UNESCO Key Competences for Sustainability — Alignment with Sulitest TASK™ - *The Assessment of Sustainability Knowledge*

Reference source: *UNESCO*: *Education for Sustainable Development Goals — Learning Objectives*. © UNESCO 2017. (Cf. p.10)

What is the UNESCO ESD Framework?

The UNESCO Education for Sustainable Development (ESD) framework highlights 8 key competencies that are particularly essential for sustainability and relevant to all SDGs. These 8 key competencies:

- Represent cross-cutting competencies that are necessary for all learners worldwide.
- Can be understood as transversal, multifunctional and context independent.
- Represent what citizens particularly need to deal with today's complex challenges.
- Enable individuals to relate the different SDGs to each other – to see "the big picture" of the 2030 Agenda for Sustainable Development.

What is Sulitest and TASK™?

- Sulitest is a social enterprise that supports universities and organizations in their efforts to integrate sustainability education into their institutions, programs, and courses.
- TASK™ is the world's first assessment tool to provide a standardized measure of knowledge based on a systemic approach to sustainability.
- The TASK™ tool provides a robust, research-based, and online assessment process leading to an internationally recognized certificate of sustainability knowledge.
- TASK™ is accessible via an easy-to-use platform that provides relevant and comparable metrics for monitoring and steering education for sustainability across any educational program.

Why Align the UNESCO ESD and TASK™ Frameworks?

- Universities integrating the UNESCO framework will benefit from a straightforward, user-friendly tool that will help streamline workflows and achieve multiple outcomes with greater efficiency.
- Universities integrating the UNESCO framework will benefit from a straightforward, user-friendly tool that will help streamline workflows and achieve multiple outcomes with greater efficiency.
- This integration will strengthen the credibility of TASK™, as the UN is the world's leading resource on sustainability and sustainable development.

Disclaimer

- TASK™ is one of a number of different educational tools for sustainable development and should be used in tandem with other sustainability tools. Alignment between different frameworks and TASK™—as presented here—should be considered as indicative only and contingent upon how UNESCO and TASK™ are used. TASK™ is not an exhaustive assessment of UNESCO's key competencies.

Chart 1. Cross-cutting key competencies for achieving all SDGs: ***Systems thinking competency*** — General alignment with sustainability knowledge assessed by TASK

UNESCO	TASK BY Sulitest — The Assessment of Sustainability Knowledge	**TASK Frameworks related to UNESCO — *Systems thinking competency*** 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Systems thinking competency	**Key TASK Domains** (from TASK matrix)	**Key TASK Subjects** (from TASK matrix)	**Key TASK Assessment Topics** / sub-topics (from TASK Navigational Charts)	**GreenComp** Areas & Competences
The ability to: **Recognize and understand relationships**	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.1.2—Biosphere Integrity 3.3.1—Sustainability Science 3.4.2—Cognitive Capacity for Sustainability	1.1.1/6—Climate impacts: On human welfare 1.1.2/7—Climate change and biodiversity 3.3.1/5—System dynamics elements (Leverage points) 3.4.2/5—Ecocentrism-Ethics and values (Gaia theory)	**2. Embracing complexity in sustainability** 2.1—Systems thinking
Analyze complex systems	1.2—Regulating Planetary Boundaries 2.1—Safety and Basic Needs 3.3—Science and Technology 3.4—Individual and collective action	1.2.2—Land Systems Change 2.1.1—Nutrition 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.2.2/1—Land uses & ecosystems (Land system science) 2.1.1/7—Environmental impact of food production 3.3.1/6—Climate science (Climate models and predictions) 3.4.2/4—IDG framework (Complexity awareness)	
Think of how systems are embedded within different domains and different scales	1.2—Regulating Planetary Boundaries 2.3—Human Flourishing 3.3—Science and Technology 3.4—Individual and collective action	1.2.5—Biogeochemical Flows 2.3.2—Peace, Justices, and Political Voice 3.3.1—Sustainability Science 3.4.2—Cognitive Capacity for Sustainability	1.2.5/1—Natural BGC cycles: water, carbon, nitrogen, phosphorus 2.3.2/3—International human rights frameworks 3.3.1/5—System Dynamics elements (Systems thinking and modeling) 3.4.2/5-6—Ecocentrism / Anthropocentrism (Ethics and values)	
Deal with uncertainty	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.2.4—Novel entities 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.1.1/12—Climate change "controversy" (Manufactured uncertainty) 1.2.4/12—Importance of Precautionary Principle (Uncertainty principle) 3.3.1/1—Science & scientific method (Hypotheses & experiments) 3.3.1/6—Climate science (Climate models and predictions) 3.4.2/11—Insights from behavior science (Risk, uncertainty)	

