

# **The 17 UN Sustainable Development Goals and the Role of Universities**

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# GETTING STARTED WITH THE SDGS IN UNIVERSITIES

A GUIDE FOR UNIVERSITIES, HIGHER EDUCATION INSTITUTIONS, AND THE ACADEMIC SECTOR



(2017)

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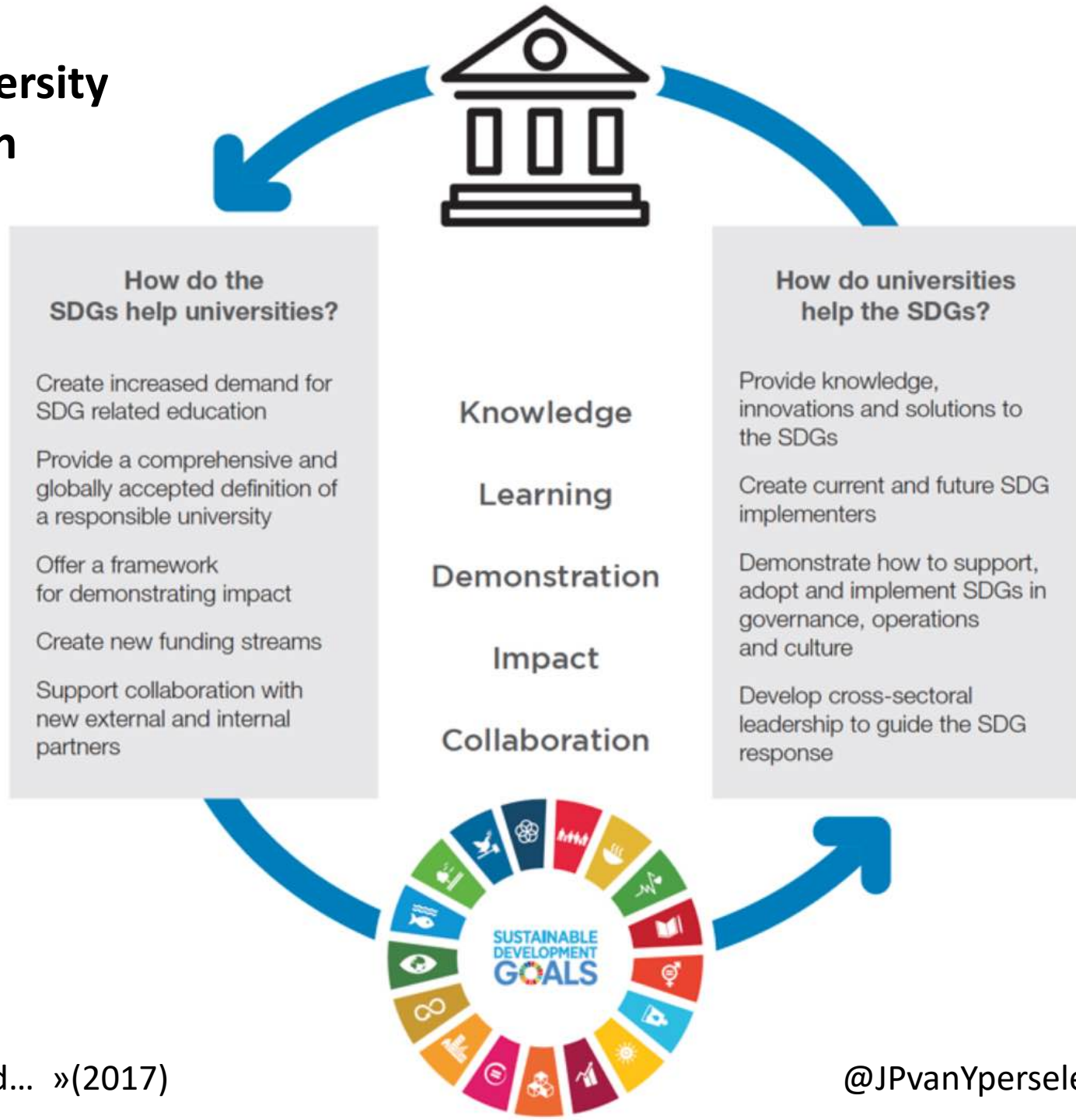
# « Getting started with the SDGs in universities » (1)

