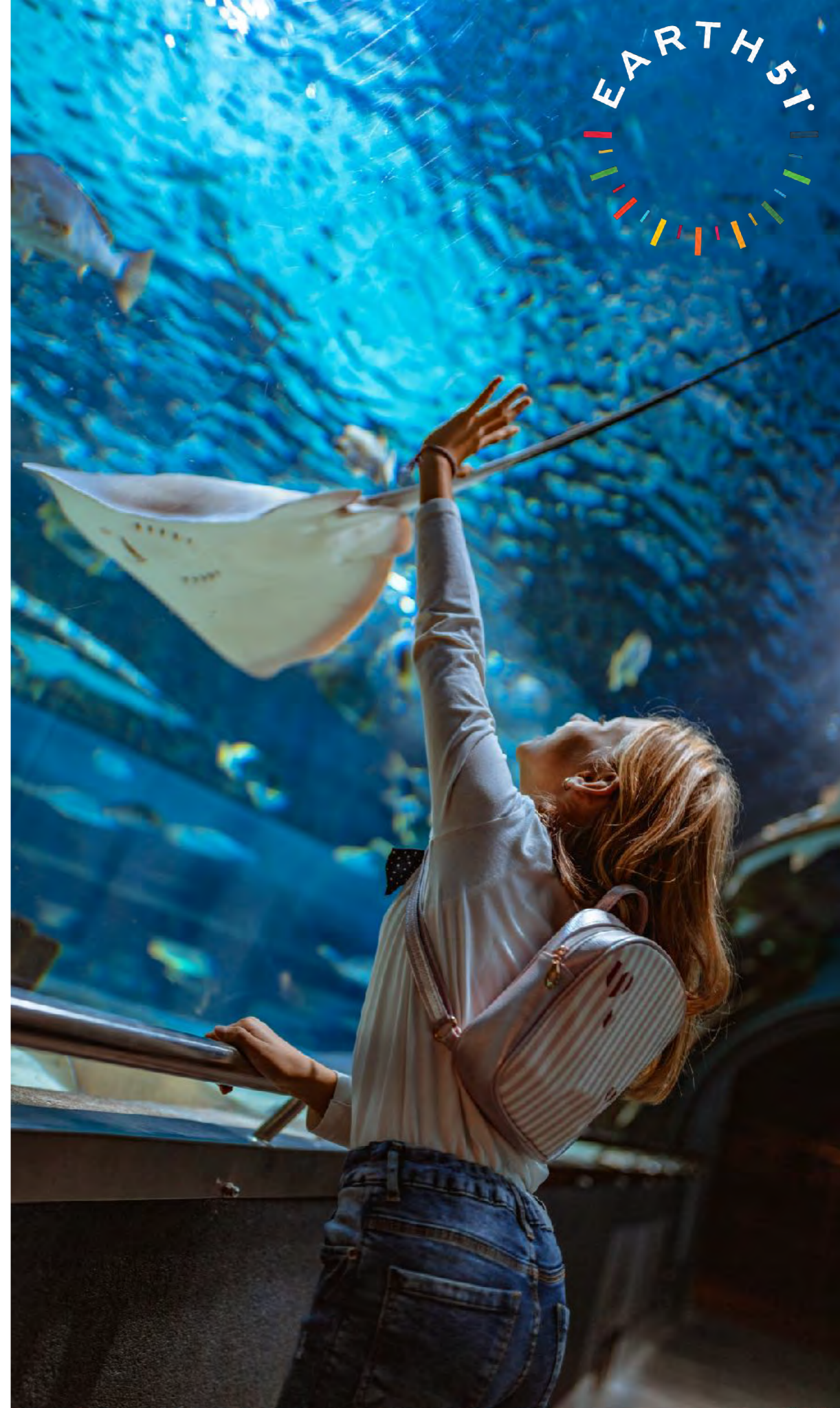
TANZANIA SDGs

LYRA SDGs



ANALYSIS

- Performance of individual goals
- Investor Dashboard
- Badge attainment
- Confirmation of participation



1 NO POVERTY



88%

2 ZERO HUNGER



61%

3 GOOD HEALTH AND WELL-BEING



68%



LYRA is raising the living standards of communities it works with by delivering skills and knowledge on informal banking techniques for savings & loans schemes. It has seen a 5X increase in savings per average farmer since it began this intervention.