Chart 2. Cross-cutting key competencies for achieving all SDGs: ***Anticipatory competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Anticipatory competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Anticipatory competency	**Key TASK Domains** (from TASK matrix)	**Key TASK Subjects** (from TASK matrix)	**Key TASK Assessment Topics** / sub-topics (from TASK Navigational Charts)	**GreenComp** Areas & Competences
The ability to: **Understand and evaluate multiple scenarios for the future – possible, probable, and desirable**	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.2—Economy and Finance 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.2.3—Ocean Acidification 3.2.2—Business, Industry, & Microeconomic Considerations 3.3.1—Sustainability Science 3.4.1—Transformative Change	1.1.1/5-6—Climate change impacts: (on Earth Systems & Human Welfare) 1.2.3/9—Mitigation and adaptation strategies (projected scenarios) 3.2.2/6—"Net Zero" business and carbon offsetting (scenarios) 3.3.1/6—Climate science (net zero scenarios) 3.4.1/9—Changing social imaginaries of how we might live sustainably	**3. Envisioning sustainable futures** 3.1-Futures literacy 3.2-Adaptability
Create one's own visions for the future	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.2.1—Freshwater Use 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.1.1/5-6—Climate change impacts: (on Earth Systems & Human Welfare) 1.2.1/4—Human uses and misuse of freshwater 3.4.1/1—Change: attributes, principles, mechanisms, agents 3.4.1/9—Changing social imaginaries of how we might live sustainably	
Apply the precautionary principle	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.2.4—Novel Entities 1.2.5—Biogeochemcial Flows 3.3.1—Sustainability Science 3.3.2—Technology and Innovation 3.4.1—Transformative Change	1.1.1./12-Climate change "controversy" 1.2.4/12—Importance of Precautionary Principle (Uncertainty) 3.3.1/7—Ecology and biology 3.3.2/8—Climate engineering 3.3.2/9—Emerging environmental technologies 3.4.1/3—Changing approaches to climate action	
Assess the consequences of actions	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.3—Science and Technology 3.4—Individual and collective action	1.2.3—Ocean Acidification 1.2.4—Novel Entities 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.2.3/3, 5, & 6—Anthropogenic causes (Impact on marine life and coastal ecosystems) 1.2.4/12—Importance of Precautionary Principle (Uncertainty) 3.3.1/1—Science & scientific method (Hypotheses, predictions, experiments) 3.3.1/6—Climate science (Climate models and predictions)	
Deal with risks and changes	1.2—Regulating Planetary Boundaries 3.4—Individual and collective action	1.2.4—Novel Entities 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.2.4/12—Importance of Precautionary Principle (Uncertainty) 3.4.1/1—Change: Characteristics and pathways 3.4.2/4—IDG Framework (enabling change) 3.4.2/10-11—Insights from brain and behavioral research	

