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The 17 Sustainable Development Goals (SDGs) were unanimously adopted by the United Nations General Assembly in 2015 as a plan of action to create a more prosperous, inclusive, and sustainable future.

The purpose of this SDG Guide is for undergraduate students to better engage with the courses, student groups, and researchers at McGill using the framework of the SDGs.

In the ensuing sections, you will first learn about the general background of the SDGs. Next, there will be a page for each SDG, where you will find 10 undergraduate courses, 5 student groups, and 5 researchers at McGill that are associated with that SDG. Please note that the list we have compiled is by no means exhaustive. Please consult with your academic advisors before registering for one of the courses as many have prerequisites and program restrictions and as some of the courses may not be offered in a given term.

This SDG Guide is prepared by members of the McGill SDG Student Hub, an initiative of the Sustainable Development Solutions Network Youth and supported by the McGill Office of Sustainability and the McGill Sustainability Systems Initiative. Our mission is to foster a close-knit community of students who are passionate about the SDGs and to promote the SDGs on campus by organizing educational and action-oriented events and campaigns.

McGill SDG Student Hub is situated on the unceded Indigenous territory, home to the Kanien’kehà:ka Nation, the Haudenosaunee Confederacy and Anishinabeg Nation.
WHAT ARE THE SDGS?

The History

Building on the success of the Millennium Development Goals (MDGs) adopted in 2002, the 17 Sustainable Development Goals (SDGs) were proposed at the Rio+20 Summit in 2012 and unanimous adopted by 193 countries in the UN General Assembly in 2015. 169 targets accompany the 17 goals, setting out quantitative and qualitative objectives that will be achieved by 2030.

The Vision

The SDGs provide a comprehensive framework for addressing the most pressing global challenges of our time, calling for collaborative action from all countries and stakeholders to balance the three dimensions of sustainable development: economic growth, social inclusion, and environmental sustainability.

The Goals

The 17 SDGs are the following: 1) no poverty; 2) zero hunger; 3) good health and wellbeing; 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; and 17) partnerships for the goals.
SDG1: NO POVERTY

Key Targets
1.1 Eradicate extreme poverty for all people everywhere
1.2 Reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
1.3 Implement nationally appropriate social protection systems and measures for all
1.4 Ensure that all have equal rights to economic resources, access to basic services, and ownership and control over land and other forms of property

McGill Courses
- INTD200: Intro to International Development
- ECON219: Current Economic Problems: Topics
- POLI227: Developing Areas/Introduction
- SOCI254: Development & Underdevelopment
- GEOG310: Development and Livelihoods
- ECON313: Economic Development
- ECON348: Urban Economics
- INTD352: Disasters & Development
- SOCI355: Rural Life in a Global Society
- GEOG409: Geographies of Developing Asia

Student Groups
- McGill Students for UNICEF
- McGill Students for UNHCR
- McGill Students for UN Women
- McGill Students for World Vision
- 5 Days for the Homeless McGill

Researchers
- Dr. Diana Allan (Anthropology)
- Dr. Matthieu Chemin (Economics)
- Dr. Nandini Ramanujam (Law)
- Dr. Sarah Turner (Geography)
- Dr. Yann le Polain de Waroux (Geography)
SDG2: ZERO HUNGER

Key Targets

2.1 End hunger and ensure access by all people
2.2 End all forms of malnutrition
2.3 Double the agricultural productivity and incomes of small-scale food producers
2.4 Ensure sustainable food production systems and implement resilient agricultural practices
2.5 Maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species

McGill Courses

FDSC200: Introduction to Food Science
AGEC231: Economic Systems of Agriculture
AGRI325: Sustainable Agriculture & Food Security
AGEC330: Agriculture and Food Markets
AGRI340: Principles of Ecological Agriculture
NUTR341: Global Food Security
AGRI411: Global Issues on Dev, Food & Agr
GEOG423: Dilemmas of Development
AGEC430: Agriculture, Food and Resource Policy
NUTR501: Nutrition in Developing Countries

Student Groups

Midnight Kitchen
McGill Food Coalition
McGill Global Food Security Club
Mac Agroecology Group
Campus Crops

Researchers

Dr. Elsa Vasseur (Animal Science)
Dr. Gordon Hickey (Natural Resource Sciences)
Dr. Hugo Melgar-Quinonez (Human Nutrition)
Dr. Martina Stromvik (Plant Science)
Dr. Valerie Orsat (Bioresource Engineering)
Key Targets

1. Reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
2. End preventable deaths of newborns and children under 5 years of age.
3. End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases.
4. Reduce by one third premature mortality from non-communicable diseases.
5. Achieve universal health coverage.
6. Support the research and development of vaccines and medicines.