LYRA has impacted over 5,000 people in communities as part of its SLA program. Of these, 3,500 are subsistence farmers with 70% of them being women. This has been a real game-changer with the women population being stronger at lifting communities out of extreme poverty

LYRA has had a very powerful impact on providing 2,500 girls in their hostels with nutritious food 3 times a day. The right balance of macronutrients are extremely difficult to deliver in these rural areas, but adequate food is provided to the children with protein in the form of meat once a week. This has helped build immunity for the longer-term and provide a stronger foundation for the girls.

LYRA has also helped their subsistence farmers with advanced agricultural projects such as chicken farming reaching over 2,000 farmers. This was planned to increase the heterogeneity of food being consumed as well as add further nourishment into meals for the wider community.

LYRA takes deliberate steps to ensure that the 100% of the girls living in their hostels are all tested for HIV and other diseases. This provides early-warnings on potential risks and in the longer-run, improves the reproductive health of the girls. In addition, the hostel keeps the girls safe from unwanted pregnancies at an early age - NO GIRL having stayed at the hostel has had an unwanted pregnancy across 2,500 students thanks to the work LYRA has carried out.

The concept of building hostels to safeguard >100 girls per hostel from external dangers with a singular focus on education improves mental health and overall well-being.

4 QUALITY EDUCATION



88%

5 GENDER EQUALITY



93%

6 CLEAN WATER AND SANITATION



78%

Primary & sec education	100%
Pre-primary education	-
Equal access to training	100%
Relevant skills for work	83%
Eliminate gender disparity	100%
Sustainable development skills	55%

End discrimination against women	100%
Eliminate violence against women	88%
Value unpaid care	88%
Women in leadership	88%
Reproductive health	100%

Access to safe drinking water	88%
Sanitation & hygiene	72%
Water quality & waste management	83%
Addressing water scarcity	72%
Integrated water management	83%
Restore water ecosystems	67%

Providing safe access to primary & secondary education is at the heart of all the work that is carried out by LYRA. In addition to the 2,500 girls in their hostels, LYRA has helped educate over 5,000 children through the use of Digital Learning platforms. They have provided over a 100 solar powered Tablets as part of the infrastructure with their education modules.

LYRA has been consciously tackling drop-out rates of girls in education. Under their tutelage, NO GIRL has dropped out of their education curriculum Vs ~780 girls having dropped out of school outside of their hostel in the local communities.

Being a women-led organisation, and with most of the organisation working for LYRA are women, they have been sensitive to any forms of discrimination against women.

In addition, LYRA has a written policy that stands against any form of harassment, discrimination and violence against women in both the workplace and in schools that house the girls.


LYRA uses bio-digesters for its sanitation tanks with earth-worms to compost waste. This is then used to fertilise the local agricultural produce with the grey water undergoing a purification cycle and used for irrigation.

For the girls hostel, LYRA has provided safe, clean drinking water for all residents through a water cleansing solution installed by an International company.

For the girls sanitary requirements, LYRA provides free and re-usable sanitary products from 'Afripads' - this reduces sanitary waste and reduces the need for incineration.

7 AFFORDABLE AND CLEAN ENERGY

70%

8 DECENT WORK AND ECONOMIC GROWTH

94%

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

91%

Access to energy	72%	Drive economic growth	100%	Develop sustainable infrastructure	100%
Grow renewable energy	83%	Productivity through diversification	83%	Sustainable industrialisation	83%
Double energy efficiency	55%	Development oriented policies	100%	Accessibility for SMEs	100%
		Full & productive employment	100%	Upgrade infrastructure sustainably	100%
		Youth employment, education & training	100%	Invest in R&D	72%
		End forced labour & slavery	83%		
		Promoting labour rights including migrants	-		
		Improved finance access	83%		

LYRA was founded on the belief that circular systems developed locally need to provide for energy & adequate infrastructure. All the buildings have natural light & designed to encourage the efficient use of energy systems.

For instance, solar panels are used to power electricity systems, LED lighting is used for the girls dormitories & ventilation walls are provided in the girls living areas to provide for self-cooling in the build-out areas. This greatly improves the efficiency of cooling in the hot months without the need for electric fans.