- **1. Why the SDGs matter to universities**
  - 1.1 What are the SDGs?
  - 1.2 The case for university engagement in the SDGs
- **2. How universities can contribute to the SDGs**
  - 2.1 Learning and teaching
  - 2.2 Research
  - 2.3 Organisational governance, culture and operations of the university
  - 2.4 External leadership

# « Getting started with the SDGs in universities » (2)

- **3. The SDG-engaged university**
  - 3.1 Step 1: Map what you are already doing
  - 3.2 Step 2: Build capacity and ownership of the SDGs
  - 3.3 Step 3: Identify priorities, opportunities and gaps
  - 3.4 Step 4: Integrate, implement and embed
  - 3.5 Step 5: Monitor, evaluate and communicate
- **4. Tools and guidance for SDG integration**
  - 4.1 Mapping university contributions to the SDGs
  - 4.2 Running a stakeholder engagement workshop
  - 4.3 Building the business case for university engagement
  - 4.4 The University Commitment to the SDGs
  - 4.5 Managing interlinkages
  - 4.6 Reporting on SDG contributions

# The case for university engagement with the SDGs



# Overview of university contributions to SDGs

Research on the SDGs  
Interdisciplinary and transdisciplinary research  
Innovations and solutions  
National & local implementation  
Capacity building for research



Education for sustainable development  
Jobs for implementing the SDGs  
Capacity building  
Mobilising young people

Governance and operations aligned with SDGs  
Incorporate into university reporting

Public engagement  
Cross-sectoral dialogue and action  
Policy development and advocacy  
Advocacy for sector role  
Demonstrate sector commitment

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# SDG 4: Quality Education



**Calls for  
« inclusive and equitable  
quality education and  
promot[ing] lifelong learning  
opportunities for all. »**

# SDG 4 targets relating directly to learning & teaching

- 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship



# SDG 4 targets relating directly to learning & teaching

- 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education (...) for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and 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

# SDG 4 targets relating directly to learning & teaching

- 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 4.b By 2020, substantially expand globally the number of scholarships available to developing countries (...) for enrolment in higher education, (...) in developed countries and other developing countries
- 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, (...)

# SDG 4: What can universities do

- Provide students with the knowledge, skills, and motivation to understand and address the challenges of the SDGs
- Empower and mobilise young people
- Provide in-depth academic or vocational training to implement SDG solutions
- Enhance opportunities for capacity building of students and professionals from developing countries to address challenges relating to the SDGs

## **Provide students with the knowledge, skills, and motivation to understand and address the challenges of the SDGs**

To become effective SDG implementers, students need [13, 14]:

- Cross-cutting skills and ‘key competencies’ that are relevant to addressing all of the SDGs: systems thinking, critical thinking, self-awareness, integrated problem-solving, and anticipatory, normative, strategic and collaboration competencies; creativity, entrepreneurship, curiosity and learning skills, design thinking, social responsibility, partnership competencies, and being comfortable in inter-disciplinary settings.
- A basic understanding of the subject areas of each of the SDGs.
- Knowledge and understanding of the SDG framework itself and its purpose and uses.

Education for the SDGs is closely aligned with the more general and well-established field of education for sustainable development (ESD), and can build on its approaches and methodologies. ESD is also increasingly focussed on the SDGs and is developing resources and tools especially for them, such as learning objectives [15] and literacy tests<sup>i</sup>.

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<sup>i</sup> For example, Sulitest ([www.sulitest.org](http://www.sulitest.org)).

To contribute to education for the SDGs, universities can:








- Integrate the SDGs and the principles of ESD into all undergraduate and graduate courses, as well as graduate research training
- Provide training on the SDGs and ESD to all curriculum developers, course coordinators and lecturers
- Offer executive education and capacity building courses for external stakeholders on the SDGs and the knowledge and skills needed to address them
- Advocate for national and state education policies that support education for the SDGs
- Engage students in the co-creation of learning environments and opportunities that support learning on the SDGs
- Structure courses around real-world collaborative projects for change, in which the students have the opportunities to act and reflect iteratively, and to develop adaptive capacity while working towards a purpose

# Research

Source: « Getting started... »(2017)

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Table 2: SDG targets relating directly to research.

