



聖若瑟大學  
UNIVERSITY OF  
SAINT JOSEPH  
MACAO



**2022/23**

**UNIVERSITY OF  
SAINT JOSEPH**

---

# **SUSTAINABILITY REPORT**

# CONTENT

- SDG 1 No poverty
- SDG 2 Zero hunger
- SDG 3 Good health and well-being
- SDG 4 Quality education
- SDG 5 Gender equality
- SDG 6 Clean water and sanitation
- SDG 7 Affordable and clean energy
- SDG 8 Decent work and economic growth
- SDG 9 Industry, innovation and infrastructure
- SDG 10 Reduced inequalities
- SDG 11 Sustainable cities and communities
- SDG 12 Responsible consumption and production
- SDG 13 Climate action
- SDG 14 Life below water
- SDG 15 Life on land
- SDG 16 Peace, justice and strong institutions
- SDG 17 Partnerships for the goals
- Conclusion: main contributions and directions for the future

# INTRODUCTION

The United Nations’ [Sustainable Development Goals](#) (SDGs) are a call to action to tackle the main challenges facing humanity and our planet today. The SDGs propose a blueprint identifying opportunities to make our world more inclusive, peaceful, and sustainable by 2030.

Universities are important drivers for the realization of these goals, due to our role in shaping and empowering the next generation, creating a bridge between research and industry, serving as a platform for debate, contributing to policy development, and disseminating competences and skills to the wider community.

The University of Saint Joseph (USJ) assumes the commitment to contribute to sustainability as part of our core [mission and strategy](#) of promoting a caring and ethically responsible, economically, socially, and environmentally sustainable society.

USJ contributes to the SDGs in three ways: (1) by conducting and disseminating impactful SDG related research; (2) by embedding the SDGs in our campus life through teaching and learning, our operations, and our internal policies; and (3) by community engagement and outreach activities.

UNIVERSITY OF SAINT JOSEPH





USJ

Helping shape a sustainable,  
peaceful and green future.







# SDG 1

## NO POVERTY

End poverty in all its forms everywhere

### SELECTED RESEARCH

Diakite, A. D. (2023). China's Aid policy approach to Poverty Alleviation in the recipient country: A Case study of the Republic of Guinea. *Journal of Social Studies (JSS)*, 19(1).

# SDG 1

## NO POVERTY

END POVERTY IN ALL ITS FORMS EVERYWHERE

### EQUAL ACCESS

At USJ we are aware that education is a powerful tool to address poverty. Equal access to education can help students from low-income backgrounds find success, build more resilient communities, and create positive change. To promote accessibility, USJ has established a set of [policies](#) for admission and success targets, as well as, [financial](#), [housing](#), [academic](#), and [counselling support](#) measures targeting local and international students from low-income backgrounds. As the COVID-19 epidemic worsened in our region at the start of 2020, several of our students faced unexpected financial pressures. In response, USJ quickly established a [Hardship Fund](#) to help release students from those pressures and allow them to continue their studies. In the 2022-2023 academic year, 3% of our low-income students were receiving financial aid, among which 68% of them were from developing countries.

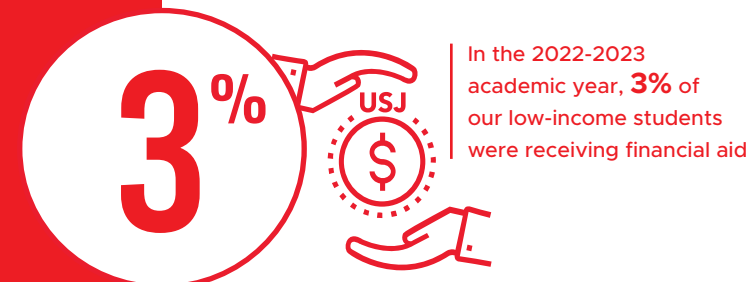
### ENTREPRENEURSHIP AND SUSTAINABLE BUSINESSES

Sustainable businesses contribute to economic development and have a positive impact on the community. USJ partners with the local [government and other organisations](#) to provide opportunities for entrepreneurs to development sustainable businesses. We are committed to offering start-up opportunities through training programmes, capital investment, resource allocation, sharing of space, and networking.

In 2022-2023 academic year, relevant activities included the [cooperation](#) with [Sustainable Development Association](#) in the promotion of sustainable development and education, as well as the support for startups incubation and acceleration. A [masters' talk series](#) has been organised for students to learn about the business and employment opportunities in the Greater Bay Area.

### Access to basic services

In order to promote access to basic resources – such as food, water, and housing – for economically marginalised groups, our students regularly engage in [volunteer](#) and fundraising activities for charity events, such as [Macao's Caritas Bazaar](#).





# SDG 1

## NO POVERTY

End poverty in all its forms everywhere

### SELECTED RESEARCH

Diakite, A. D. (2023). China's Aid policy approach to Poverty Alleviation in the recipient country: A Case study of the Republic of Guinea. *Journal of Social Studies (JSS)*, 19(1).

# SDG 1

## NO POVERTY

END POVERTY IN ALL ITS FORMS EVERYWHERE

### NEWS & EVENTS

News & Events	Release Date
<a href="#">USJ World Youth Day delegation donates funds to Caritas Macau for earthquake survivors</a>	May 2023
<a href="#">Trends of Sustainable Finance in the Greater Bay Area</a>	May 2023
<a href="#">BA students' sustainable e-commerce projects judged at Sustaincia's business competition</a>	May 2023
<a href="#">USJ Faculty of Business and Law signed MoU with Sustainable Development Association</a>	Dec 2022
<a href="#">USJ Social Work students participated in the 53rd Caritas Charity Bazaar</a>	Nov 2022
<a href="#">FBL graduate students learnt sustainable business projects at the first Masters' Talk series</a>	Oct 2022



# SDG 2

## ZERO HUNGER

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

### SELECTED RESEARCH

Lampo, A., & Sun, H. T. (2023). Acceptance of Insects as Food: An Exploratory Study of Young Consumers in Macau. *Indian Journal of Entomology*, 1–7.