As an organisation, LYRA is 100% focussed on raising the economic profile and standard of living of the communities it works with. Increasing the average savings from \$20 to \$100 per average farmer has greatly improved the quality of seeds, cashflow for when drought or other weather related events have hit farmers or just to have the ability to hold onto harvested crops till the prices rise to get the best price for their produce.

On average, LYRA delivers a 5X impact on financial and economic growth in their communities.

All building in rural Tanzania use wood-fired bricks in kilns for their infrastructure requirements. LYRA has consciously reduced the impact it has on the environment by using Earth compressed bricks which uses 90% less cement through the use of lime for mortar & the offset of CO2 and other GHG by 90% for every brick it lays. This process is in development and expected to be The blueprint for all further build-outs.

LYRA has also used local materials for all their construction reducing the need for transportation for all their infrastructure build-out. This includes the soil, limestone and local labour from the community.

10 REDUCED INEQUALITIES



76%

11 SUSTAINABLE CITIES AND COMMUNITIES



79%

13 CLIMATE ACTION



78%

Elevate income levels

83%

Empowerment & inclusion

72%

Discriminatory laws

72%

Social protection

55%

Monitoring global finance market

100%

Safe migration

-

Safe & affordable housing

100%

Safe & affordable transport systems

-

Sustainable urbanisation

83%

Safeguard cultural heritage

72%

Disaster risk reduction

60%

Climate resilience

78%

Integrate climate measures

95%

Awareness of climate change

62%

LYRA has increased the income levels through their SLA groups providing cashflow and working capital for substance farmers. In addition to the SLA groups, LYRA has also encouraged more women in employment with 70% of the farmers they work with being women.

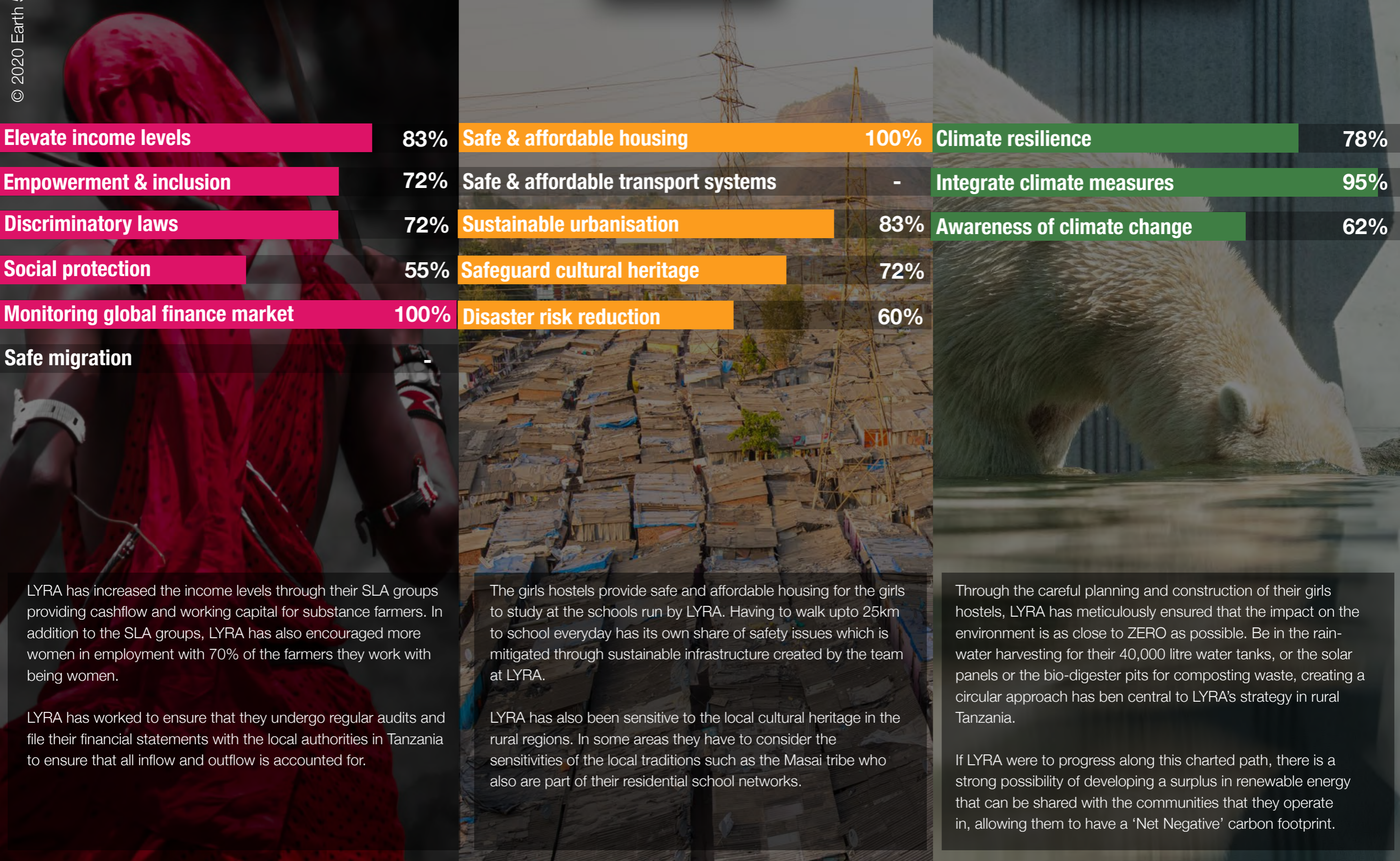
LYRA has worked to ensure that they undergo regular audits and file their financial statements with the local authorities in Tanzania to ensure that all inflow and outflow is accounted for.

