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Education towards Sustainability,
York University

ESD, SDG 12 and Higher Education

International Association of Universities IAU SDG 12 Network

May 6th, 2019

Regina, Canada

Charles Hopkins

UNESCO Chair

York University Toronto Canada



Scope



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- **Emerging trends in education and sustainable development**
- Education for sustainable development: perspectives
- Importance of HEI
- Issues re: SDG 12 and HEI
- A suggestion re: an overarching framework

Education's changing foci



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Traditional foci

- Individual competence
- Quality
- PISA (M,L,S)
- Vocation
- Equity: gender
- STEM

Emerging foci

- Common good
- Quality includes values/ethics
- Education 2030
- Well-being
- Identity: equity, gender, sexuality ...
- STREAM, AI

Changing purposes of education



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1996 UNESCO “Delors”

- To know
- To do
- To be
- To live together

2016 UNESCO 2030 Agenda with SDGS

- To know + **be aware of unknown**
- To do + **be engaged**
- To be + **ensure equity for others**
- To live together + **with “others” sustainably**

UNESCO's Global Futures of Education Project (April 2019)



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“When inequalities deepen, when digital, big data and artificial intelligence open new perspectives, when cognitive sciences disrupt traditional approaches to learning, [...] then it is crucial to rethink education.”

Audrey Azoulay, Director-General, UNESCO

Futures of Education Project: 2 interrelated tracks prepared



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1. Establishment of an independent **International Commission** of eminent personalities and thought leaders of diverse expertise and perspectives from the worlds of politics, academia, the arts, science and business
2. Second, a **broad process of engagement** with multiple stakeholder networks and platforms to ensure the insight of youth, educators, civil society, researchers, policy-makers, and business and technology partners

Futures of Education Project: “Learning to become”



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- The future of sustainability
- The future of knowledge
- The future of learning and teaching
- The future of work, skills and competencies
- The future of citizenship, democracy and social cohesion
- The future of public education
- The future of higher education, research and innovation

The Global Education 2030 Agenda



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Global goal SDG 4

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

SDG 4: By 2030 all learners will have...



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- 4.1 Complete free quality primary and secondary school
- 4.2 Access to early childhood education and care
- 4.3 Affordable quality technical, vocational, tertiary, & university
- 4.4 Skills for employment and entrepreneurship
- 4.5 Eliminate gender disparities, indigenous and vulnerable
- 4.6 Ensure youth and “most” adults have numeracy & literacy
- 4.7 Knowledge and skill for sustainable development (ESD)

The Global Education 2030 Agenda



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Global goal SDG 4

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



SDG target 4.7

by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including ...through **education for sustainable development** ... sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, **global citizenship**, and appreciation of cultural diversity and of culture's contribution to sustainable development.

ESD: more than SDG4

“Recognizing also the role of education for sustainable development in promoting and enhancing public awareness of the eradication of poverty, of sustainable consumption and production, of combating climate change, ...”

“Reaffirms education for sustainable development as a vital means of implementation for sustainable development, ... and as an integral element of the Sustainable Development Goal on quality education and a key enabler of all the other Sustainable Development Goals”

UNGA Res 72, 222 2017



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ESD: 30 years in the making?



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- Integral part of Agenda 21(1992)
- ESD a parallel process with Education for All (2000—2014)
- UN Decade on ESD (2005-2014)
- ESD Global Action Programme (2015-2019)
- 2030 Agenda with SDGs (2016-2030)
- Global Education 2030 Agenda (2016-2030)
- UNGA statement on ESD (2017)
- ESD for SDG (2020-2030)
- UNESCO's Global Futures of Education Project

The 4 major aspects of ESD



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1. **Access to and retention** within quality education system(s) ranging from pre-school to life-long learning. (SDG 4 targets 1-6)
2. **Reorienting existing education** and training systems to address a sustainable future. (SDG 4 target 4.7)
3. **Public awareness and understanding** of the concept of sustainability issues and means of informed action (all SDGs)
4. **Training** programs for all sectors including private and public sector workplaces (all SDGs)

ESD or another adjectival education?



