

## Key Messages for the ICSU SDGs Interactions Report

### Overview

The International Council for Science (ICSU) recently released a report called *A Guide to SDG Interactions: from Science to Implementation*, which provides a blueprint to help countries implement and achieve the Sustainable Development Goals (SDGs). The report examines the interactions between the various goals and targets, determining to what extent they reinforce or conflict with each other.

### The Challenge

Countries around the world are faced with a significant challenge: How can they reach the 17 SDGs – and 169 targets that sit underneath these goals – by 2030? The SDGs, which were adopted by the international community in 2015, cover a diverse range of issues including gender equity, sustainable cities, access to clean water, and good governance. It is a big, unwieldy, ambitious agenda that – if it is successfully implemented – could set the world on a course toward inclusive, sustainable development.

We all want the SDGs to be realized, but how can countries transform this complicated set of individual goals into a coherent roadmap they can implement in the next 13 years? How can they calibrate and sequence their efforts and investments to make the most progress?

### The ICSU Approach

At the International Council for Science, we believe that scientists can point the world in the right direction to achieve the SDGs. We know that some SDGs have synergistic relationships such that investing in one goal makes it easier to achieve others. We also understand that some goals and targets have conflictual relationships; progress in one area may come at the expense of progress in others.

ICSU, leading a consortium of scientific research organizations, looked at SDG interactions in a new way. We applied a seven-point scale to quantify these synergies and conflicts. The scale ranges from +3, which applies when one goal or target is very reinforcing of others, to -3, which applies when goals and targets conflict with each other. A score of 0 indicates neutral interaction.

The scale could be used to answer a range of questions: Would efforts to increase agricultural production make it more difficult to sustainably manage natural resources? Would ensuring access to reproductive healthcare make it easier to achieve gender equality? Would efforts to ensure healthy life below water detract from or reinforce activities to maintain healthy life on land?

For this report, we examined four goals and their underlying 36 targets to test this scoring framework: food security and sustainable agriculture (SDG2), health and wellbeing (SDG3), accessible energy (SDG7), and conservation of the oceans (SDG14).

What's the unique value of having scientists examine these interactions? First of all, they are trained in the scientific method; they rigorously observe, test, experiment, and measure results. Second, they have the latest reliable knowledge on the complex relationships between nature and people, and for this report, we convened scientists with in-depth knowledge in different subject areas relevant to the SDGs. The outcome is an independent analysis that connects scientific thinking and in-depth expertise. Our hope is that this assists policymakers and others as they engage with the goals.

## Results

The results of this study helped us understand which clusters of goals and targets work together – and which do not. This kind of information could help countries determine the best sequencing and most effective pathways to implementation of the SDGs. Specific results were:

**Most goals were synergistic but not all synergies are equal.** For example, one of the strongest relationships we found was that ensuring access to modern energy for all (SDG7) would go a long way toward combatting climate change (SDG13) and decreasing death and illness from pollution (a target of SDG3). A weaker but still positive connection exists between growing the economy (SDG8) and improving health and well-being (SDG3). Economic growth allows government to increase spending on healthcare, including universal health coverage, but this is not a given. Making this positive relationship a reality requires good governance and smart decision-making.

**The scale highlighted where there are conflicts and tradeoffs between SDGs.** One strong conflict we identified is that efforts to end hunger and achieve food security (SDG2) could involve agricultural practices that would limit the availability and sustainability of clean water (SDG6) and reliable energy (SDG7). In addition, constraining the development of fisheries to protect marine life (SDG14) and limiting deforestation (SDG15) could negatively impact food supplies. Advancing agriculture that feeds people and protect the environment requires a careful set of tradeoffs.

**The power is in the process.** Applying the seven-point scale brought scientists from different disciplines – oceanographers, agronomists, epidemiologists, and more – together to work toward a common set of goals. This was a tough process that included heated debates and several revisions to the scores of some interactions. But this diverse group of scientists hashed out differences, and created a common way of talking about the SDGs, as well as and a scaling system that could be applied to navigate them and bring diverse set of data and information together. This forging and implementing of a common methodology is a significant achievement and enables a more joined-up approach to the SDGs that bridge academic and sectoral cultures.

## Recommendations

This report is a starting point to further examine and act on SDG interactions. The seven-point scale can be applied by countries around the world to achieve each of the SDGs and their targets. Like the scientists who participated in this report, leaders in government, civil society, and business can come together to tackle the SDGs as an integrated system of achievable goals rather than a disparate set of aspirations.

Here's how we recommend that people from different sectors can collaborate to make progress on the SDGs:

1. Convene people from a wide range of expertise to **identify** the interactions between and among the 17 SDGs in each country. This will help prioritize investments, and create a common language and approach, as well as break down siloes and work across sectors.
2. **Map** existing institutions and actors to assess a country's potential to meet the SDGs. This will help determine who should do what and where there are gaps to fill.
3. **Enact** change so that achievement of the SDGs can happen across sectors. This may involve creating cross-cutting coordination mechanisms to allocate resources, share data and information, facilitate research and innovation, and build capacity.
4. **Apply** a similar integrated perspective to monitoring, evaluation, and review as a country works toward achieving the SDGs.