The girls hostels provide safe and affordable housing for the girls to study at the schools run by LYRA. Having to walk upto 25km to school everyday has its own share of safety issues which is mitigated through sustainable infrastructure created by the team at LYRA.

LYRA has also been sensitive to the local cultural heritage in the rural regions. In some areas they have to consider the sensitivities of the local traditions such as the Masai tribe who also are part of their residential school networks.

Through the careful planning and construction of their girls hostels, LYRA has meticulously ensured that the impact on the environment is as close to ZERO as possible. Be in the rain-water harvesting for their 40,000 litre water tanks, or the solar panels or the bio-digester pits for composting waste, creating a circular approach has ben central to LYRA's strategy in rural Tanzania.

If LYRA were to progress along this charted path, there is a strong possibility of developing a surplus in renewable energy that can be shared with the communities that they operate in, allowing them to have a 'Net Negative' carbon footprint.



15 LIFE ON LAND

44%

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

91%

17 PARTNERSHIPS FOR THE GOALS

85%

Freshwater Ecosystems	-
Sustainable forests	50%
Combat desertification	38%
Mountain ecosystems	-
Loss of biodiversity	50%
Genetic resources	38%

Reduce violence & deaths	83%
End atrocities against children	83%
Promote the rule of the law	83%
Combat organised crime	-
Reduce corruption & bribery	100%
Accountable & transparent institutions	100%
Responsive decision-making	83%
Protecting fundamental freedoms	100%

Domestic resource mobilisation	83%
Mobilise financial resources	88%
Investments in least developed countries	-
Support national plans for SDGs	100%
Enhance policy coherence	83%
Enhance global partnerships	100%
Public private partnerships	100%
Measure sustainable development	38%

LYRA has been partnering with Tanzanian NGOs to help the preservation of local wildlife with a focus on both carnivorous animals & elephant conservation projects.

Additionally, LYRA has kept sustainability central to its strategic planning for infrastructure projects. By removing the need for wood in construction, LYRA has reduced its footprint on the ecosystem the girls hostels are being built in. Not having to use wood from the forest has helped retain forest cover & avoid decertification in rural Tanzania.

LYRA operates a ZERO tolerance policy on any form of violence in their policy documentation covering both staff and the communities they work in. At their core, their vision is to protect the fundamental freedoms of the communities they work with in Tanzania especially girls who are most vulnerable.

LYRA has stringent policies on anti-bribery and corruption. They also declare their financials transparently through audit procedures on a regular basis.

Completing a SDG assessment with EARTH 51 has helped LYRA thread together the pockets of sustainable impact it has been creating for the past 5 years in Iringa, Tanzania.

In summary, LYRA has created employment for the local populations, ensured financial resilience, build trust with local communities for stronger partnerships & measured their sustainable impact on the community they operate within.