McGill Courses

- GEOG221: Environment and Health
- ANTH227: Medical Anthropology
- ANTH302: New Horizons in Medical Anthropology
- GEOG303: Health Geography
- HSEL308: Issues in Women’s Health
- SOCI309: Health and Illness
- PSYC328: Health Psychology
- SOCI390: Gender and Health
- POLI417: Health Care in Canada
- SOCI515: Medicine and Society

Student Groups

- McGill Peer Support Centre
- Sexual Assault Centre of McGill Students’ Society
- MedLife McGill
- McGill Students’ Nightline
- McGill Student Emergency Response Team

Researchers

- Dr. Eric Latimer (Psychiatry)
- Dr. Mitchell Bernstein (Medicine & Health Sci.)
- Dr. Nicholas King (Social Studies of Medicine)
- Dr. Sam Harper (Epidemiology)
- Dr. Scott Weichenthal (Epidemiology)
SDG4: QUALITY EDUCATION

Key Targets
4.1 Ensure that all girls and boys complete free, equitable and quality primary and secondary education
4.2 Ensure that all girls and boys have access to quality early childhood development, care and pre-primary education
4.3 Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education
4.6 Ensure that all youth achieve literacy and numeracy

McGill Courses
EDPD200: Integrating Ed. Tech. in Classrooms
EDPE208: Personality and Social Development
EDEC233: Indigenous Education
EDEC248: Equity and Education
EDPE300: Educational Psychology
POLI321: Issues: Canadian Public Policy
EDPE335: Instructional Psychology
EDPE355: Cognition and Education
RELG384: Religion and Public Policy
SOCI415: Education and Inequality

Student Groups
Junior Peacemakers
Beyond Me
Big Buddies Tutoring Club
McGill Students for Best Buddies
McGill SUS Peer Tutoring

Researchers
Dr. Allison Gonsalves (Education)
Dr. Elizabeth Patitsas (Education & Comp Sci)
Dr. Matthieu Chemin (Economics)
Dr. Nii Addy (Public Policy)
Dr. Peter Brown (Natural Resource Sciences)
5.1 End all forms of discrimination against all women and girls everywhere
5.2 Eliminate all forms of violence against all women and girls
5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation
5.4 Recognize and value unpaid care and domestic work
5.5 Ensure women’s full and effective participation and equal opportunities for leadership

McGill Courses
- GSFS200: Feminist and Social Justice Studies
- PHIL242: Introduction to Feminist Theory
- SOCI247: Family and Modern Society
- GSFS250: Sexual and Gender Diversity Studies
- HSEL309: Women's Reproductive Health
- ISLA310: Women in Islam
- SOCI321: Gender and Work
- ANTH341: Women in Cross-cultural Perspective
- ANTH342: Gender, Inequality and the State
- SOCI370: Gender and Development

Student Groups
- McGill Students for UN Women
- HeForShe McGill
- McGill Women in Leadership
- McGill Women in the House
- McGill Students for Oxfam

Researchers
- Dr. Alissa Koski (Epidemiology)
- Dr. Allison Gonsalves (Education)
- Dr. Maria Hwang (Gender Studies)
- Dr. Myriam Gervais (Gender Studies)
- Dr. Natalie Stoljar (Philosophy)
**SDG6: CLEAN WATER & SANITATION**

### Key Targets

6.1 Achieve universal and equitable access to safe and affordable drinking water
6.2 Achieve access to adequate and equitable sanitation and hygiene for all
6.3 Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials
6.4 Substantially increase water-use efficiency

### McGill Courses

- GEOG210: Global Places and Peoples
- BREE217: Hydrology and Water Resources
- GEOG322: Environmental Hydrology
- BREE327: Bio-Environmental Engineering
- AGRI 411 Global Issues on Dev, Food & Agr
- CIVE430: Water Treatment & Pollution Control
- BREE503: Water: Society, Law and Policy
- PARA515 Water, Health and Sanitation
- GEOG530 Global Land and Water Resources
- BREE533: Water Quality Management

### Student Groups

- Borderless World Volunteers
- Refill McGill
- McGill Students for UNICEF
- McGill Students for UNHCR
- McGill SDG Student Hub

### Researchers

- Dr. Bernhard Lehner (Geography)
- Dr. Dominic Frigon (Civil Eng.)
- Dr. Jan Adamowski (Bioresource Eng.)
- Dr. Nathalie Tufenkji (Chemical Eng.)
- Dr. Susan Gaskin (Environment)
**Key Targets**

