



Global Systems Accounting

ebbf people
building
the future }

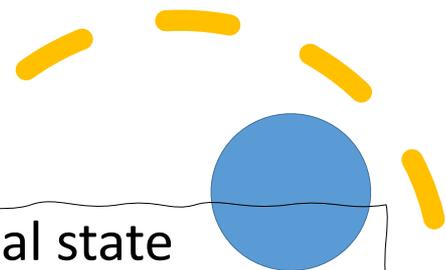
ENVIRONMENTAL ACCOUNTING

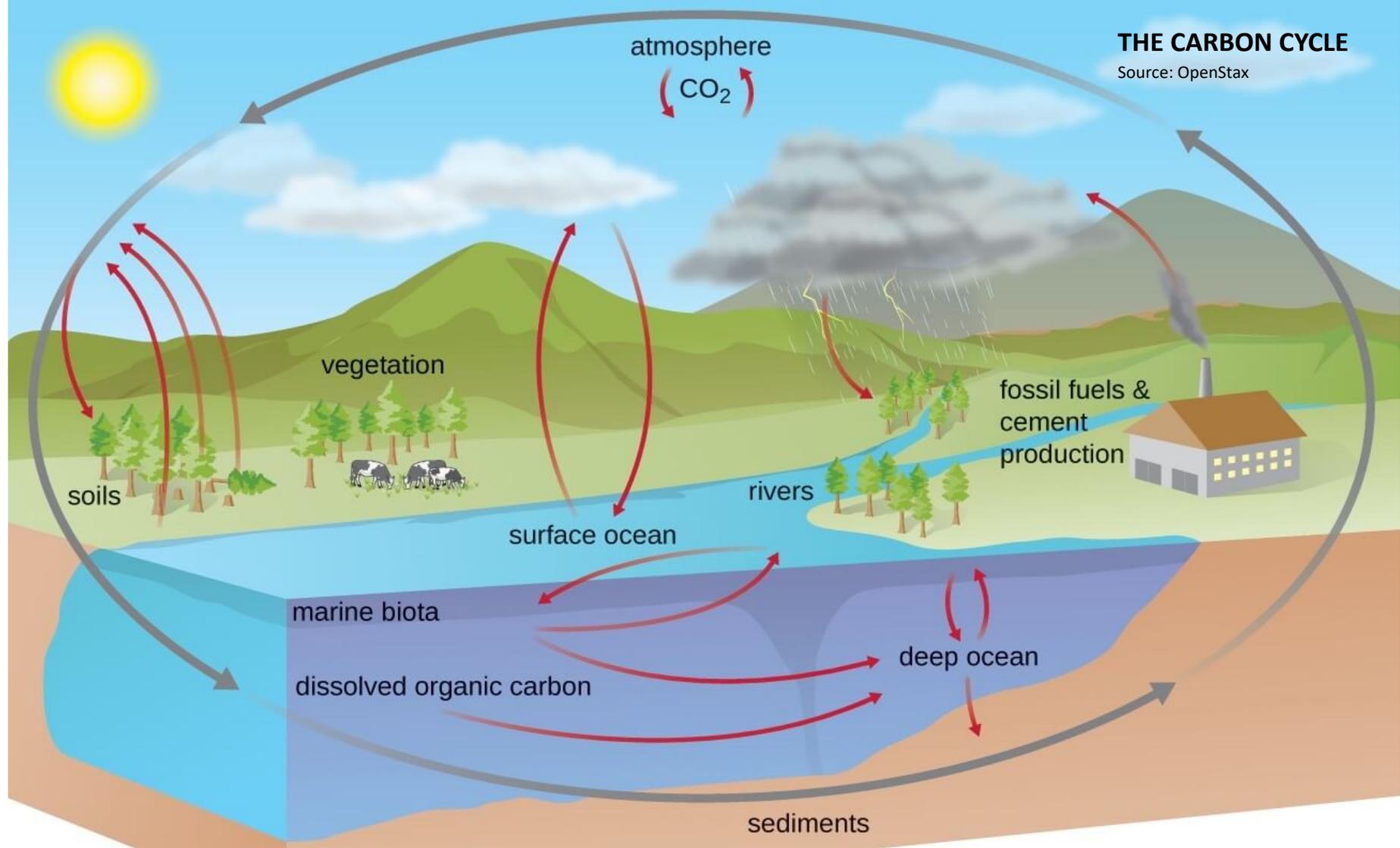




Environmental Accounting

- Carbon
- Biodiversity
- Pollution

- 
- Ideal state
 - Positive and negative trends and drivers
 - Strategies and solutions