Chart 3. Cross-cutting key competencies for achieving all SDGs: ***Normative competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Normative competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Normative competency	**Key TASK Domains (from TASK matrix)**	**Key TASK Subjects (from TASK matrix)**	**Key TASK Assessment Topics / sub-topics (from TASK Navigational Charts)**	**GreenComp** Areas & Competences
The ability to: **Understand and reflect on the norms and values that underlie one's actions**	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 2.1—Safety and Basic Needs 2.2—Social Welfare 2.3—Human Flourishing 3.2—Economy and Finance 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.1.2—Biosphere Integrity 2.1.1—Nutrition 2.2.3—Gender equality 2.3.2—Peace, Justice, and Political Voice 3.2.1—Macroeconomic Considerations 3.2.2—Business, Industry, Micro-economic Considerations 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.1.1/12—Climate impacts "controversy" (Denial, conspiracy, pseudoscience) 1.1.2/6—Animal welfare and ecosystem rights (Animal testing) 2.1.1/8—Food diets and consumer behavior (Meat: environmental ethics) 2.2.3/10—Women's rights standards (International norms and standards) 2.3.2/10—Criminal Justice (Death penalty, ethics, deterrence, injustice) 3.2.2/11—Ethical consumerism (Green / ethical consumerism) 3.3.1/8—Science and society (Environmental ethics) 3.4.1/1—Change Characteristics and pathways (Values-motivate/impede) 3.4.1/2—Insights from theories of change & leadership (Ethical leadership) 3.4.2/3—21st Century competency (Character, ethics) 3.4.2/5—Ecocentrism – Ethics & values (green virtue ethic, land ethic) 3.4.2/6—Anthropocentrism – Ethics and values 3.4.2/8—Indigenous knowledge and ways of being 3.4.2/9—Ecopsychology / Environmental psychology 3.4.2/10—Insights from brain research (Theories of choice) 3.4.2/11—Insights from behavioral research (Bounded rationality)	**1. Embodying sustainability values** 1.1—Valuing sustainability 1.2—Supporting fairness 1.3—Promoting nature

Chart 4. Cross-cutting key competencies for achieving all SDGs: ***Strategic competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Strategic competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Strategic competency	**Key TASK Domains (from TASK matrix)**	**Key TASK Subjects (from TASK matrix)**	**Key TASK Assessment Topics / sub-topics (from TASK Navigational Charts)**	**GreenComp** Areas & Competences
The ability to: **Collectively develop and implement innovative actions that further sustainability at the local level and further afield**	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 2.1—Safety and Basic Needs 2.2—Social Welfare 3.1—Governance 3.2—Economy and Finance 3.3—Science and Technology 3.4—Individual and Collective Action	1.1.1—Climate Change 1.1.2—Biosphere Integrity 1.2.7—Stratospheric Ozone Depletion 2.2.2—Social Equality 2.3.1—Education and Culture 3.1.1—Laws, Policies, and institutions 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.1.1/7—Climate change prevention (Climate action) 1.1.1/8—Climate change adaptation (National *Climate Action Plans*) 1.1.2/4—Indirect & direct drivers: Actions directly affecting nature 1.1.2/7—Climate change and biodiversity (Actions affecting biodiversity) 1.2.7/5—International response / action (Montreal Protocol) 2.2.2/7—Diversity, equity, and inclusion efforts (Affirmative action) 2.3.1/9—Traditional Ecological Knowledge (Local knowledge) 3.1.1/7—Environmental law & policymaking (local vs. centralized) 3.1.1/9—Problems of global governance (Delay in taking action) 3.1.1/11—Multi-stakeholder and indigenous inclusion (grassroot & local) 3.3.1/2—Scientific research (Action-oriented research) 3.4.1/5—Changing governance approaches to environ. & social action 3.4.2/10—Changing high-carbon lifestyles (Social practice theory) 3.4.1/12—Climate activism for Trans. Change (violent/non-violent action)	**3. Envisioning sustainable futures** 3.3—Exploratory thinking **4. Acting for sustainability** 4.1—Political agency