MILESTONE ACHIEVED

Whilst most CSR & ESG reports highlight past trends and achievements, LYRA is one of the few companies taking steps to proactively seek out areas of improvement within the business as well as highlight its strong areas of impact on the planet.

This forward looking vision is rare and will benefit LYRA in multiple tangible and intangible ways.

We are pleased to confirm that LYRA has been awarded GOLD status for completing at least 15 UN SDG goals. As a next step, we would strongly recommend assessing the remaining 2 SDG goals to develop a holistic picture of the overall contributions to society and the ecosystem LYRA operate in.

In addition, we have prepared a confirmation of participation as evidence of the assessment LYRA has undertaken. This document along with the badge can be used in the public domain.

Finally, a big thanks to LYRA for taking on an action plan to remediate areas that need work.

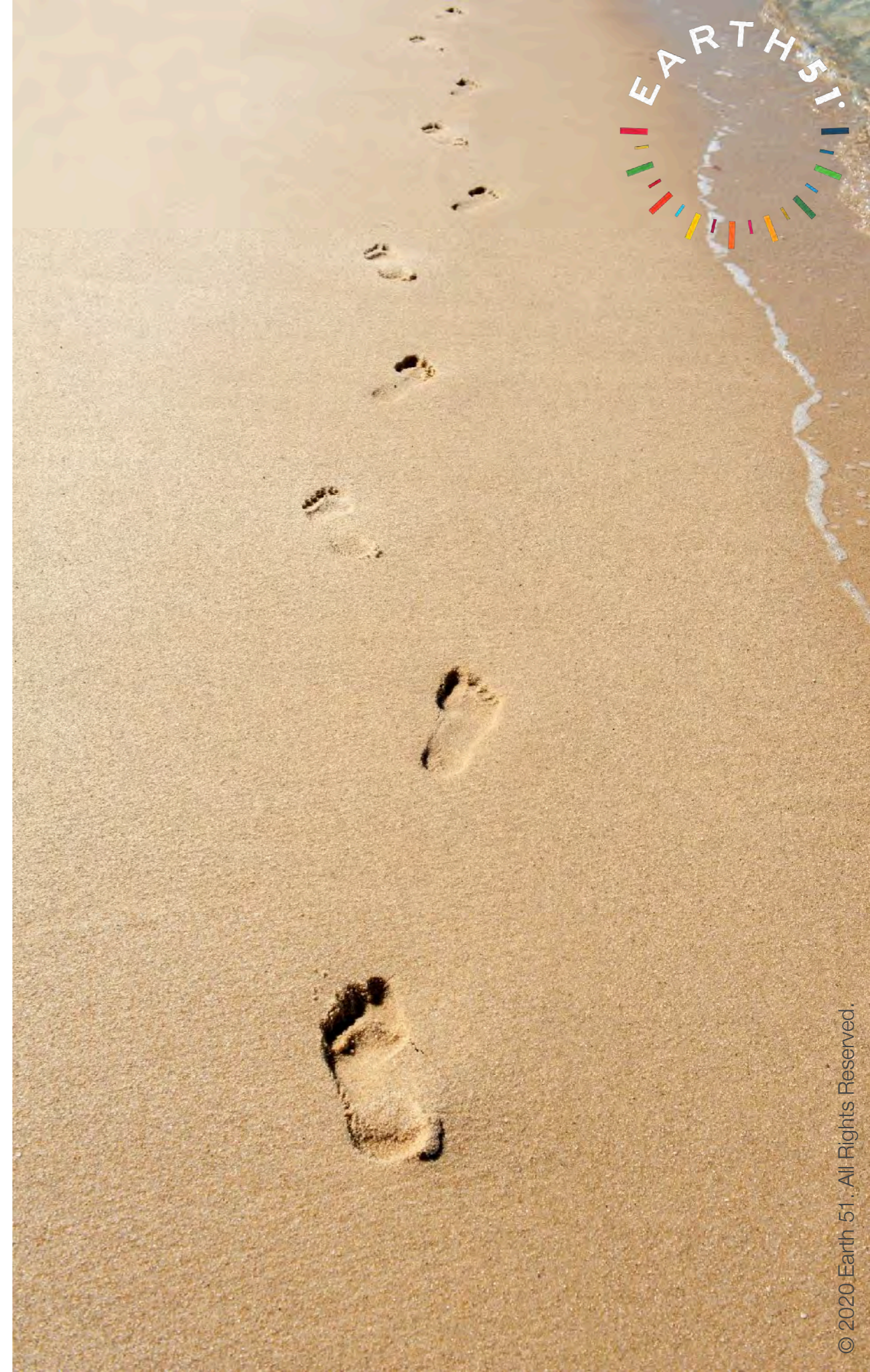


Lyra

15+
Goals

EARTH 51.
SUSTAINABILITY
FOOTPRINT
VALID UNTIL
JUN 2021

GOLD





SUSTAINABILITY FOOTPRINT ANALYSIS

VALID TILL JUNE 2021

CONFIRMATION OF

PARTICIPATION



CLIENT

LYRA, Iringa, Tanzania.

BACKGROUND

In Sept 2015, a 193 countries signed a United Nations plan for collective prosperity, coined the **Sustainable Development Goals**. These 17 goals carry with them a 169 targets which each nation state has signed up to deliver against by 2030. In addition to country leadership, private sector, social entrepreneurs & governments has a strong role to play in helping countries deliver against these targets. To date, the **SDGs** are being seen as the single most comprehensive coverage of proactive sustainable practices that have ever been proposed. In summary, first movers in the private sector who align their businesses to the SDG's will have a 5-15 year advantage on the sustainable playing field. As part of the process of establishing the sustainability index of a business, assess gaps and define a sustainability strategy to move to a desired state, Earth 51 was contracted by LYRA to conduct a thorough assessment of their business to integrate sustainability into its core.

FINDINGS