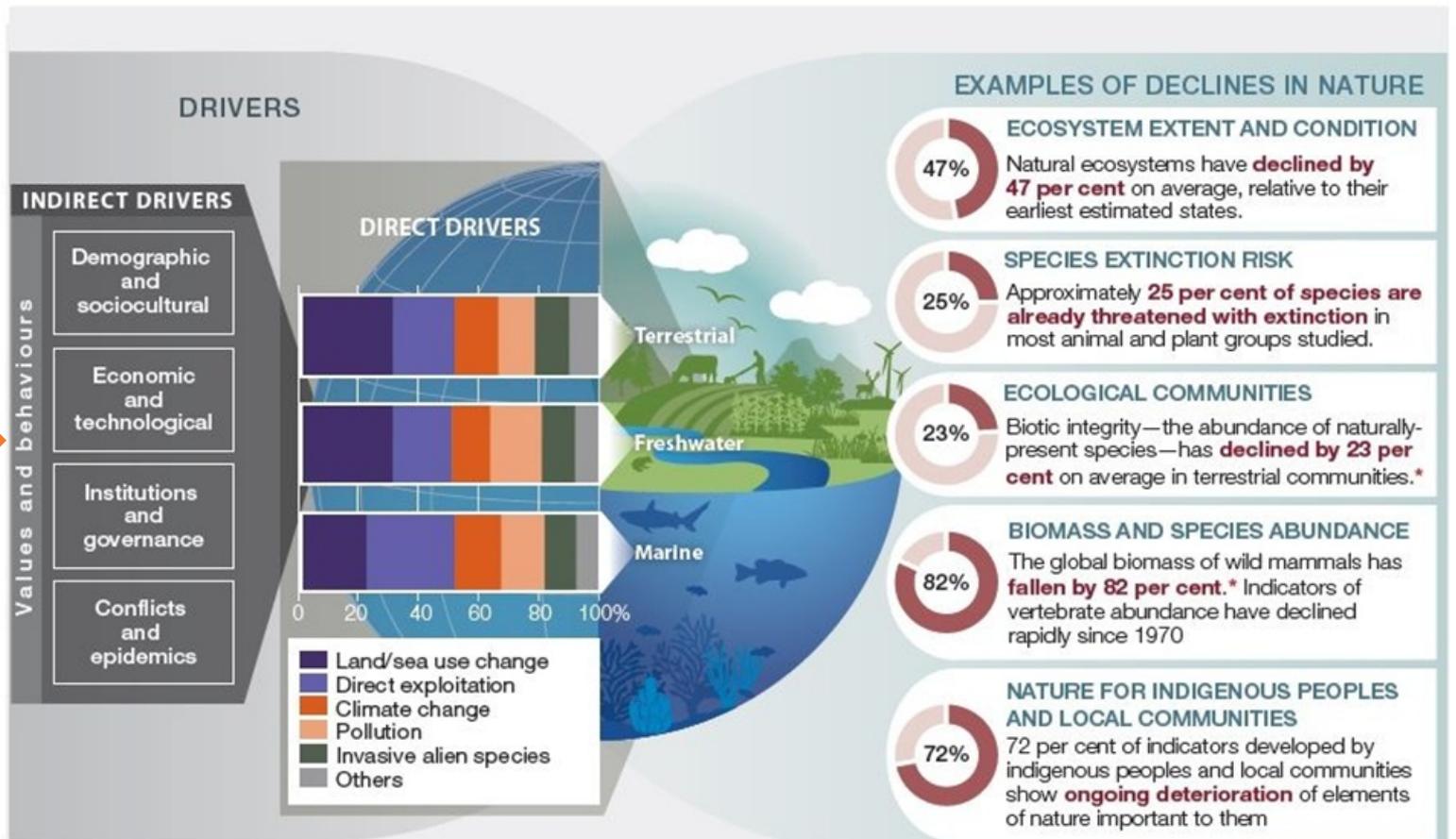
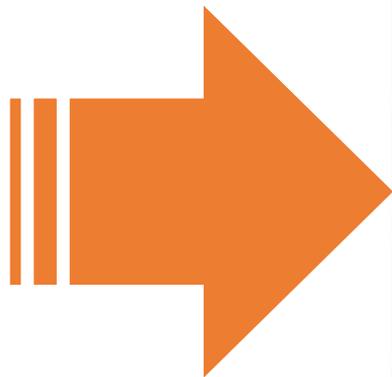
THE CARBON CYCLE

Source: OpenStax

How to reduce carbon debt?