Goal	Target
	<p>9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</p> <p>9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities</p>
    	<p>SDGs 2.a, 3.b, 7.a, 12.a, refer to the need for scientific research and input on sustainable agriculture, vaccines development, and sustainable consumption and production, respectively. SDGs 14.3, 14.4, 14.5, 14.a refer to the need for scientific input in addressing ocean and fisheries management.</p>
	<p>17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</p> <p>17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology</p>

# Research: What can universities do (1)

- Encourage and promote the SDGs as a topic of research within the university
- Support the full spectrum of research approaches needed to address the SDGs, including interdisciplinary and transdisciplinary research
- Support and incubate innovation for sustainable development solutions

Source: « Getting started... »(2017)

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# Research: What can universities do (2)

- Actively support national and local implementation of the SDGs
- Advocate for national support and coordination of research on the SDGs
- Support capacity building for developing countries to undertake and use research on the SDGs

Source: « Getting started... »(2017)

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# ORGANISATIONAL GOVERNANCE, CULTURE AND OPERATIONS OF THE UNIVERSITY

Source: « Getting started... »(2017)

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Goal	Examples of actions
 <p>1 NO POVERTY</p>	<ul style="list-style-type: none"> <li>• Ensuring Fair Trade and ethical supply chains</li> <li>• Investment policies that promote Environment, Social and Governance (ESG) principles</li> <li>• Providing support structures for students living in poverty, such as scholarships and assistance packages</li> </ul>
 <p>2 ZERO HUNGER</p>	<ul style="list-style-type: none"> <li>• Providing sustainable, nutritious and affordable food choices on campus</li> <li>• Facilitating food production on campus</li> <li>• Offering fresh food markets on campus</li> <li>• Introducing measures to reduce food waste on campus</li> </ul>
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<ul style="list-style-type: none"> <li>• Providing access to affordable health and wellbeing services on campus</li> <li>• Providing wellbeing programs for staff and students to reduce incidence of non-communicable diseases and promote mental health</li> <li>• Implementing 'no smoking' policies on campuses</li> <li>• Ensuring appropriate practices are in place for dealing with hazardous substances</li> </ul>
 <p>4 QUALITY EDUCATION</p>	<ul style="list-style-type: none"> <li>• Supporting vulnerable and disadvantaged people to access and participate fully in the university, including persons with disabilities, indigenous peoples, and people experiencing financial difficulty</li> <li>• Providing programs to enhance literacy and education in communities and schools in the university's local area and beyond</li> <li>• Providing facilities that promote and encourage inclusivity in learning</li> </ul>
 <p>5 GENDER EQUALITY</p>	<ul style="list-style-type: none"> <li>• Implementing workplace gender equity strategies, including those for improving the representation of women in university leadership positions and senior academic roles</li> <li>• Working to close the gender pay gap</li> <li>• Providing childcare on campus and promoting workplace flexibility</li> <li>• Participating in national campaigns for preventing violence against women and committing to report on the number of sexual assaults that have taken place at the institution</li> </ul>

Source: « Getting started... »(2017)

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**Goal****Examples of actions**

- Incorporating aspirational environmentally sustainable design aspects into capital works
- Providing free drinking water for students, staff and visitors
- Instituting zero-net emission policies and investing in on-campus renewable energy production
- Putting climate mitigation and adaptation strategies in place
- Including climate change risk in risk reporting frameworks
- Developing long term resource efficiency and management plans
- Developing management and guardianship plans for on-campus and surrounding waterways
- Developing management and guardianship plans for on-campus biodiversity and ecosystems
- Installing appropriate drainage traps to minimise pollution
- Installing water harvesting, storage and reuse systems
- Reducing all waste (including hazardous waste) and increasing recycling
- Ensuring safe practice expectations for hazardous waste handling and disposal
- Increasing use of sustainable transport
- Incorporating sustainability and ethical considerations into purchasing policies, procedures and activities
- Monitoring and reporting on sustainability performance through to Council level
- Engaging staff and students in all sustainable campus activities