To that end, we can confirm that Earth 51 has conducted an **INDEPENDENT 3RD PARTY REVIEW** of LYRA in June 2020 with the intention of providing an end to end assessment of the sustainability footprint of their business in line with the UN Sustainable Development Goals.



The detailed findings from the assessment have been provided as an attached file to the LYRA leadership team.

Based on our assessment and the feedback from LYRA, we can conclude that LYRA has demonstrated serious intent to proactively thread sustainability into its business operations. As a next step, we would advise LYRA to complete the assessment of all 17 SDG goals and undertake a SDG performance assessment after 180 days.

Sincerely,

Team at **EARTH 51**





FOUNDER: MARIA SPINK

CURRENT STATUS QUO

TO SHARE WITH INVESTOR COMMUNITY

At Earth 51, we take the time to understand the current state of an organisation from a sustainability standpoint. We measure the contribution both intrinsically within the organisation as well as the impact it has on the ecosystem of operation. An added advantage is that the framework covers critical areas such as gender diversity, health, climate action, hunger, poverty, water, sanitation, education and others. This approach allows an organisation to thread sustainability into their organisational DNA and provides a holistic view on real impacts both in and outside of the organisation. Through this process, we were able to define the current sustainability index called the “Earth Score”, and work with the client on focussed areas of improvement, hand-holding them through the process of integrating metrics into their value chain and finally, delivering a publicly reportable performance summary of the organisation’s efforts towards threading sustainability into the organisation. The backdrop to this approach is framed in the UN SDG’s. These are a set of goals for the world to ensure that we move our planet forward in a way that is comprehensively sustainable.

Fig: 1

SDG	GOAL	AVG SCORE
1	NO POVERTY	87%
2	ZERO HUNGER	61%
3	GOOD HEALTH & WELL-BEING	68%
4	QUALITY EDUCATION	88%
5	GENDER EQUALITY	93%
6	CLEAN WATER & SANITATION	78%
7	AFFORDABLE & CLEAN ENERGY	70%
8	DECENT WORK & GROWTH	94%
9	INDUSTRY, INNOVATION & INFRA	91%
10	REDUCED INEQUALITIES	76%
11	SUSTAINABLE COMMUNITIES	79%
13	CLIMATE ACTION	78%
15	LIFE ON LAND	44%
16	PEACE, JUSTICE & INSTITUTIONS	91%
17	PARTNERSHIPS FOR GOALS	85%
SUSTAINABILITY FOOTPRINT		78.76%