Chart 5. Cross-cutting key competencies for achieving all SDGs: ***Collaboration competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Collaboration competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Collaboration competency	**Key TASK Domains (from TASK matrix)**	**Key TASK Subjects (from TASK matrix)**	**Key TASK Assessment Topics / sub-topics (from TASK Navigational Charts)**	**GreenComp** Areas & Competences
The ability to: **Learn from others**	3.4—Individual and collective action	3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	3.4.1/4—Targets and attributes of sustainable social systems (capacity for learning) 3.4.1/9—Changing approaches to climate justice and social equality 3.4.1/11—Changing social imaginaries of how we might live sustainably 3.4.2/4—IDG framework (openness and learning mindset)	**4. Acting for sustainability** 4.2—Collective action
Understand and respect the needs, perspectives, and actions of others (empathy)	2.2—Social Welfare 2.3—Human Flourishing 3.4—Individual and collective action	3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	2.2.2/7—Diversity, equality, and inclusion efforts 2.3.2/8—Inclusion and representation of minorities 3.4.2/4—IDG framework (Empathy and compassion) 3.4.2/8—Indigenous knowledge and ways of being	
Understand, relate to and be sensitive to others (empathic leadership)	2.2—Social Welfare 2.3—Human Flourishing 3.1 Governance 3.4—Individual and collective action	2.2.2—Social Equity 2.3.2—Peace, Justices, and Political Voice 3.1.1—Laws, Policies, and Institutions 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	2.2.2/7—Diversity, equality, and inclusion efforts 2.3.2/8—Inclusion and representation of minorities 3.1.1/1—Principles of good governance (Representative & inclusive) 3.1.1/11—Multi-stakeholder and indigenous inclusion 3.4.1/2—Insights from theories of change and leadership (Leadership theory) 3.4.2.4—IDG framework (Empathy and compassion)	
Deal with conflicts in a group	3.1 Governance 3.4—Individual and collective action	3.1.1—Laws, Policies, and Institutions 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	3.1.1/1—Principles of good governance (non-discriminatory, transparent, diverse, etc.) 3.1.1/11—Multi-stakeholder & indigenous inclusion (managing hard choices) 3.4.2/4—IDG framework (Empathy and compassion)	

Chart 6. Cross-cutting key competencies for achieving all SDGs: ***Critical thinking competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Critical thinking competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Critical thinking competency	**Key TASK Domains (from TASK matrix)**	**Key TASK Subjects (from TASK matrix)**	**Key TASK Assessment Topics / sub-topics (from TASK Navigational Charts)**	**GreenComp** Areas & Competences
The ability to: **Question norms, practices, and opinions**	1.1—Core Planetary Boundaries 2.3—Human Flourishing 3.4—Individual and collective action	1.1.1—Climate Change 2.3.1—Education and Culture 3.4.2—Cognitive Capacity for Sustainability	1.1.1/12—Climate change "controversy" (critical thinking / scientific method) 2.3.1/6—Learning outcomes (critical thinking) 3.4.2/3—21st Century competency framework (critical thinking) 3.4.2/4—IDG Framework (critical thinking) 3.4.2/7—Educating for the Anthropocene (critical ecopedagogy)	**2. Embracing complexity in sustainability** 2.2—Critical thinking
Reflect on one's own values, perceptions, and actions	3.2—Economy and Finance 3.4—Individual and collective action	3.2.2—Business, Industry, & Microeconomic Considerations 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	3.2.2/9—Consumer behavior (perceptions, motivations) 3.4.1/1—Change: Characteristics and pathways (motivators and impediments) 3.4.2/3—21st Century competency framework (meta-learning) 3.4.2/4 IDG Framework (Being, Thinking, Relating) 3.4.2/5-6—Ecocentrism / Anthropocentrism (Ethics and values)	
Take a position in the sustainability discourse	3.1—Governance 3.3—Technology and Innovation 3.4—Individual and collective action	3.1.1—Laws, Policies, and Institutions 3.3.1—Sustainability Science 3.4.2—Cognitive Capacity for Sustainability	3.1.1/11. Multi-stakeholder and indigenous inclusion 3.3.1/8—Science and society: science for sustainability 3.4.2/4—IDG framework (acting – enabling change) 3.4.2/5-6—Ecocentrism / Anthropocentrism (Ethics and values)	

