Assessment of the Contribution of IUPAC Projects to the Achievement of the United Nations Sustainable Development Goals

Project no. 2020-011-2-041

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ASSESSMENT OF THE CONTRIBUTION OF IUPAC PROJECTS TO THE ACHIEVEMENT OF THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

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Project No.: 2020-011-2-041
Start Date: 01 October 2020

Impact
Broad IUPAC Division and Committee participation and representation in project outcomes
The International Union of Pure and Applied Chemistry (IUPAC)

WHO WE ARE

- “We are the catalyst that unites chemists worldwide and we fulfill our mission by fostering sustainable development, providing a common language for chemistry, and advocating the free exchange of scientific information.”

PROJECT 2020-011-2-041 OBJECTIVES

- Reflect and evaluate the contributions IUPAC projects have made to achieving the UN SDGs
  - Through knowledge sharing and standards of chemical practice
  - Raise IUPAC visibility as major contributor
  - Illustrate broad representation of divisions and committees

https://iupac.org/who-we-are/
Task 1: Analysis of IUPAC Projects according to IUPAC Committees and Divisions
   ✔ 264 projects gathered and organized into a spreadsheet

Task 2: Survey of all IUPAC Projects and categorize them according to the SDGs
   ✔ Interdisciplinary effort from divisions and committee representatives

Task 3: Identification of a synergy between IUPAC Projects

Task 4: Development of project materials for open-access online database within the IUPAC.org platform to demonstrate the contribution of IUPAC Projects to the achievement of SDGs.

Task 5: Give to Project Committee suggestions how to incorporate the UN SDGs in the selection process of the projects

Task 6: Preparation and publications of Report and Recommendations for Future Strategic Plans of IUPAC to achieve SDGs
Task 2: Survey of all IUPAC Projects and categorize them according to the SDGs

Challenging Task!

- For many projects it was hard to decide on ONE PRIMARY goal
- Perspectives varied for those categorizing
- Projects cross-listed
- #Projects varied greatly between divisions/committees
- UN SDG targets often more closely aligned with project objectives
  - 169 targets
  - Indicators not considered

Master Spreadsheet/Google Drive

Categorization refined to PRIMARY and SECONDARY goals

- Additional categorization based on SDG targets added

Committee/Division Task Group Member

- Completed 3 rounds of category assignments (project highlights)
Preliminary Summary of Data
264 Projects reviewed for associated UN SDGs

253 Projects categorized according to primary relationship to a UN SDG

IUPAC contributed to 12/17 UN SDGs listed as primary goals

78% attributed to 4 major goals (32 specific targets cited):

- SDG 3: Good Health & Well-Being
- SDG 4: Quality Education
- SDG 12: Responsible Consumption & Production
- SDG 17: Partnerships for the Goals

Not identified as primary: 1, 8, 10, 11, 15
Targets attributed to SDG Goal 17: Partnerships for the Goals

- More specifically related to targets:
  - 17.16 *Enhance the global partnership for sustainable development*, complemented by multi-stakeholder partnerships that mobilize and *share knowledge, expertise, technology* and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.
  
  - 17.7 *Encourage and promote effective* public, public-private and civil society *partnerships*, building on the experience and resourcing strategies of partnerships data, monitoring and accountability.
Target attributed to SDG Goal 4: Quality Education

- More specifically related to targets:
  - **4.7** 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.
  - **4c.** Substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States
  - **4.3** ensure equal access for all women and men to affordable and quality education
  - **4.4** increase number of youth/adults with relevant skill for vocation
Targets attributed to SDG Goal 3: Good Health & Well-Being

- More specifically related to targets:
  - 3.3 *end the epidemics* of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
  - 3.5 strengthen prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
  - 3.9 *reduce number of deaths/illnesses from hazardous chemicals in air, water and soil*
  - 3.b support research and *development of vaccines and medicines*
Targets attributed to SDG Goal 12: Responsible Consumption & Production

• More specifically related to targets:
  ➢ **12.4** *environmentally sound management of chemicals and all wastes* throughout their life cycle, in accordance with agreed international frameworks, and significantly *reduce their release to air, water and soil* in order to minimize their adverse impacts on human health and the environment

  ➢ **12.5** By 2030, substantially *reduce waste generation through prevention, reduction, recycling and reuse*

  ➢ **12.6** Encourage companies, especially large and transnational companies, to *adopt sustainable practices and to integrate sustainability* information into their reporting cycle
SECONDARY UN SDGs for 175 Projects

- 264 Projects reviewed for associated secondary UN SDGs
- 175 Projects indicated secondary goals related to **ONE OR MORE** UN SDG and targets
- IUPAC contributed to 15/17 Goals (adding 8, 10, 15)
  - 88% attributed to goals:
    - SDG 3: Good Health & Well-Being
    - SDG 4: Quality Education
    - SDG 12: Responsible Consumption & Production
    - SDG 17: Partnerships for the Goals
  - PLUS
    - SDG 8: Good jobs & Economic Growth
    - SDG 9: Innovation and Infrastructure
    - SDG 13: Climate Action
    - SDG 16: Peace and Justice

Not identified: 1, 5
SDG Goal 6: Clean Water and Sanitation
- 6.1 achieve universal and equitable access to safe and affordable drinking water for all
- 6.b support and strengthen the participation of local communities in improving water and sanitation management

SDG Goal 7: Affordable and Clean Energy
- 7.a enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure...

SDG Goal 9: Industry, Innovation, and Infrastructure
- 9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020
Future Plans

**Task 2/3:** Continue to work to consistently assign categorizations, highlight representative projects and their outputs

**Task 4:** Development of project materials for open-access online database within the IUPAC.org platform to demonstrate the contribution of IUPAC Projects to the achievement of SDGs.

- Investigate the feasibility of adding a "UN SDG/Targets" tab on Project pages (credit: Fabienne Meyers)
  - Use data for previous projects
  - New projects will align
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THANK YOU!