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Environmental Education, Population Education, Development Education, Energy Education, HIV/AIDS Education, Permaculture Education, Citizenship Education, Democracy Education, Consumer Education, Media Education, Outdoor Education, Experiential Education, Workplace Education, Conservation Education, Anti-Racist Education, Religious Education, Equity Education, Gender Education, Holocaust Education, Entrepreneurship Education, Horticulture Education, Water Education, Global Education, Drug Education, Sex Education, International Studies, Family Studies, Human Rights Education, Women's Studies, Native Studies, Values Education, Natural History Education, Vocational Education, Economic Education, Anti-smoking Education, Conflict Resolution Education, Workplace education, Disaster Prevention Education, Computer Studies, Life-Skills Education, Recycling Education, Civics Education, Heritage Education, Community Studies, Multicultural Education, Anti-Violence Education, Systems Thinking Education, Futures Education, Biodiversity Education, Pioneer Studies, Nutrition Education, Resource Management Education, Self-Image Education, Peace Education, Leadership Education, Cooperative Education, Character Education,...

Global Education Monitoring Report: indicators in target 4.7



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The extent to which global citizenship education and education for sustainable development including gender equality and human rights are **mainstreamed in all levels of (a) national education policies (b) curricula (c) teacher education and (d) student assessment.**

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Societal challenges for 2030: implications for education and well-being of all



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Provide for 40% more people while:

- addressing poverty, exclusion, social justice
- using less water, land, ocean food resources
- changing our consumption/lifestyle patterns
- quadrupling the global energy supply
- addressing mega issues: climate change, biodiversity loss etc.
- creating employment in decent work

Societal opportunities for 2030: implications for education and well-being of all



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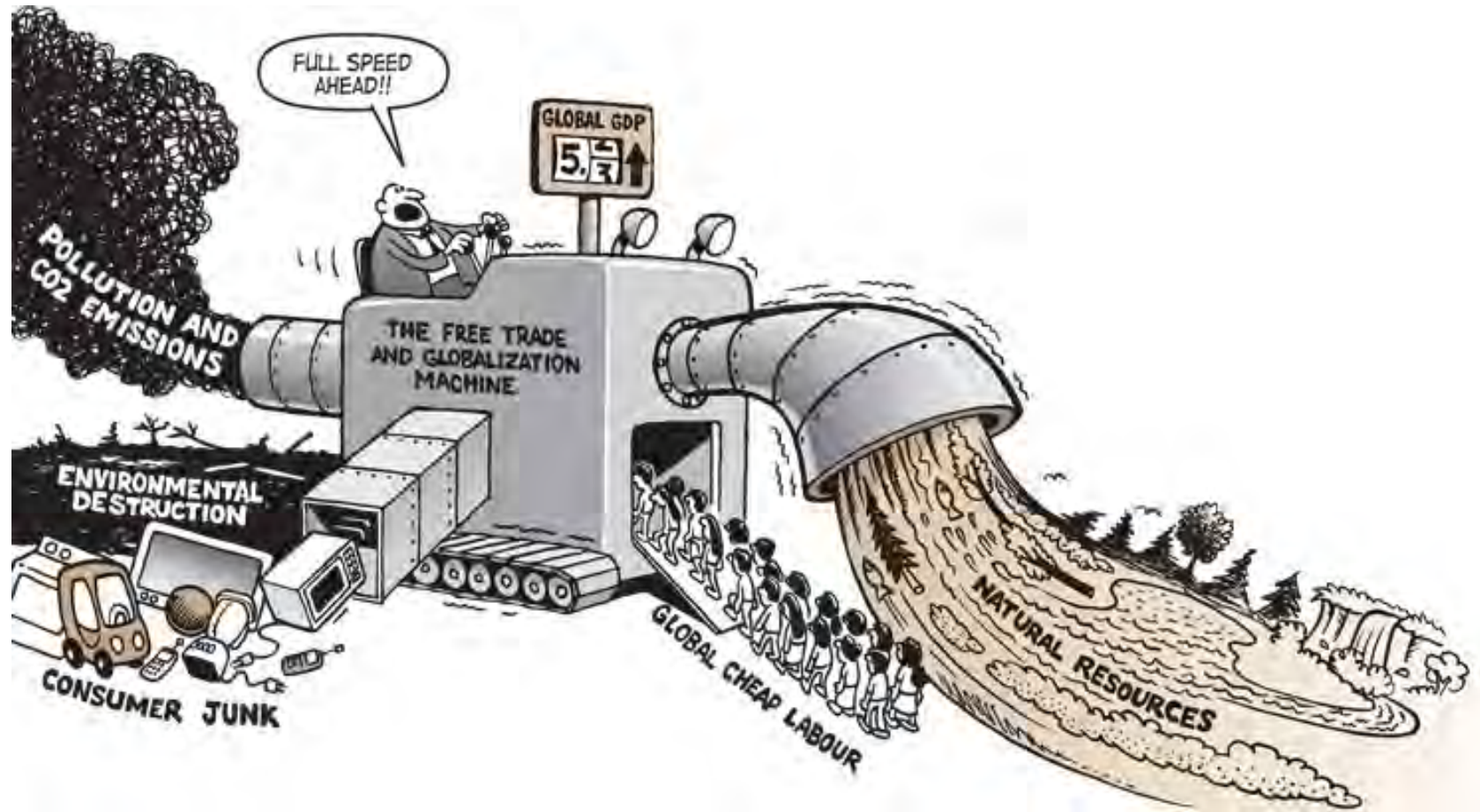
STEM and SCP