# SDG 2

## ZERO HUNGER

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION, AND PROMOTE SUSTAINABLE AGRICULTURE

### DINING SERVICES

Lack of access to food is a leading cause of death worldwide ([UN](#), 2021). Although Macao is a relatively wealthy city, USJ is aware of the diverse needs of students from various socio-economic backgrounds and with different eating habits. USJ is making efforts to improve our canteen services—which cater to members of USJ and also the students and staff of a [local secondary school](#)—by increasing healthy, affordable, and sustainable food choices, and including vegetarian and vegan options.

### FOOD WASTE REDUCTION

Food waste is a global issue. Some estimate that 25-30% of total food produced is lost or wasted ([IPCC](#), 2019).

In order to contribute reducing food waste, a [food waste monitoring](#) system has been introduced in our campus canteen.

### NEWS & EVENTS

News & Events	Release Date
<a href="#">USJ and Wynn Macao signed MOU for “Cherish Food and Waste Reduction-Smart Technology Application Outreach Program”</a>	Jul 2021

## 3 GOOD HEALTH AND WELL-BEING



# SDG 3

## GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

### SELECTED RESEARCH

Rodrigues, P. M., Madeiro, J. P., & Marques, J. A. L. (2023). Enhancing Health and Public Health through Machine Learning: Decision Support for Smarter Choices. *Bioengineering*, 10(7), 792. <https://doi.org/10.3390/bioengineering10070792>

Lobo Marques, J. A., & Fong, S. (Eds.). (2022). *Epidemic analytics for decision supports in COVID19 crisis*. Springer. <https://link.springer.com/book/10.1007/978-3-030-95281-5#about-this-book>

# SDG 3

## GOOD HEALTH AND WELL-BEING

ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

### MENTAL-HEALTH

Health and well-being are essential for a sustainable society. In the 2022-2023 academic year, 12% of our students graduated with degrees in the field of Psychology, equipped to promote the mental health and well-being of communities.

### POLICIES AND SUPPORT

USJ provides free mental health support to our students and staff through our [counselling services](#), which also refer sexual health issues to the appropriate health services. USJ is a [smoke-free campus](#). The use of tobacco products is prohibited in enclosed buildings and facilities, as well as during events, whether indoor or outdoor. To accommodate the needs of some students and staff, we do provide a designated 'smoking allowed' restricted area away from the main part of campus.

### COLLABORATIONS

Partnerships are vital to the promotion of the SDGs. USJ partners with the Macao government and other organisations to promote the health of Macao's population.

In 2022-2023 academic year, USJ collaborated with local organisation to conduct a [study](#), which aimed to help the local government entities to improve the mental well-being of aging population.

### HEALTH SERVICE

We provide mental health support to the community at a reduced rate, through our [counselling services](#), and physical health is promoted through our sports facilities, which are shared with a [local secondary school](#).

12%



In the 2022-2023 academic year, **12%** of our students graduated with degrees in the field of Psychology.

NEWS & EVENTS

News & Events	Release Date
<a href="#">USJ’s Faculty of Health Sciences Provides Consultancy for SKH’s Research on Gambling Disorders and Family Members</a>	Aug 2023
<a href="#">USJ and Macau Federation of Trade Unions Collaborate to Advocate for Improved Well-being of Aging Population</a>	Jul 2023
<a href="#">USJ holds “2nd Child Protection Conference”</a>	Jun 2023
<a href="#">2nd Child Protection Conference   Working together to safeguard children in Macau: from theory to practice</a>	Jun 2023
<a href="#">SDG 3 Promoting Health and Well-being: Research in Psychology Seminar</a>	Apr 2023
<a href="#">USJ Blood Drive 2023</a>	Feb 2023
<a href="#">“ConnectUs” on Awareness of Students’ Mental Health</a>	Nov 2022
<a href="#">USJ Joined the Symposium on Caring for Our Elderly Sleep Health</a>	Oct 2022
<a href="#">Share a talk on emotional awareness – “A dive into emotion as a contribution of mental health”</a>	Oct 2022
<a href="#">USJ to collaborate future Green Activities with AECM &amp; Green Monday</a>	Oct 2022







# SDG 4

## QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

### SELECTED RESEARCH

Lobo Marques. (2023). The (non) standardized classroom – the analysis of three different cultures in the higher education systems – Angola, Brazil and Macau SAR, China. In *Disentangled Vision on Higher Education: Preparing the Generation Next* (pp. 329–351). Peter Lang. <https://www.peterlang.com/document/1266828>

Tagulao, K. A. (2022). Nature-Based Solutions for Environmental Education in the East Asian Context. In C. Vasconcelos & C. S. C. Calheiros (Eds.), *Enhancing Environmental Education Through Nature-Based Solutions* (pp. 361–370). Springer International Publishing. [https://doi.org/10.1007/978-3-030-91843-9\\_21](https://doi.org/10.1007/978-3-030-91843-9_21)

# SDG 4

## QUALITY EDUCATION

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION  
AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