Chart 7. Cross-cutting key competencies for achieving all SDGs: ***Self-awareness competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Critical thinking competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Self-awareness competency	**Key TASK Domains (from TASK matrix)**	**Key TASK Subjects (from TASK matrix)**	**Key TASK Assessment Topics / sub-topics (from TASK Navigational Charts)**	**GreenComp** Areas & Competences
The ability to: **Reflect on one's own role in the local community and (global) society**	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 3.1 Governance 3.2 Economy and Finance 3.3—Technology and Innovation 3.4—Individual and collective action	1.1.1—Climate Change 1.2.3—Ocean Acidification 3.1.1—Laws, Policies, and Institutions 3.3.1—Sustainability Science 3.4.2—Cognitive Capacity for Sustainability	1.1.1/4—Anthropogenic climate impacts 1.2.3/3—Anthropogenic causes 3.1.1./1—Principles of good governance (civil society participation) 3.3.1/8—Science and society: science for sustainability (environmental ethics) 3.4.1/1—Change: attributes, principles, mechanisms, agents 3.4.1.11—Changing social imaginaries of how we might live sustainably 3.4.2/4—Inner Development Goals Framework 3.4.2./5—Ecocentrism – Ethics and values 3.4.2./6—Anthropocentrism – Ethics and values	**4. Acting for sustainability** 4.3—Individual initiative
Continually evaluate and further motivate one's actions	3.4—Individual and collective action	3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	3.4.1/1—Change: Characteristics and pathways (agents and motivators) 3.4.2/3—21st Century competency framework (character and meta-learning) 3.4.2/4 IDG Framework (Being, Thinking, Relating) 3.4.2/5-6—Ecocentrism / Anthropocentrism (Ethics and values)	
Deal with one's feelings and desires	3.4—Individual and collective action	3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	3.4.1/1—Change: Characteristics and pathways (motivators) 3.4.2/3—21st Century competency framework (meta-learning) 3.4.2/4 IDG Framework (Being, Thinking, Relating) 3.4.2/5-6—Ecocentrism / Anthropocentrism (Ethics and values)	

Chart 8. Cross-cutting key competencies for achieving all SDGs: ***Integrated problem-solving competency*** — General alignment with sustainability knowledge assessed by TASK

		TASK Frameworks related to UNESCO — *Integrated problem-solving competency* 1. Earth Systems 2. Human Welfare 3. Levers of Opportunity		
Integrated problem-solving competency	**Key TASK Domains (from TASK matrix)**	**Key TASK Subjects (from TASK matrix)**	**Key TASK Assessment Topics / sub-topics (from TASK Navigational Charts)**	**GreenComp** Areas & Competences
The overarching ability to: **Apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive, and equitable solution options that promote sustainable development, integrating the above-mentioned competences.**	1.1—Core Planetary Boundaries 1.2—Regulating Planetary Boundaries 2.1—Safety and Basic Needs 2.2—Social Welfare 2.3—Human Flourishing 3.3—Science and Technology 3.4—Individual and collective action	1.1.1—Climate Change 1.2.2—Land-System Change 1.2.7—Stratospheric Ozone Depletion 2.1.2—Health 2.1.3—Access to Water and Sanitation 2.1.4—Sustainable construction and planning 2.2.1 Basic Income and Decent Work 2.3.1—Education and Culture 2.3.2—Peace, Justice, and Political Voice 2.3.3—Access to Networks and Human Interaction 3.3.1—Sustainability Science 3.4.1—Transformative Change 3.4.2—Cognitive Capacity for Sustainability	1.1.1/8—Climate change adaptation 1.1.1/9—Climate change mitigation 1.2.2/—Land-use planning 1.2.7/7—Comparison with other environmental issues 2.1.2/7—Health systems and access 2.1.3/2—Access to water 2.1.3/4—Sanitation and hygiene 2.2.1/7—Economic impacts of redistributive policies 2.2.1/9—Basic income and inclusion 2.3.1/2—Principles of quality education (inclusive, equitable, transformative, etc.) 2.3.1/3—Principles of quality education 2.3.2/5—Governance and lawmaking 2.3.2/8—Inclusion and representation of minorities 2.3.3/2—Social sustainability, a systemic perspective 3.3.1/5—System dynamics elements (Leverage points) 3.4.1/1—Change: attributes, principles, mechanisms, agents 3.4.1/2—Insights from theories of change and leadership 3.4.1/7—Changing climate inequality and injustice 3.4.2/4—IDG Framework (thinking/cognitive change and acting/enabling change) 3.4.2./5—Ecocentrism – Ethics and values 3.4.2./6—Anthropocentrism – Ethics and values 3.4.2./7—Educating for the Anthropocene	**2. Embracing complexity in sustainability** 2.3—Problem-framing