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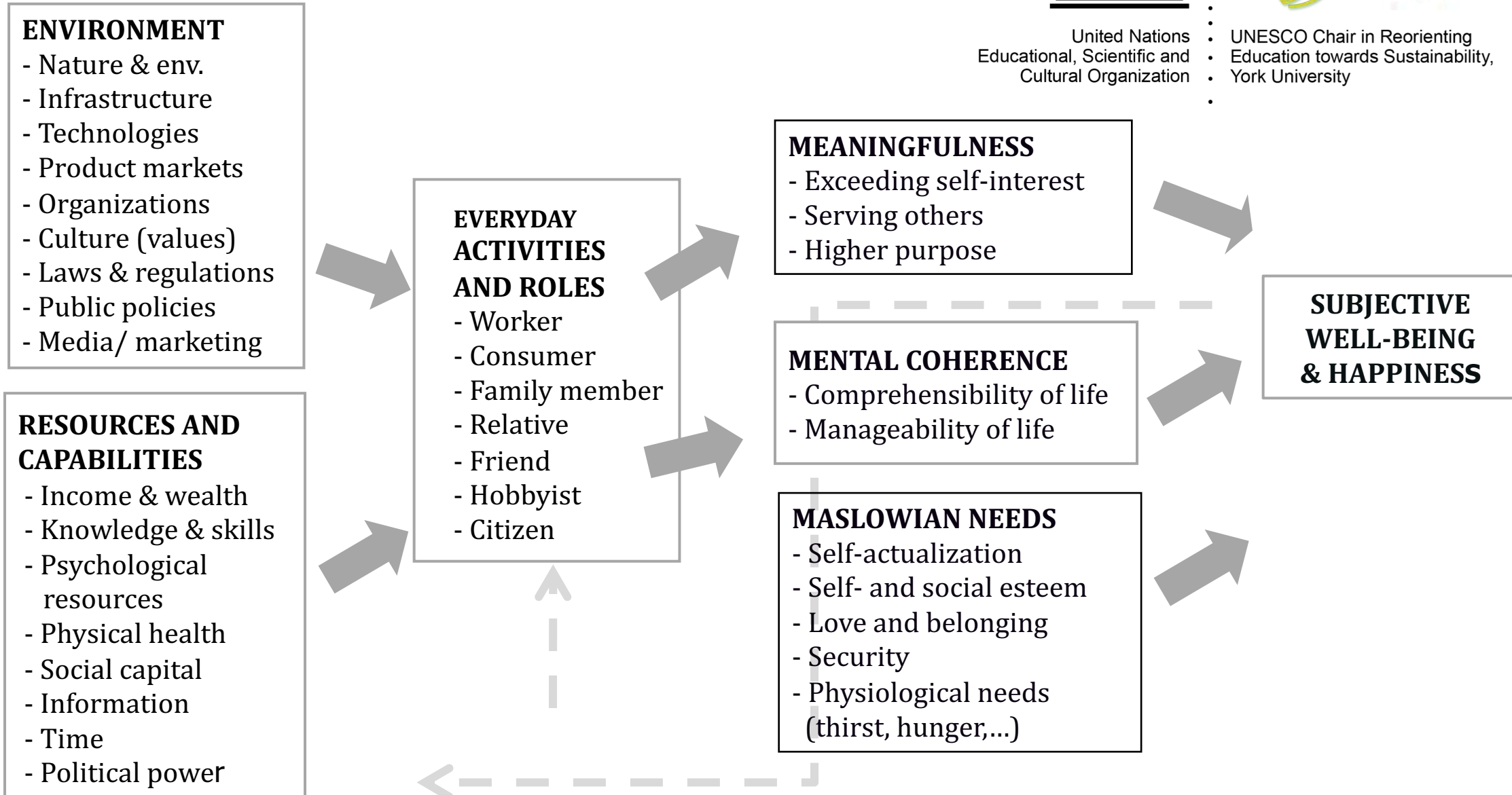
Social sciences and well-being