### FIRST GENERATION STUDENTS

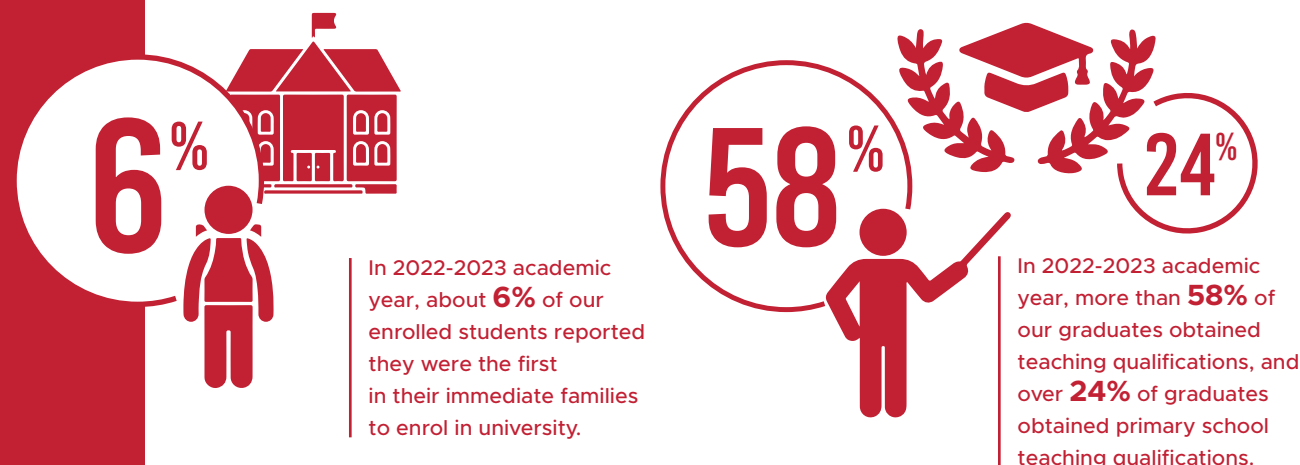
Obtaining a higher education degree is important for breaking cycles of exclusion. In 2022-2023 academic year, about 6% of our enrolled students reported they were the first in their immediate families to enrol in university.

### TEACHER TRAINING

USJ invests greatly in the training of the next generation of teachers. In 2022-2023 academic year, more than 58% of our graduates obtained teaching qualifications, and over 24% of graduates obtained primary school teaching qualifications.

### LIFELONG LEARNING

To support the integration of learning throughout life, USJ offers a variety of services and activities targeting the wider community. Our [policy](#), is that all services and activities be accessible to all, regardless of age, ethnicity, religion, disability, or gender. Our educational [outreach programme for prison inmates](#), running since 2009, provides incarcerated individuals with access to higher education and contributes to their eventual reintegration in society.



The [University Library](#) is open to the community, welcoming readers even if they are not students or members of the staff. For the community’s continued learning, USJ provides public events, vocational training programmes, and education outreach activities.

**GOVERNMENTAL COLLABORATION**

In order to promote the integrated development of education in Macao, our Vice-Rector [Zhang Shugang](#) and University Administrator [Alejandro Salcedo Garcia](#) are members of the Talents Development Committee of the Macao SAR Government.

**NEWS & EVENTS**

News & Events	Release Date
<a href="#">USJ-Coursera 2023-2024</a>	Aug 2023
<a href="#">USJ’s Faculty of Health Sciences Provides Consultancy for SKH’s Research on Gambling Disorders and Family Members</a>	Aug 2023
<a href="#">USJ x Coursera Summer Courses 2023</a>	Jul 2023
<a href="#">FUTURES presents the bachelor capstone projects of the Department of Architecture and Design</a>	Jun – Jul 2023
<a href="#">USJ Students Participate in Southern Lingnan Medicated Diet Study Tour</a>	Jun 2023
<a href="#">USJ Communication and Media Master Students successfully held Open Class “Better Together”</a>	Jun 2023
<a href="#">Public Lecture   The mission of education – Perform, achieve and success</a>	Dec 2022





# SDG 5

## GENDER EQUALITY

Achieve gender equality and empower all women and girls

### SELECTED RESEARCH

Harsløf, I., & Zuev, D. (2022). Temporary transnational labour mobility and gendered individualization in Europe. *Mobilities*, 0(0), 1–18. <https://doi.org/10.1080/17450101.2022.2092417>

# SDG 5

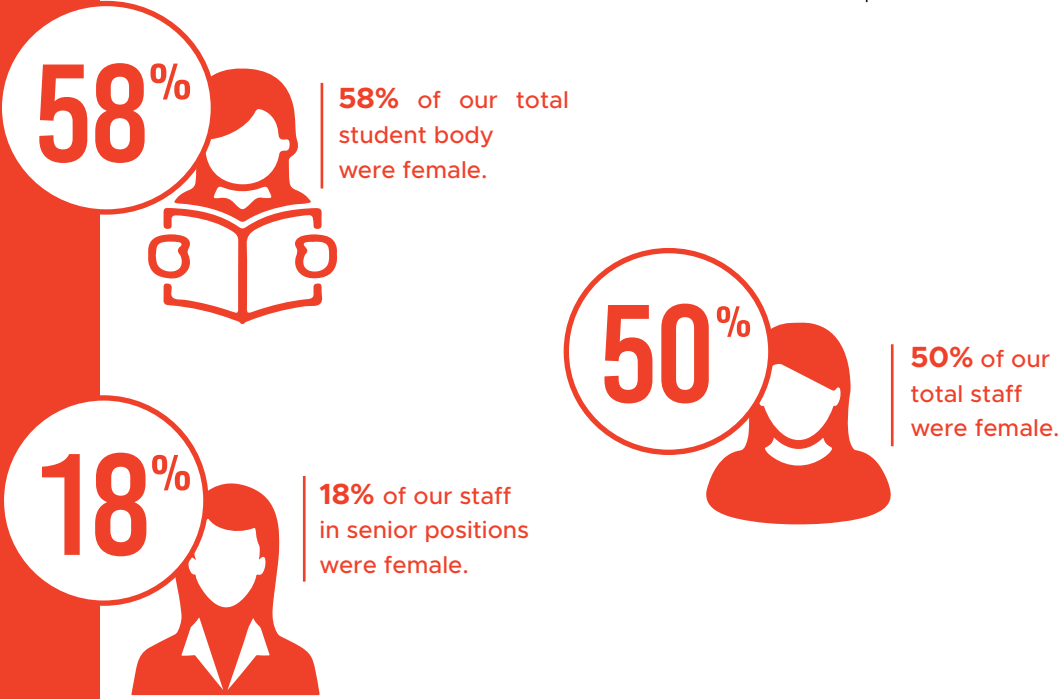
## GENDER EQUALITY

### ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

Gender equality is necessary for a more fair and sustainable society. An important contribution to that goal is equal access to education and employment opportunities. Our policies on [Admission](#), [Equality and Diversity](#), [Non-discrimination](#) and [Anti-harassment](#), ensure equal access and prevent discrimination based on gender or sexual orientation. To promote transparency and accountability, [appeal processes](#) are also in place.