- Ideal state: Carbon well regulated and stabilized
- Positive drivers:
 - Use of renewable energy sources, protection of ecosystem, organic farming
 - Global governance
- Carbon storage measurement in Ecosystems
- Carbon sequestration innovation





Source: IPBES

* Since prehistory

Figure SPM 2 Examples of global declines in nature, emphasizing declines in biodiversity, that have been and are being caused by direct and indirect drivers of change.

Ideal State

- Natural ecosystems staying intact & stable, climate (atmosphere), land (eg forests, agricultural areas), oceans-lakes-rivers

Biodiversity

Capital of natural ecosystems
and species maintained

Positive Indicators

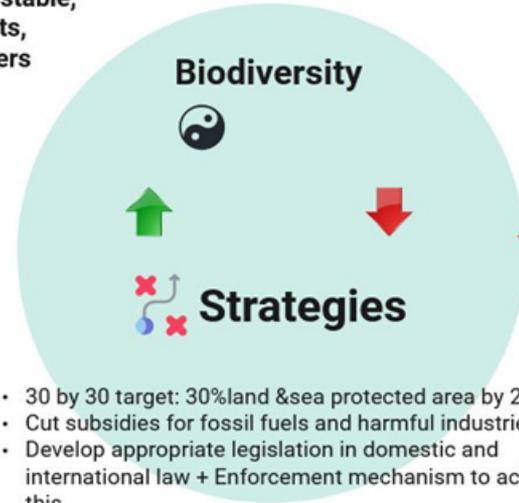
Reforestation to capture Carbon

Protection of natural areas

- number and areas of nature reserves expanded, on land and at sea;
- Green belt project
- Some endangered species removed from red -lists. eg Panda bears.

Education

- Awareness of human behaviour on biodiversity
- Bring scientific methods to be used by people at all levels



- 30 by 30 target: 30%land &sea protected area by 2030
- Cut subsidies for fossil fuels and harmful industries
- Develop appropriate legislation in domestic and international law + Enforcement mechanism to achieve this
- Change laws on patents of monopolies of large agrifirms for hybrid seeds, pesticides etc.
- Providing incentives & subsidies for measures that are increasing positive indicators
- Price of food and stuff to include externalities, real environmental costs
- Tax GHG emissions, unhealthy food
- Investigate and educate good examples of maintaining biodiversity
- Raise conciousnes - spiritual values of biodiversity
- Bring destructive organizations to court

Negative Indicators

- Ecosystems have declined by 47 %; decrease of forest areas and other habitats
- 25% of species threatened with extinction
- Average atmospheric air temperature rising: increasing GHG levels, mainly CO2
- Human population growth (doubled in last 50 years)
- Bio-industry-antibiotics health effects
- Too much negative impact from present food cycle:
 - industrial/chemical farming
 - food waste (1/3)
 - soil erosion/depletion
 - Land & water pollution

Biodiversity



- Why do we need resilient ecosystems?



- Capital growth



Pollution debt

- Polluter Pays Principle
- Pollution Indicators
- Identify sources
- Pay the real price
- Reduce-Reuse- Recycle
- End Plastic pollution treaty
- Orbital waste
- International environmental agreements

Environmental system accounting

Conclusions

When it comes to the environment, the current economic system encourages humanity to live recklessly on illimited credit without any plan to reimburse their debts. Who in their right mind would do this?

It is time to work locally and globaly on proper accounting of our assets and debts and together devise a plan to balance our accounts following the natural systems.

For implementation a key element is to ensure that our true values are maintained. As we need an account for our natural environment, we need and Accounting for human wellbeing.



One Planet, One Habitation and Global Systems Accounting

Arthur Lyon Dahl

Global Systems Accounting
Consultation with working groups
20 July 2022

Interrelationships

The Global Systems Accounting project is developing alternative ways of measuring well-being inspired by Bahá'í principles, as a replacement for the materialistic financial accounting that dominates the present economic system and development paradigm.