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Scope of rankings



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BUILDING A RANKING



- THE collects data for 11 SDGs in the first year
- Each SDG has a number of metrics associated with it
- Universities may submit data to as many of the SDGs as they wish (minimum of 4)
- This will always include 17 – Partnerships for the Goals
- Evidence to be submitted (public domain expected)



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Most important SDGs



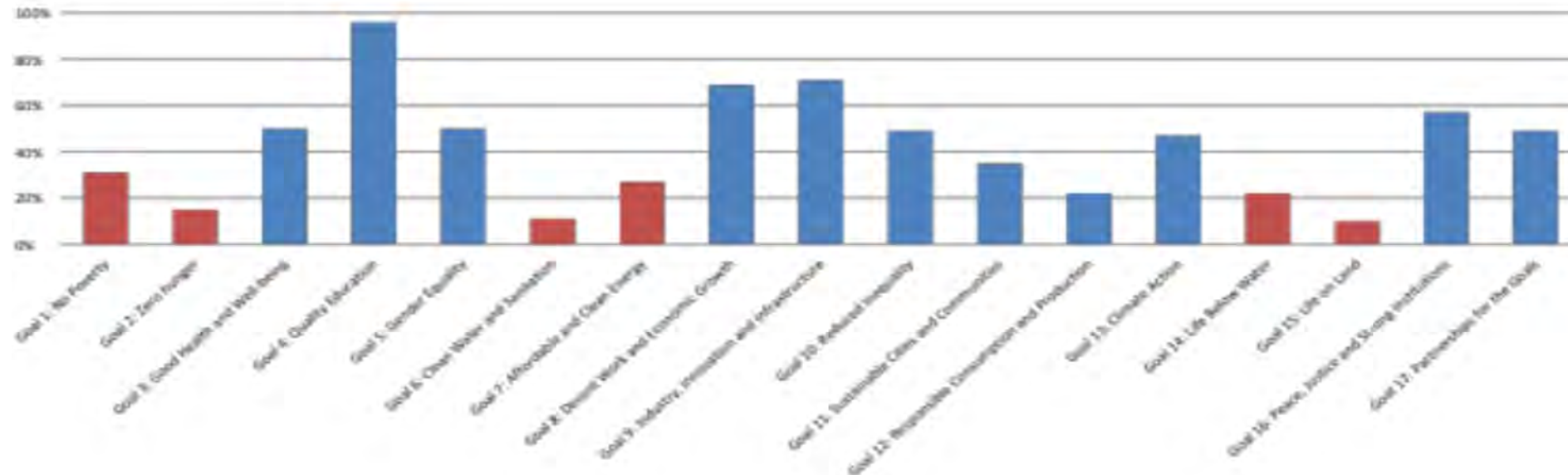
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WHICH OF THE FOLLOWING SDGs ARE THE MOST RELEVANT TO UNIVERSITIES?