7.1 Ensure universal access to affordable, reliable and modern energy services
7.2 Increase substantially the share of renewable energy in the global energy mix
7.3 Double the global rate of improvement in energy efficiency
7.a Enhance international cooperation to facilitate access to clean energy research and technology

**McGill Courses**

- ENVR201: Society, Environment & Sustainability
- PHYS228: Energy and the Environment
- CHEE400: Principles of Energy Conversion
- ENVR400: Environmental Thought
- CHEE401: Energy Systems Engineering
- CHEM429: Chem of Energy, Storage, Utilization
- CHEM462: Green Chemistry
- URBP506: Environmental Policy and Planning
- ECON511: Energy, Economy and Environment
- CIVE561: Greenhouse Gas Emissions

**Student Groups**

- McGill Energy Association
- Research and Sustainability Network
- SSMU Environment Committee
- Project ECOLE
- McGill SDG Student Hub

**Researchers**

- Dr. Benoit Boulet (Electrical & Comp Eng.)
- Dr. Francois Bouffard (Electrical & Comp Eng.)
- Dr. Jeffrey Bergthorson (Mechanical Eng.)
- Dr. Jinhyuk Lee (Materials Eng.)
- Dr. Patanjali Kambhampati (Chemistry)
**SDG8: DECENT WORK & ECONOMIC GROWTH**

### Key Targets

8.1 Sustain per capita economic growth in accordance with national circumstances
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation
8.5 Achieve full and productive employment and decent work for all women and men

### McGill Courses

- ECON208: Microeconomic Analysis & Application
- ECON209: Macroeconomic Analysis & Application
- GEOG216: Geography of the World Economy
- ECON302: Money, Banking & Government Policy
- ECON306: Labour Markets and Wages
- GEOG311: Economic Geography
- ECON313: Economic Development 1
- ECON326: Ecological Economics
- INDR492: Globalization and Labour Policy
- ECON511: Energy, Economy and Environment

### Student Groups

- Desautels Sustainability Network
- McGill Social Business Network
- McGill Desautels African Business Initiative
- McGill Penny Drop
- McGill Entrepreneurs’ Society

### Researchers

- Dr. Francesco Amodio (Economics)
- Dr. Kazue Takamura (International Dev.)
- Dr. Mayssun El-Attar (Economics)
- Dr. Paola Perez-Aleman (Management)
- Dr. Sonia Laszlo (Economics)
SDG9: INDUSTRY, INNOVATION & INFRASTRUCTURE

Key Targets

9.1 Develop quality, reliable, sustainable and resilient infrastructure
9.2 Promote inclusive and sustainable industrialization
9.3 Increase the access of small-scale industrial and other enterprises
9.4 Upgrade infrastructure and retrofit industries to make them sustainable
9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors
9.a Facilitate sustainable and resilient infrastructure development

McGill Courses

COMP189: Computers and Society
ECON308: Government Policy Towards Business
SOCI312: Sociology of Work and Industry
MGPO362: Fundamentals of Entrepreneurship
MGPO364: Entrepreneurship in Practice
ORGB421: Managing Organizational Change
MGPO438: Social Entrepreneur & Innovation
INSY455: Tech & Innovation for Sustainability
BUSA465: Technological Entrepreneurship

Student Groups

Desautels Sustainability Network
McGill Desautels African Business Initiative
Engineers Without Borders McGill
AERO McGill
McGill Entrepreneurs’ Society

Researchers

Dr. Darin Barney (Communications)
Dr. Madhav Badami (Urban Planning)
Dr. Michael Jemtrud (Engineering)
Dr. Tho Le-Ngoc (Electrical & Comp Eng.)
Dr. Yaoyao Fiona Zhao (Mechanical Eng.)
SDG10: REDUCED INEQUALITIES

Key Targets

10.1 Achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
10.2 Empower and promote the social, economic and political inclusion of all
10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
10.6 Ensure enhanced representation and voice for developing countries in decision-making

McGill Courses

GEOG 216 Geography of the World Economy
SOCI230: Sociology of Ethnic Relations
SOCI333: Social Stratification
INTD350: Culture and Development
SOCI366: Neighborhoods and Inequality
SOCI415: Education and Inequality
GEOG417: Urban Geography
POLI435: Identity and Inequality
ECON473: Income Distribution
SOCI550: Developing Societies

Student Groups

McGill Students for UN Women
McGill Students for Amnesty International
WeAreAware McGill
BeyondMe McGill
SSMU Equity Committee

Researchers

Dr. Diana Allan (Anthropology)
Dr. Hugo Melgar-Quinonez (Human Nutrition)
Dr. Matthieu Chemin (Economics)
Dr. Nicolas Gendron-Carrier (Economics)
Dr. Oliver Coomes (Geography)
SDG11: SUSTAINABLE CITIES & COMMUNITIES