<https://iefworld.org/accounting>

Interrelationships

The most recent statement of the Bahá'í International Community, *One Planet, One Habitation: A Bahá'í Perspective on Recasting Humanity's Relationship with the Natural World*, of 1 June 2022, calls for a similar fundamental questioning of assumptions, with a focus on our relationship with nature. This is most relevant to the environmental dimension of global systems accounting, as you will see in the excerpts below.

Interrelationships

While there is not much other direct overlap between the two, the statement does call for new approaches to measuring well-being, and has much to say about spiritual capital. Also relevant are its comments about the process that is required to transform society, with a systems perspective, at multiple levels, also one of the aims of the accounting project.

The need for a systems perspective

1. The **natural world**, in all its wonder and majesty, offers profound insight into the essence of **interdependence**. From the biosphere as a whole to the smallest microorganism, it demonstrates how dependent any one life-form is on numerous others—and how imbalances in one system reverberate across an **interconnected whole**.

The need for a systems perspective

2. Intimately embedded in this greater system, and deeply **reliant** upon it, **humanity** faces a paradox growing more consequential by the day. On the one hand, the human race has never held more power to shape the physical world on **planetary scales**—a development some have termed the anthropocene.... On the other, that very power, when untempered by thoughtful consideration and directed by priorities heedless of the present and future common good, gives rise to **consequences** not only worldwide in scope but potentially **irreversible**.

The need for a systems perspective

Our activities must reflect the fact that the wealth and wonders of the earth are the **common heritage** of all people, who deserve **just and equitable access** to its resources. Our choices must evince an intergenerational perspective in which the well-being of **future inhabitants** is taken into account at all levels of decision-making. And in this turbulent period of human history, our activities must increasingly be tempered by the **wisdom and judgment** that come with growing maturity. [\(Trusteeship\)](#)

The need for a systems perspective

3. As the grave effects of **surpassing planetary limits** become increasingly apparent, from climate change to biodiversity loss to environmental degradation and pollution, humanity is being compelled to develop more mature, **collaborative**, and constructive relationships between its peoples and with the natural environment.

Communicating at multiple levels

All of the earth's inhabitants deserve the opportunity to enjoy the fruits of a global society advancing in **harmony with the natural world**. To create such a society, people everywhere must be empowered to **participate** in the constructive processes that will give rise to it. Building **capacity in individuals, communities, and institutions** to contribute effectively to transformational change is therefore an indispensable element of effective environmental action.

(Empowering protagonists of transformational change)

Communicating at multiple levels

For the **individual**, this implies developing a range of interrelated **capacities**—scientific, technical, social, moral, and spiritual. Individuals must be endowed with an understanding of concepts, knowledge of facts, and mastery of methods, as well as the skills, attitudes, and qualities required to establish more healthy and sustainable patterns of individual and collective life.

(Empowering protagonists of transformational change)

Communicating at multiple levels

In terms of local **communities**, capacity building involves the enrichment and conscious shaping of **culture**. On the community rests the challenge of creating a milieu in which individual wills blend together, in which powers are multiplied and manifest themselves in **collective effort**, and in which higher expressions of the **human spirit** are demonstrated in new ways of arranging the affairs of society.

(Empowering protagonists of transformational change)

Communicating at multiple levels

Attention must also be paid to strengthening organizational structures. **Institutions** with capacity are needed at every level that can act as channels through which the talents and energies of individuals and groups can be expressed in **service** to the common good.

(Empowering protagonists of transformational change)

Communicating at multiple levels

35. The mandate of the **state**, as steward of the common good, is **long-term** in nature, transcending electoral cycles and political terms. Effective **governance** ensures the flourishing of all within a jurisdiction, for generations to come. The state also bears crucial responsibility for governing the **commons**, whether within its own borders or in collaboration with other institutions beyond them, for example in managing and caring for **public goods** that benefit all.

Communicating at multiple levels

30. The voices of those who have been **disadvantaged** by the current order will need to figure far more prominently into decision-making processes at all levels. Insight will need to be sought from populations sustaining more **harmonious relationships** with the natural world, many of whom live in areas other than urban centers. Diverse cultural understandings of humanity's relationship with the natural world, especially those of **indigenous peoples**, can provide needed insights into the creation of more holistic and sustainable models for present and future generations.

Measures beyond GDP

17. If humanity's relationship with the natural world is to be refashioned, notions of progress, civilization, and development will need to be redefined. Efforts in this direction, such as **budgets centered around well-being** or **indicators of progress more holistic than gross domestic product**, must be expanded and deepened, and fundamental questions interrogated further. What are the **qualities** by which a person, nation, or corporation are judged successful? For what are they commended and appreciated?