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Dominated by UK, Scandinavia



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- THE table on SDG 12 – **responsible consumption and production** measures universities' research on responsible consumption and their approach to the sustainable use of resources.
- The list includes more than 200 universities from 56 countries.
- Japan is the most-represented nation in the table with 24 institutions, followed by the UK with 18 and Russia with 17.

THE rankings: SDG 12

research, outreach and stewardship



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1. University College Cork (Ireland)
2. Newcastle University (UK)
3. University of Dundee (UK)
4. University of Eastern Finland
5. University of Aberdeen (UK)
6. Aalto University (Finland)
7. Bournemouth University
8. University of Manchester
9. University of Strathclyde
10. City University of London
11. University of Gothenburg
12. University of South Hampton (UK)
13. King's College London (UK)
14. University of Leicester (UK)
15. University of Bergen (Norway)
16. JSS Academy of Higher Education (India)
17. University of Worcester (UK)
18. Laval University (Canada)
19. Arizona State University (USA)
20. University of Barcelona (Spain)
21. Polytechnic University of Valencia (Spain)
22. York University (Canada)

Indicators



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- Publishing
- Research with international co-op in SGD
- Reputation
- Relationships with NGOs, Government etc. re: SDG

Further work



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End poverty in all its forms everywhere



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



Ensure access to water and sanitation for all



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



Conserve and sustainably use the oceans, seas and marine resources



Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss



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Moving forward



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- Creating the image of Higher Education as the key to SDG implementation.
- IAU's history in promoting ESD
- New strategies (Colleges and Institutions of Canada)
- UNESCO-UNEVOC

Greening TVET



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Technical and vocational
education: TVET, bringing
sustainability to SMEs



https://unevoc.unesco.org/go.php?q=page_greening_tvete

Transforming TVET: Whole institution



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Green Campus

Managing Campus

- Resource Mg
- Technology deployment
- Monitoring

Green Curriculum

Promoting SD

- Cleaner technology
- Defining learning outcome
- Integrating ESD
- Teacher PD

Green Community

Adapting Community

- Capacity Building
- Renewable Tech
- Resource Support
- Unique Practices

Green Research

Fostering Research

- Renewable Energy
- Water Treatment
- Green Innovations
- Waste Recycling

Green Culture

Promoting Culture

- Green Values
- Green Attitude
- Green Ethics
- Green Practices

A Canadian initiative



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- Colleges and Institutions Canada initiative to pursue a whole institution approach to Education for Sustainable Development and Global Citizenship with a focus on SDGs. 1
- SDG 12 is a natural focus addressing all aspects of Higher Education.

Institutional intentionality



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- If the SDGs can be achieved by the United Nations' target date of 2030, the global economy will grow by an estimated \$12 trillion, with the potential for 2-3 times that.
- Commitment to the SDGs is only growing - 373 asset owners with \$19 trillion in assets under management have signed on to the Principles for Responsible Investment, an initiative that closely maps to the SDGs.

17 Asset Management

Financial Services New York (USA)

Institutional intentionality



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- Aligning institutional investors with the global SDG agenda
- The SDG framework is a guide to the economy of the future

HEI and SDGs



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Opportunities and responsibilities !

Can we rise to the occasion quickly and effectively?



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Thank you.

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