**Key Targets**

11.1 Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
11.2 Provide access to safe, affordable, accessible and sustainable transport systems for all
11.3 Enhance inclusive and sustainable urbanization
11.6 Reduce the adverse per capita environmental impact of cities
11.7 Provide universal access to safe, inclusive and accessible, green and public spaces,

**McGill Courses**

- URPB201: Planning the 21st Century City
- GEOG217: Cities in the Modern World
- GEOG325: New Master-Planned Cities
- GEOG331: Urban Social Geography
- ARCH377: Energy, Environment, & Buildings 1
- ENVR422: Montreal Urban Sustainability Analysis
- CIVE433: Urban Planning
- ARCH515: Sustainable Design
- GEOG525: Asian Cities in the 21st Century
- ARCH562: Innovative Homes & Communities

**Student Groups**

- Project ECOLE
- Research and Sustainability Network
- MacDonald Student Ecological Garden
- The Flat Bike Collective
- Walking Birds

**Researchers**

- Dr. David Wachsmuth (Urban Planning)
- Dr. Jill Baumgartner (Epidemiology)
- Dr. Madhav Badami (Urban Planning)
- Dr. Richard Janda (Law)
- Dr. Sarah Moser (Geography)
SDG12: RESPONSIBLE
CONSUMPTION & PRODUCTION

Key Targets

12.2 Achieve the sustainable management and efficient use of natural resources
12.3 Halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains
12.4 Achieve the environmentally sound management of chemicals and all wastes
12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse

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**SDG13: CLIMATE ACTION**

### Key Targets

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters
13.2 Integrate climate change measures into national policies, strategies and planning
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

### McGill Courses

- ATOC100: Extreme-Weather & Climate-Change
- ATOC181: Introduction to Atmospheric Science
- ATOC182: Introduction to Oceanic Sciences
- ATOC183: Climate and Climate Change
- ENVR200: The Global Environment
- ATOC215: Oceans, Weather and Climate
- GEOG 205 Global Change: Past, Present & Future
- ECON 347 Economics of Climate Change
- ATOC373: Arctic Climate and Climate Change
- GEOG 514 Climate Change Adaptation

### Student Groups

- Greenpeace McGill
- Research and Sustainability Network
- Divest McGill
- Climate Justice Action McGill
- McGill Energy Association

### Researchers

- Dr. Blane Harvey (Education)
- Dr. Gail Chmura (Geography)
- Dr. Ian Strachan (Natural Resource Sciences)
- Dr. Peter Douglas (Earth Science)
- Dr. Tim Moore (Geography)
SDG14: LIFE BELOW WATER

Key Targets

14.1 Prevent and significantly reduce marine pollution of all kinds
14.2 Sustainably manage and protect marine and coastal ecosystems
14.3 Minimize and address the impacts of ocean acidification
14.4 Effectively regulate harvesting and end overfishing
14.5 Conserve at least 10 per cent of coastal and marine areas
14.a Increase scientific knowledge, develop research capacity and transfer marine technology

McGill Courses

ATOC182: Introduction to Oceanic Sciences
ATOC215: Oceans, Weather and Climate
ENVB222: St. Lawrence Ecosystems
WILD302: Fish Ecology
BIOL335: Marine Mammals
BIOL342: Topics in Aquatic Ecology
CIVE430: Water Treatment and Pollution Control
BIOL441: Biological Oceanography
BREE503: Water: Society, Law and Policy
BREE533: Water Quality Management

Student Groups

Greenpeace McGill
McGill Wildlife Association
Climate Justice Action McGill
Mac Environment Club
Research and Sustainability Network

Researchers

Dr. Frédéric Guichard (Biology)
Dr. Jennifer Sunday (Biology)
Dr. Kyle Elliott (Natural Resource Sciences)
Dr. Melania Cristescu (Biology)
Dr. Nrian Leung (Biology)
Key Targets

15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services
15.2 Promote the implementation of sustainable management of forests
15.3 Combat desertification, restore degraded land and soil
15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources
15.9 integrate ecosystem and biodiversity values into national and local planning

McGill Courses

ENVR200: The Global Environment
ENVR202: The Evolving Earth
ENVB222: St. Lawrence Ecosystems
BIOL310: Biodiversity and Ecosystems
BIOL334: Applied Tropical Ecology
ANTH339: Ecological Anthropology
WOOD441: Integrated Forest Management
PLNT460: Plant Ecology
BIOL465: Conservation Biology
SOIL535: Ecological Soil Management