In order to support families, USJ has a generous maternity and paternity paid [leave policy](#) for the staff, and has established a [partnership with a nursery](#), that ensures childcare facilities at reduced rates for our staff, making it easier for parents to choose to actively participate in the job market.

In 2022-2023 academic year, 58% of our total student body was female; 50% of our total staff were female and 18% of our staff in senior positions were female.





NEWS & EVENTS

News & Events	Release Date
<a href="#"><u>FBL Masters' Talk Explores Sustainable Development and E-Government with UN and Government Experts</u></a>	May 2023
<a href="#"><u>Language and Linguistics Seminar   'Grammar, Gender, and Sex: an unruly threesome.'</u></a>	Feb 2023







# SDG 6

## CLEAN WATER AND SANITATION

Ensure availability and sustainable management  
of water and sanitation for all

### SELECTED RESEARCH

Tagulao, K. A., Bernardo, A. B. I., Kei, L. H., & Calheiros, C. S. C. (2022). Mangrove Conservation in Macao SAR, China: The Role of Environmental Education among School Students. *International Journal of Environmental Research and Public Health*, 19(6), 3147. <https://doi.org/10.3390/ijerph19063147>

# SDG 6

## CLEAN WATER AND SANITATION

**ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF  
WATER AND SANITATION FOR ALL**

### WATER STEWARDSHIP

Water is an essential and finite resource that should be protected. At USJ, we are committed to our Green Campus [Environmental Action Plan](#), which includes rainwater harvesting and recycling systems. The USJ campus is equipped with drinking fountains on each floor, both to promote access to free drinking water and to motivate students and staff to bring their own reusable water bottles, which minimizes plastic consumption and waste.

### WATER CONSERVATION

USJ supports water conservation offcampus and collaborates with the local government and NGOs to ensure clean water resources are maintained. Much of our Institute of Science and Environment's direct action is focused on [mangrove conservation](#). Among the many ecosystem benefits of mangroves, coastal protection and their ability to filter toxic materials make them crucial battlegrounds in the fight for the conservation of water resources.



# SDG 7

## AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all

### SELECTED RESEARCH

Weng Chi Lei, & Tai, O. T. (2023). *Impacts of Policies and Infrastructure on the Usage of Electric Vehicles in Macao* [Conference]. 2023 Symposium on Environmental Science and Sustainable Technology (ESST2023), University of Saint Joseph, Macao, China. [https://ise.usj.edu.mo/wp-content/uploads/2023/10/ESST2023-AbstractBooklet\\_2023-10-19-lres.pdf](https://ise.usj.edu.mo/wp-content/uploads/2023/10/ESST2023-AbstractBooklet_2023-10-19-lres.pdf)

# SDG 7

## AFFORDABLE AND CLEAN ENERGY

### ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

Excessive use of fossil fuels is the major cause of climate change in the world today. At USJ we are committed to the use of alternative and cleaner energy sources, such as solar panels, and solar-powered water heating, and to the reduction of our energy needs through the use of low energy consumption and LED bulbs. Launched in 2019, our fully equipped [Green Campus](#) incorporates green technologies for the reduction of energy consumption, including:

- Solar power electricity panels
- Solar-powered hot water heating
- Energy recovery in ventilation systems and chillers
- Low consumption bulbs and LED bulbs
- Low transmission glazing
- Crossflow ventilation chimneys
- Rainwater harvesting and recycling systems
- Ledger green strips and fins
- Rooftop gardens

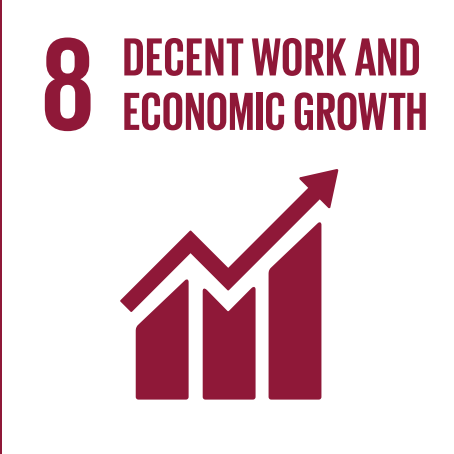


# SDG 7

7 AFFORDABLE AND  
CLEAN ENERGY







# SDG 8

## DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

### SELECTED RESEARCH

Lei, W. C., & Wang, X. (2023). Digital Renminbi: Impacts on Economic Integration of the Greater Bay Area. In E. Lau, R. K. Brahmanna, & L. M. Tan (Eds.), *Economics and Finance Readings* (pp. 1–14). Springer Nature. [https://doi.org/10.1007/978-981-99-1979-6\\_1](https://doi.org/10.1007/978-981-99-1979-6_1)

Phillips, J. O. L., & Oliveira, N. (2022). Entrepreneurial Process of SMEs in Macau. *2022 13th International Conference on E-Business, Management and Economics*, 563–568. <https://doi.org/10.1145/3556089.3556113>

# SDG 8

## DECENT WORK AND ECONOMIC GROWTH

PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

Promoting an inclusive and fair workplace is an important part of creating decent work environments and fostering economic growth. Our policies on [Equality and Diversity](#), [Non-discrimination](#) and [Anti-harassment](#), ensure equal access to employment and prevent discrimination based on age, physical ability, gender, sexual orientation, economic status, ethnicity, religious affiliation, or political persuasion.