- Aligning employment, training and regulation policies to be consistent with commitments to equity and access strategies and targets
- Providing appropriately positioned and supported scholarship and financial assistance schemes for students in need
- Supporting creativity and innovation through a culture of acceptable risk-taking, providing the appropriate space and process for ideas to flourish
- Monitoring employment outcomes and academic workload management
- Implementing socially and environmentally responsible procurement policies and procedures, affecting up and down the supply chain
- Critically querying the role of economic growth
- Issuing only green bonds where bonds are required



- Testing and piloting innovative solutions to improving operations on campus
- Committing to building sustainable and resilient infrastructure that supports wellbeing and minimises environmental impact
- Ensuring retrofits of existing buildings increase resource efficiency and adopt clean and environmentally sound technologies
- Committing to sustainable and reliable Information and communications technology processes and services

Source: « Getting started... »(2017)

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- Managing the pay gap between lowest and highest paid staff
- Instituting an equity agenda and plan that commits to equal opportunity and reduced inequalities in all processes and activities, most notably pay
- Committing to the elimination of discrimination across the university by ensuring the diversity of the population has the opportunity to be represented and have a voice in the decision-making process
- Providing a supportive, inclusive and safe working and learning environment for people from financially and socially disadvantaged, backgrounds, people from rural and regional areas, people with disabilities, women in the workplace, people of diverse genders and sexualities and people from diverse cultural and faith communities



- Scaling up and delivering sustainable solutions to global challenges developed by the university for the wider community and industry
- Providing safe and affordable on-campus and/or university supported housing
- Committing to the development of and investment in the university's local community and areas of greatest influence (where possible)
- Allowing fluid campus boundaries to encourage the use of green space by local community members as a public amenity
- Committing to ensure the campus always remains safe, green, and provides accessibility for all levels of mobility
- Implementing best practice pollution control (including air) and waste management processes and policies
- Working with local and state government to advocate for greater access to and provision of sustainable transport systems including public transport and bike paths



- Developing policies, procedures and plans to ensure the campus is safe for all staff, students and visitors
- Ensuring that procurement policies and procedures clearly indicate an intolerance to working with any companies known or found to be involved in exploitation of people
- Ensuring that investment policies preclude investment in industry that deals in arms, human trafficking and/or modern slavery
- Ensuring that the policies and culture of the institution clearly indicate that bribery, corruption, violence, crime and acts of terrorism is unacceptable
- Organising cross-cultural and inter-faith activities on campus
- Ensuring that all staff and students have access to justice and information about their rights
- Involving staff, students and key stakeholders in university governance decisions



- Building strategies and culture that openly supports developing, maintaining and enhancing partnerships both internally and externally

Source: « Getting started... »(2017)

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# External Leadership: What can universities do?

- Strengthen public engagement and participation in addressing the SDGs
- Initiate and facilitate cross-sectoral dialogue and action on SDG implementation
- Play a lead role in policy development and advocacy for sustainable development
- Demonstrate the importance of the university sector in SDG implementation
- Demonstrate university sector commitment to the SDGs

# SDG integration process



Source: « Getting started... »(2017)

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# Template cross-university SDG workshop

## Potential objectives

- To build a basic understanding of the SDGs
- To bring key people on board with the SDGs and build champions
- To identify strengths, gaps, priorities, and opportunities for university engagement with the SDGs, and develop a plan for putting them into action
- To create links and a shared purpose for people working in different areas of the university

## Length

- Half to full day

## Participants

- University leadership, key sustainable development leaders in the university, external relations, representatives from each faculty and from operational areas, student reps (for example from relevant clubs and societies), key external stakeholders

## Presentations (first half)

- What are the SDGs and how is the world responding to them?
- How can the ambitions of the SDGs be translated into action?
- Interesting and relevant examples of how the SDGs have been used (within the area, by external stakeholders, by other universities)
- Short reflections from a variety of stakeholders on the opportunities of the SDGs for the university

## Discussion questions / breakout groups (second half)

- How does what I do align with the SDGs? How could I do more to contribute to them?
- How does the current work of the university relate to or contribute to the SDGs – which SDGs and how?
- What are our strengths, what are our gaps and opportunities? How do these align with the university's priorities and values?
- How can we use the SDG framework to improve and showcase what we currently do?
- What are the areas of common interest within the university? Can we use these linkages as the basis for collaboration?
- What are the structural barriers/challenges? What needs to change to promote more action?
- What needs to happen to realise opportunities? What are next the steps?