Fig: 2

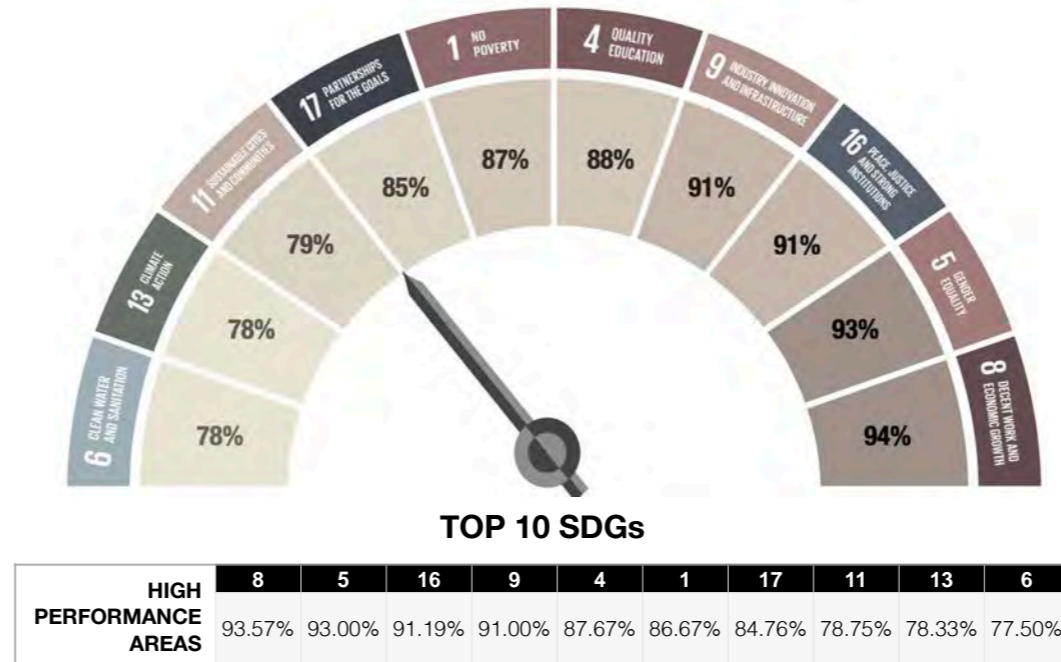


Fig: 3

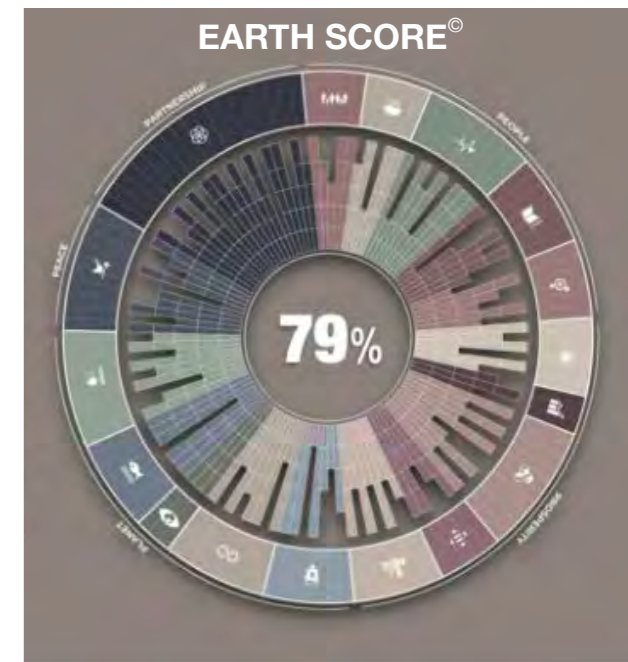


Fig: 4



In this report, we have completed the scoring of the following UN SDG Goals - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16 & 17 which included a discovery, assessment of the organisational capabilities on sustainability, focussing on specific areas to improve upon and integrating incremental methods of improvement into their business value chain. Fig 1 indicates the average scores per SDG goal yielding an average percentage score across all 15 goals scored. Fig 2 indicates the high performing areas for the organisation. Fig 3 indicates the overall Earth Score with visual indicators of SDG performance per goal. Fig 4 indicates the individual performance areas including qualitative feedback on steps currently being taken.

EARTH 51!

Q & A