To promote transparency and accountability, [appeal processes](#) are also in place. USJ is committed to paying all our staff above the Macao living wage. In 2022-2023 academic year, about 20% of our students participated in work placements or internships.



In 2022-2023 academic year, about **20%** of our students participated in work placements or internships.





NEWS & EVENTS

News & Events	Release Date
<a href="#"><u>USJ Hosts Faculty Development Programme 2023 on “Internationalisation in Higher Education” for Higher Education Professionals from across the Asia-Pacific</u></a>	Jul 2023
<a href="#"><u>Faculty Development Programme 2023 – “Internationalisation in Higher Education”</u></a>	Jul 2023
<a href="#"><u>USJ visited the Guangdong-Macao In-Depth Cooperation Zone in Hengqin</u></a>	Jun 2023



## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



# SDG 9

## INDUSTRY AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation

### SELECTED RESEARCH

Wong, K. S., & Lobo Marques, J. A. (2023). Exploratory Analysis of Project Management Adoption and Maturity Level of IT Companies—A Comparison between Macao and Hengqin. *Journal of Advanced Management Science*, 11(2), 124–129. <https://doi.org/10.18178/joams.11.3.124-129>

# SDG 9

## INDUSTRY AND INFRASTRUCTURE

**BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALISATION, AND FOSTER INNOVATION**

Infrastructure provides the basic physical facilities essential to business and society; industrialization drives economic growth and job creation, thereby reducing income inequality; and innovation expands the technological capabilities of industrial sectors and leads to the development of new skills.

### GOVERNMENTAL COLLABORATION

In order to promote stronger ties between academia and industry, our Vice-Rector, [Álvaro Barbosa](#), serves on the Taskforce on the Industrialisation of Research for the Higher Education Bureau of Macao.

### NEWS & EVENTS

News & Events	Release Date
<a href="#">FAH exhibits selected graduation works at the Creative Macau Gallery</a>	Nov – Dec 2022



# SDG 10

## REDUCED INEQUALITIES

Reduce income inequality within and among countries

### SELECTED RESEARCH

Correia, A. M., Forlin, C., & Sio, E. (2022). Exploring the participation and agency of students with special education needs in a Macau-Chinese secondary school. *Journal of Research in Special Educational Needs*, 22(3), 288–296. <https://doi.org/10.1111/1471-3802.12566>

# SDG 10

## REDUCED INEQUALITIES

### REDUCE INCOME INEQUALITY WITHIN AND AMONG COUNTRIES

#### ACCESSIBILITY AND EQUALITY

Our policies on [Admission, Equality and Diversity](#), [Non-discrimination](#) and [Anti-harassment](#), ensure equal access and prevent discrimination based on age, physical ability, gender, sexual orientation, economic status, ethnicity, religious affiliation, or political persuasion. Obtaining a higher education degree is important for breaking cycles of exclusion and USJ is committed to provide a [diversified culture and environment](#) to the students.

For students in our care, we provide a wide range of support measures to meet the [financial](#), [housing](#), academic, and [counselling](#) needs of students from underrepresented groups, as well as [students with special needs](#).

USJ promotes equal access to education and work for people with disabilities in accordance with the [Convention on the Rights of Persons with Disabilities](#). In 2022-2023 academic year, our students body included roughly 0.4% of students with disabilities, and 6% of our students originate from developing countries.

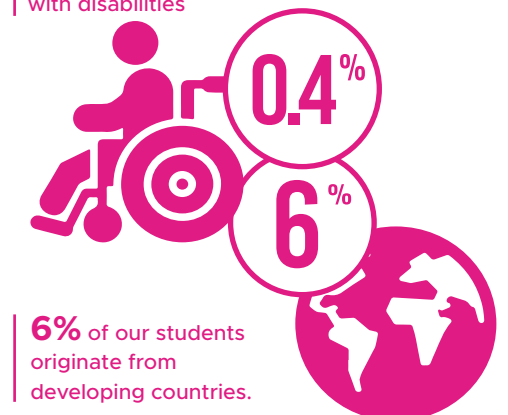
#### COMMUNITY ENGAGEMENT

Our educational [outreach programme for prison inmates](#), running since 2009, has been allowing access of incarcerated individuals to higher education, and contributing their reintegration in society.

To advocate universal sign language education and promote a disability-friendly society in Macao, [USJ signed a partnership with Macau Deaf Association](#) in 2022. In 2022-2023 academic year, USJ provide the [first Sign Language training program](#) to the professional social work community in Macau.

Furthermore, a lecture on [Supporting Visually Impaired Education](#) was organised this year, aiming to raise awareness and also support social integration of the disabled.

In 2022-2023 academic year, our students body included roughly **0.4%** of students with disabilities



**6%** of our students originate from developing countries.



# SDG 10

## REDUCED INEQUALITIES

Reduce income inequality within and among countries

### SELECTED RESEARCH

Correia, A. M., Forlin, C., & Sio, E. (2022). Exploring the participation and agency of students with special education needs in a Macau-Chinese secondary school. *Journal of Research in Special Educational Needs*, 22(3), 288–296. <https://doi.org/10.1111/1471-3802.12566>

# SDG 10

## REDUCED INEQUALITIES

### NEWS & EVENTS

News & Events	Release Date
<a href="#">USJ holds Lecture on Supporting Visually Impaired Education by alumnus Eric Leong Ka Chon</a>	May 2023
<a href="#">‘Sign Languages Unite Us’ – USJ in Action to Build an Inclusive Community</a>	Sep 2022



USJ promotes equal access to education and work for people with disabilities in accordance with the Convention on the Rights of Persons with Disabilities.