## Outcomes

- Workshop report
- Plan of action for the university
- Communication to the whole university

## Tips

- Ensure that the content and activities are meaningful to all the participants, regardless of their background or area of the university. For example, ensure that discussion questions make sense from the perspective of all participants
- Use a combination of presentation and activities that allow discussion

Source: « Getting started... »(2017)



# GREENING UNIVERSITIES TOOLKIT V2.0

TRANSFORMING UNIVERSITIES INTO GREEN AND SUSTAINABLE  
CAMPUSES : A TOOLKIT FOR IMPLEMENTERS

ADVANCE COPY



(UNEP, 2014,  
Available on [www.UNEnvironment.org](http://www.UNEnvironment.org))

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# Core set of environmental performance indicators for universities (recommended by the UNEP toolkit)

ELEMENT	METRIC	UNITS*	COMMENTS
Energy, carbon and climate change	Scope 1 and 2 greenhouse gas emissions	tCO <sub>2</sub> e/capita	Measurement of Scope 1 & 2 emissions disaggregated to source is regarded as the minimum requirement. Best practice will include Scope 3.
	Electricity consumption	kWh/m <sup>2</sup> floor space kWh/capita	In most cases, this will be the largest contributor to a university's GHG emissions. Proportion of electricity derived from onsite and/or renewable sources should be separately recorded.
	Natural gas consumption	GJ/m <sup>2</sup> floor space GJ/capita	Any natural gas used in cogeneration and trigeneration should be separately recorded.
	Transport energy consumption	kL fuels Passenger kilometres	Minimum requirement for measurement is the university vehicle fleet. Best practice will include air travel and commuter travel modal split.
Water use	Potable and non-potable water consumption	kL/m <sup>2</sup> floor space kL/capita	Should include consumption of collected rainwater and any other sources of water reuse.
	Wastewater production	kL/capita	Volume of greywater and blackwater which is reused is captured by the previous indicator
Land use	Proportion of certified green buildings by floor area	m <sup>2</sup> /m <sup>2</sup>	This indicator is assumed to integrate the workplace health, environmental and productivity benefits of green buildings.
	Proportion of pervious / impervious surfaces	m <sup>2</sup> /m <sup>2</sup>	Proxy metric for anthropogenic impact on hydrological cycles and urban microclimate.
	Vegetation cover	m <sup>2</sup> /m <sup>2</sup>	Proxy estimate of vegetation ecosystem services. May be supplemented by measurement of leaf area index (LAI) which enables a more refined estimate (see Technical Appendix).
Material flows	Solid waste disposal	kg/capita	Can be disaggregated into categories, e.g. municipal solid waste, construction and demolition, hazardous, e-waste, etc.
	Solid waste recovery	kg/kg (diversion rate)	Can be disaggregated into material types where required.
	Material use	kg/capita	Typically one or a few representative materials such as paper will be selected. Best practice will require a more comprehensive material balance.

\*Given as SI units here, actual units employed will depend on country. Note that "per capita" refers to the total population of the university (staff + students).

# Les 17 Objectifs de Développement Durable, adoptés par l'ONU en septembre 2015



**OBJECTIFS DE DÉVELOPPEMENT DURABLE**



**SOLIDARITÉ climatique**  
UN MOUVEMENT ANIMÉ PAR **geres**

# Pour en savoir plus :

- [www.ipcc.ch](http://www.ipcc.ch) : GIEC ou IPCC
- [www.climate.be/vanyp](http://www.climate.be/vanyp) : beaucoup de mes dias
- [www.plateforme-wallonne-giec.be](http://www.plateforme-wallonne-giec.be) : Plateforme wallonne pour le GIEC (e.a., Lettre d'information)
- [www.my2050.be](http://www.my2050.be) : calculateur de scénarios
- [www.realclimate.org](http://www.realclimate.org) : réponses aux semeurs de doute
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