Student Groups

Research and Sustainability Network
Greenpeace McGill
McGill Wildlife Association
Mac Environment Club
Climate Justice Action McGill

Researchers

Dr. Catherine Potvin (Biology)
Dr. Fiona Soper (Biology)
Dr. Gregor Fussmann (Biology)
Dr. Melissa Mckinney (Natural Resource Sciences)
Dr. Virginie Millien (Biology)
SDG16: PEACE, JUSTICE & STRONG INSTITUTIONS

Key Targets

16.1 Significantly reduce all forms of violence and related death rates everywhere
16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children
16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all
16.6 Develop effective, accountable and transparent institutions at all levels
16.10 Ensure public access to information and protect fundamental freedoms

McGill Courses

GSFS200: Feminist and Social Justice Studies
ANTH222: Legal Anthropology
PHIL240: Political Philosophy 1
GSFS305: Critical Race & Social Justice Theories
POLI362: Political Theory and Int. Relations
POLI360: Security: War and Peace
RELG370: Religion and Human Rights
RELG371: Ethics of Violence/Non-Violence
SOCI388: Crime
POLI450: Peacebuilding

Student Groups

McGill Students for Amnesty International
McGill Students for Peace and Disarmament
Peace by PEACE at McGill
Mcgill Policy Association
Quebec Public Interest Research Group at McGill

Researchers

Dr. Catherine Lu (Political Science)
Dr. Jaye Ellis (Law)
Dr. Jennifer Welsh (Political Science)
Dr. Manuel Balan (Political Science)
Dr. Megan Bradley (Political Science)
SDG17: PARTNERSHIPS FOR THE GOALS

Key Targets

17.2 Developed countries to implement fully their official development assistance commitments
17.3 Mobilize additional financial resources for developing countries from multiple sources
17.6 Enhance North-South, South-South and triangular regional and international cooperation
17.17 Encourage and promote effective public, public-private and civil society partnerships

McGill Courses

INTD200: Intro to International Development
ENVR201: Society, Environment & Sustainability
POLI244: International Politics: State Behaviour
POLI345: International Organizations
GEOG360: Analyzing Sustainability
INTD360: Environmental Challenges in Dev
ENVR400: Environmental Thoughts
MSUS401: Sustainability Consulting
POLI350: Environmental Politics
POLI449: Diplomacy in Practice

Student Groups

McGill SDG Student Hub
Desautels Sustainability Network
McGill Policy Association
Conscious Citizen McGill
International Youth Advisory Delegation

Researchers

Dr. Blane Harvey (Education)
Dr. Gwyn Campbell (History)
Dr. Paola Perez-Aleman (Management)
Dr. Erik Kuhonta (Political Science)
Dr. Vincent Pouliot (Political Science)
CONCLUSION

The 17 Sustainable Development Goals (SDGs) are a plan of action for the future of our global society. They are inclusive, universal, interrelated, and measurable, mobilizing and uniting governments, businesses, civil society, and people from around the world.

Young people are especially important in promoting sustainable development. We are the generation who will directly suffer the consequences if no effective actions are taken to tackle the pressing challenges identified in the SDGs. But with our creativity, critical thinking, entrepreneurship, and self-awareness, we can educate ourselves and those around us to address these challenges, participate in decision-making processes, and push for systemic changes.

As undergraduate students at McGill, the resources the university offers provide us with the knowledge, skills, and motivation to take actions on these challenges of our time. We hope this Guide provides you with some useful information about the courses, researchers, and student groups you can join / reach out to to better engage with the SDGs!
The McGill University Undergraduate SDG Guide is prepared by the McGill SDG Student Hub, an initiative of the Sustainable Development Solutions Network Youth.

The main contributor and designer of this Guide is Geneva Yang, the Coordinator of the McGill SDG Student Hub.

The other contributors and reviewers are from the McGill Office of Sustainability, the McGill Sustainability Systems Initiative, and the steering committee of the McGill SDG Student Hub.

2. UN. What are the SDGs, their targets, indicators, and statistics. https://sdgs.un.org/goals


Don’t hesitate to reach out (mcgillsdgstudenthub@gmail.com) if you have any questions / concerns / feedback!
REFERENCES

1. THE 17 GOALS | Sustainable Development. sdgs.un.org/goals.

* Note on methodology: The courses are selected using keyword searches and manual review. Keywords can be found on Elsevier website (https://www.elsevier.com/about/partnerships/sdg-research-mapping-initiative). The researchers are selected mainly from MSSI Dashboard. Some researchers are selected using keyword searches and manual review. The student groups are selected based on past mapping work done by the McGill Office of Sustainability.