# 佈會

## COMMUNITY PRESS CONFERENCE



麥侍文  
PROF. STEPHEN MORGAN  
聖若瑟大學校長  
Rector of Holy Joseph's University



劉舒文教授  
PROF. HELEN LIU  
聖若瑟大學  
UNIVERSITY OF SAINT JOSEPH

SDG 10



## 11 SUSTAINABLE CITIES AND COMMUNITIES



# SDG 11

## SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient, and sustainable

### SELECTED RESEARCH

Jin Xue, Fangting Wang, Kun Zhang, Hehe Zhai, Dan Jin, Yusen Duan, Elly Yaluk, Yangjun Wang, Ling Huang, Yuewu Li, Thomas Lei, Qingyan Fu, Joshua S. Fu, Li Li. Elucidate long-term changes of ozone in Shanghai based on an integrated machine learning method. *Front. Environ. Sci. Eng.*, 2023, 17(11): 138 <https://doi.org/10.1007/s11783-023-1738-5>

Lampo, A., Silva, S., & Duarte, P. (2022). The Influence of Society on the Behavioural Intention to Use a Technology: Evidence from the Battery Electric Vehicles Domain. *International Journal of Business Excellence*. In press.

# SDG 11

## SUSTAINABLE CITIES AND COMMUNITIES

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT, AND SUSTAINABLE

### TRANSPORTATION

The way people get around cities is an important indicator of sustainability. At USJ, we promote the use of public transportation. Our campus is conveniently [located](#) a short distance from bus stops and a train station. In order to reduce time and energy spent commuting, USJ allows remote work for some employees.

### HOUSING

USJ provides [affordable housing](#) to staff and students in our on-campus residential building, further conserving the time and energy otherwise spent commuting to and from the University.

### COMMUNITY ENGAGEMENT

Sustainable businesses contribute to economic development and have a positive impact on the community. USJ partners with the [government and other organisations](#) to provide entrepreneurial opportunities for the development of sustainable businesses. We are committed to offer start-up opportunities in terms of training, capital, resources, space, and networking.

In 2022-2023 academic year, our students in the Faculty of Business and Law participated in a [competition](#), to contribute what they have learned in developing a sustainable e-businesses as startups with the potential to make an impact on communities across the world.

### STUDENTS' PROJECTS AND WORKSHOPS

USJ strives to provide our students with a sound academic foundation and to contribute to their integrated development as responsible global citizens. In 2022-2023 academic year, under the framework of SDGs, the students of the Bachelor of Architectural Studies and the Bachelor of Design programmes developed a [featured exhibition](#) of proposals to design a sustainable Macau.



NEWS & EVENTS

News & Events	Release Date
<a href="#">Alumni Association of USJ Visits Yunfu City</a>	Aug 2023
<a href="#">International Students Explore Macao's History and Culture</a>	Aug 2023
<a href="#">OSAA visits Sichuan on a Student Affairs' Study Tour</a>	Jul 2023
<a href="#">BA students' sustainable e-commerce projects judged at Sustaincia's business competition</a>	May 2023
<a href="#">USJ organised Dialogue with the Digital Entrepreneurs discussion at the UN WDF satellite event</a>	Apr 2023
<a href="#">BOUNDLESS BAMBOO PAVILION OPENS</a>	Dec 2022
<a href="#">Advent-Christmas Carol Service</a>	Dec 2022
<a href="#">FAH exhibits selected graduation works at the Creative Macau Gallery</a>	Dec 2022
<a href="#">USJ Fado do Estudante</a>	Nov 2022
<a href="#">ARTeFACTo2022 MACAO</a>	Nov 2022
<a href="#">The exhibition "Back to the Steps which were taken – José Saramago 1922 – 2022", at USJ now</a>	Oct 2022





# SDG 12

## RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

### SELECTED RESEARCH

Ivorra, L., Cardoso, P. G., Chan, S. K., Cruzeiro, C., & Tagulao, K. (2023). Quantification of insecticides in commercial seafood sold in East Asian markets: risk assessment for consumers. *Environmental Science and Pollution Research*, 30(12), 34585–34597. <https://doi.org/10.1007/s11356-022-24413-7>

# SDG 12

## RESPONSIBLE CONSUMPTION AND PRODUCTION

### ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

USJ is committed to increasingly adopt and promote responsible production and consumption patterns. Some of these increases are described in our [Environmental Action Plan](#).

Our campus is equipped with waste sorting equipment, and we regularly

promote our policy of waste minimization. For example, to minimize plastic waste, each floor on the USJ campus is equipped with water fountains designed for filling reusable water bottles. USJ is structuring out environment to incentivise responsible consumption habits during the highly formative years of our students.

### NEWS & EVENTS

News & Events	Release Date
<a href="#">The Sea of Plastic Exhibition Opening: A great success</a>	May 2023
<a href="#">ISE’s Plastic Pollution and Mangroves Exhibition continues</a>	Apr 2023
<a href="#">ISE hosts lab tour and microplastics workshop</a>	Feb 2023
<a href="#">ISE Science Seminars: Plastic Pollution Series</a>	Nov 2022





# SDG 13

## CLIMATE ACTION

Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy

### SELECTED RESEARCH

McNabb, T. D., & Devito, M. (2022). Climate Alarmism or Lukewarming? How So-Called American Conservatives Should Think About Climate Change. *Ethics & the Environment*, 27(1), 101–121. <https://www.muse.jhu.edu/article/858108>

# SDG 13

## CLIMATE ACTION

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS BY REGULATING EMISSIONS AND PROMOTING DEVELOPMENTS IN RENEWABLE ENERGY

At USJ, we have a commitment to our Green Campus Environment Action Plan, which includes:

- Low transmission glazing
- Cross-flow ventilation chimneys
- Solar electricity panels
- Solar hot water heating
- Energy recovery in ventilation systems and chillers
- Low consumption bulbs and LED bulbs



# SDG 13







# SDG 14

## LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

### SELECTED RESEARCH

Zhang, H., Chen, K., Tao, C., Alveirinho Dias, Á., Liang, J., Yang, W., Liao, S., An, F., Yin, B., & Sun, C. (2023). Occurrence and precipitation mechanism of silver in pyrite from chimney fragments in the Edmond hydrothermal field, Central Indian Ridge. *Ore Geology Reviews*, 105471. <https://doi.org/10.1016/j.oregeorev.2023.105471>

Zhang, S., Ru, X., Zhang, L., Gonçalves, D., & Yang, H. (2023). Examination of sex-related differences in intestinal and gonadal lipid metabolism in the sea cucumber *Apostichopus japonicus*. *Aquaculture*, 562, 738787. <https://doi.org/10.1016/j.aquaculture.2022.738787>

# SDG 14

## LIFE BELOW WATER

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

### ENVIRONMENTAL OUTREACH

In 2022-2023 academic year, USJ held a series of environmental education activities, including delivering educational talks in [local schools](#) and launching [mobile exhibitions](#), to further promote community involvement in coastal protection and mangrove conservation. USJ also participated and delivered a talk about mangrove conservation in the [Urban Biodiversity and Data Technology Forum 2023](#).

### DIRECT ACTION

Our Institute of Science and Environment (ISE) is unique in Macao for its academic focus. Much of the Institute's direct-action work is focused on [mangrove conservation](#). Among the many ecosystem benefits of mangroves, coastal protection and carbon sequestration place them at the forefront of adaptation to climate change and mitigation measures.

Continued the actions taken in previous years, USJ devoted effort in the [mangrove planting activities](#) in 2022-2023 academic year. Furthermore, numbers of [coastal clean-up activities](#) were held to make Macao's coast cleaner and the oceans safer.

### PARTNERSHIPS

Since 2019-2020 academic year, USJ partnered with the [Clean the World Foundation](#)—a global leader in water sanitation, hygiene, and sustainability—and [Las Vegas Sands Corp.](#) to facilitate The [Drop by Drop Project](#) in Macao.

This project's aim is to investigate ways to enhance local water quality through the use of native wetland plants such as mangroves, which act as natural water purifiers for water pollution and reduce water-related risks (e.g., flooding due to storm surges). The project also studies ecosystem rehabilitation and maintenance, as well as enhancement and protection of biodiversity in the local coastal wetland ecosystems.

In commemoration of World Environment Day 2023, a [recycled artwork exhibition](#) was organised to raise awareness of plastic pollution and emphasize importance of protecting our oceans and coastal systems.

NEWS & EVENTS

News & Events	Release Date
<a href="#">University of Saint Joseph’s Sea of Plastic Exhibition Culminates with Opening and Award Ceremony</a>	Jun 2023
<a href="#">ISE Promotes Macao’s Mangrove Conservation at the Urban Biodiversity and Data Technology Forum 2023</a>	May 2023
<a href="#">The Sea of Plastic Exhibition Opening: A great success</a>	May 2023
<a href="#">Green Week Carnival draws enthusiastic community participation</a>	Mar 2023
<a href="#">ISE/USJ joins the Green Week mangrove planting campaign</a>	Mar 2023
<a href="#">Clean the World announces new world-changing projects, including partnership with USJ/ISE</a>	Mar 2023
<a href="#">ISE launched the first of a series of environmental education activities for 2023</a>	Feb 2023
<a href="#">ISE hosts lab tour and microplastics workshop</a>	Feb 2023
<a href="#">Year-end Coastal Cleanup 2022</a>	Dec 2022
<a href="#">ISE Science Seminars: Plastic Pollution Series</a>	Dec 2022

News & Events	Release Date
<a href="#">ISE’s Mobile Exhibition “Macao’s Mangroves: A Coastal Treasure” is back</a>	Nov 2022
<a href="#">ISE successfully held the Microplastics Workshop for Citizen Scientists</a>	Oct 2022
<a href="#">Macao Coastal Cleanup Day 2022</a>	Sep 2022



# SDG 14



USJ Institute of Science and Environment  
Animal/ Fish Facility







# SDG 15

## LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

### SELECTED RESEARCH

Tagulao KA, Lai WI, Lebel A, Calheiros CSC. Evaluating the Potential of Mangrove Phytoremediation for Mitigating Coastal Water Eutrophication in Macao SAR: A Field and Mesocosm Study. *Sustainability*. 2023; 15(10):7830. <https://doi.org/10.3390/su15107830>

# SDG 15

## LIFE ON LAND

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

### GARDENS

In USJ we are committed to our Green Campus [Environmental Action Plan](#), which includes the use of green strip edgers and fins, and rooftop gardens.

### DIRECT ACTION

To promote local mangroves ecosystems, USJ through the institute of science and Environment, conducts a series of activities for the rehabilitation and maintenance of ecosystems, as well as the enhancement and protection or biodiversity in the local coastal wetland ecosystems, which protects Macao from damage done to the land by flooding.

### NEWS & EVENTS

News & Events	Release Date
<a href="#">The Sea of Plastic Exhibition Opening: A great success</a>	May 2023
<a href="#">USJ and Wynn Macao signed MOU for “Cherish Food and Waste Reduction-Smart Technology Application Outreach Program”</a>	Jan 2023
<a href="#">ISE successfully held the Microplastics Workshop for Citizen Scientists</a>	Oct 2022





**SDG 15**





## 16 PEACE, JUSTICE AND STRONG INSTITUTIONS



# SDG 16

## PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

### SELECTED RESEARCH

Diakite, A. D., & Marques, J. A. L. (2023). Categorization of Foreign Aid Donors: A Critical Review of the Criteria in Light of China's Reemergence as a Donor. *Journal of Global South Studies*, 40(2). <https://journals.upress.ufl.edu/JGSS/article/view/2381>

long, K. Y., & Phillips, J. O. L. (2022). Examining the impact of behavioral factors on the intention of adopting E-government services: An empirical study on the hard-to-reach groups in Macao SAR, China. *Technology in Society*, 71, 102107. <https://doi.org/10.1016/j.techsoc.2022.102107>

# SDG 16

## PEACE, JUSTICE AND STRONG INSTITUTIONS

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

In 2021-2022 academic year, [USJ's incarcerated students awarded "Outreach Programme – Prison Education Scholarships" by Social Welfare Bureau](#). USJ's department of Social Work also assisted in organising the "World Social Work Day" in Macao.

### POLICIES

In order to promote good governance, USJ has a policy to address the risk of [corruption and bribery](#), and a policy protecting [academic freedom](#).

### STAKEHOLDER ENGAGEMENT

Strong institutions promote stakeholder participation. USJ is open to the contributions of industry, government, and other groups in society, and has a policy for the identification and [engagement](#) of diverse stakeholders. The contributions of our advisory boards are important to our understanding of the needs and resources of the community.

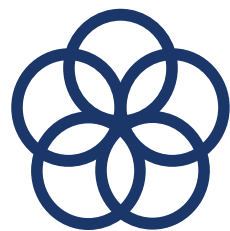


NEWS & EVENTS

News & Events	Release Date
<a href="#"><u>Macau Sex Education in the New Era Roundtable</u></a>	Mar 2023
<a href="#"><u>“Are we ready for the future of Greater Bay Area?” – Along with Youth Strategic Roundtable</u></a>	Nov 2022
<a href="#"><u>Roundtable Discussion   Transformation of Youth Development Strategy</u></a>	Nov 2022



**17** PARTNERSHIPS  
FOR THE GOALS



# SDG 17

## PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and  
revitalize the global partnership for sustainable

# SDG 17

## PARTNERSHIPS FOR THE GOALS

**STRENGTHEN THE MEANS OF IMPLEMENTATION AND  
REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE**

### POLICY DEVELOPMENT

The SDGs aim to tackle complex and multidimensional challenges requiring structural changes; therefore, partnerships are essential. USJ has established relationships with governmental and non-governmental organisations for policy development.

For example, USJ has promoted policy development by participating in the Rehabilitation International Asia & Pacific Regional Conference, presenting [data on inclusive education](#), and also through the presentation of [radical green architecture concepts](#), which are to enhance the surrounding Ilha Verde area through urban design improvements and as a way to envision new uses for the space.

### COLLABORATIONS WITH NGOs FOR THE SDGs

USJ collaborates with a number of organisations for specific SDGs as part of our environmental and social outreach programmes. For examples, in 2022-2023 academic year, USJ signed partnership with [Macau Federation of Trade Unions](#) for future development on social services, to improve the health and well-being of local community. An [MoU](#) was signed with the [Sustainable Development Association](#), to strengthen collaboration and promote sustainable development, education and technology transfer.



NEWS & EVENTS

News & Events	Release Date
<a href="#"><u>USJ and Macau Federation of Trade Unions Collaborate to Advocate for Improved Well-being of Aging Population</u></a>	Jul 2023
<a href="#"><u>USJ Volunteer Team Cares Anima Macau Cat Paradise</u></a>	Jun 2023
<a href="#"><u>USJ Presented on Intercultural Teambuilding at Conference for Global Research Collaboration</u></a>	May 2023
<a href="#"><u>USJ Faculty of Business and Law signed MoU with Sustainable Development Association</u></a>	Dec 2022
<a href="#"><u>USJ and Macau Federation of Trade Unions signed partnership for future development on social services</u></a>	Nov 2022
<a href="#"><u>USJ to collaborate future Green Activities with AECM &amp; Green Monday</u></a>	Oct 2022





# SDG PROGRESS

## MAIN CONTRIBUTIONS AND DIRECTIONS FOR THE FUTURE.

With this report, we describe our efforts to pursue the SDGs through various sustainability activities in 2022/2023. The 17 United Nations [Sustainable Development Goals](#) (SDGs) can be grouped into 5 main areas according to the challenges they aim to address: People, Planet, Prosperity, Partnerships, and Peace. Our main contribution has been to the area of People.

### MAIN CONTRIBUTION

We consider the Goals we have supported most have been in the area of People. Some highlights include our leading role in research and policy development for our [prison outreach program](#), and our focus on outreach activities that promote the [mental health and well-being](#) of the community.

#### PEOPLE



### CONTRIBUTIONS AND ADVANCEMENTS

USJ has been making efforts to actively establish and participate in partnerships and collaborations for the SDGs, and to refine and improve our institutional SDG related policies. These efforts are paying off and will be extended in the future.

#### PARTNERSHIP



#### PEACE



### DIRECTIONS FOR THE FUTURE

The main direction of our future efforts is toward the areas of “Planet” and “Prosperity.” USJ’s Institute of Science and Environment is unique in Macao for its academic focus and plays a vital role in research, monitoring, and intervention for [mangrove conservation](#) and aquatic ecosystems preservation. In the coming years, we aim to also increase contributions to land ecosystems preservation, with increased focus on the efficiency of our facilities and operations in order to better contribute to the other Planet related goals.

#### PLANET



Going forward, through our Faculty of Business and Law, we aim to also promote more community engagement regarding Goals related to prosperity and economic growth.

#### PROSPERITY



The present report has catalysed institutional reflection on our systemic efforts in the area of sustainability and we are using it to chart next steps and develop a plan for future actions.



聖若瑟大學  
UNIVERSITY OF  
SAINT JOSEPH  
MACAO

SUSTAINABLE  
DEVELOPMENT  
GOALS