Measures beyond GDP

20. Crafting a **more holistic conception of progress** will require an expanded understanding of ourselves as a species, including truths about the human spirit itself. The planet, its peoples, and creatures have suffered tremendously from a **materialistic** mindset that views the individual as a purely self-interested economic unit, competing with others to accumulate an ever-greater share of the world's material resources. This caricature has largely been rejected at the level of formal theory as simplistic and crude. Many aspects of the global order still rest on these **assumptions**, however, and often reinforce and deepen them.

Measures beyond GDP

People and the planet need to be valued as explicitly today as profit and economic gain have been in the past.... Basic notions of **progress, development, and prosperity** will need to be recast in far more holistic terms.

(Rethinking economic arrangements)

Measures beyond GDP

23. SDG 17.19 calls for the development of **measures of progress** to complement gross domestic product. This is a worthwhile aim that has been echoed by the Secretary-General of the United Nations and that should receive due priority and resourcing. International gatherings, for example—both ad-hoc and in the regular United Nations calendar—could explore complementary measures from the perspective of the **thematic focus** particular to each.

Measures beyond GDP

23. In addition to measurement becoming more **holistic**, contemporary conceptions of progress itself must be reconsidered and in many aspects recast.... The aim would not be a single set of findings but rather an ongoing **process of inquiry** into what a sustainable civilization includes, and how its features might be appropriately valued and promoted.

Specific accounting domains

13. The insufficiency of national plans to reduce **carbon** emissions under the 2015 Paris Agreement, to date, provides one well-noted example. This gap between rhetoric and action is indicative of a deeper challenge, namely that principles related to sustainability are not embedded deeply enough in the collective consciousness to shape the choices and behaviors of nations.

Spiritual capital

21. A more accurate understanding of **human nature** would encompass qualities and attitudes such as trustworthiness, mutual support, commitment to truth, and a sense of responsibility, that are the building blocks of a **stable social order**. It would give rise to models which would avoid or ameliorate the ills of reductive materialism, ensuring that our pursuit of prosperity includes the many other facets of individual and collective **well-being**.

Spiritual capital

24. Humanity's existence is governed not only by physical forces, but also by **social and moral laws** of cause and effect. Greed is inherently corrosive to the common good, no matter how artfully justified or concealed. Acts of **selfless compassion** invariably hold the power to motivate and inspire, no matter how seemingly simple or isolated.

Spiritual capital

25. From this perspective, the path to a more harmonious relationship with nature cannot be one of technological adjustment alone. It must also involve communities and societies learning to align themselves with **higher principles**.

Spiritual capital

The **spiritual principles** animating the world's enduring religions have aided individuals and entire populations to grapple with questions of meaning, purpose, and the nature of the good life and the good society. When true to these ideals, **religion** has provided a bulwark against ideologies of materialism that would reduce human beings to mere resources to be exploited or consumers to be satiated. At its highest, religion has not only raised the call to virtues such as integrity, good character, high resolve, cooperation, and sacrificial endeavor, but drawn growing numbers together around such principles, unifying disparate elements, and giving rise to **cohesive communities** working to manifest high ideals in practice.

(Complementary systems of knowledge and practice)

Spiritual capital

28. A notable alternative to the paradigm of material advancement alone can be found in the significance that multitudes around the world place in the transcendence of the **human spirit** and its connection with the divine. Much could be learned from a systematic and scientific inquiry into communities that are learning to apply **spiritual principles**—such as selflessness, solidarity with others, and stewardship for the natural world—to advance broad-based **social progress**.

Vision of the future

42. A flourishing global civilization in **harmony** with the natural environment is a vision toward which growing numbers are laboring. The world that beckons is one of integration and balance, beauty, and maturity. It is a world with a **redefined sense of progress**, filled with communities and individuals working together with the support of institutions toward the realization of their highest aspirations. It is a world increasingly relieved of the destructive **moral compromises**—social, economic, and environmental—that have so often been asserted as necessary to progress.

Vision of the future

43. Movement toward this vision has begun; its momentum is gathering. Lofty **ambitions** have been articulated and action is being called for on scales unseen....

Vision of the future

44. The gulf between **intention and action** is one of the central challenges facing humanity today. This gap can be bridged; individuals, communities, and nations are contributing their share toward this goal every day. Yet for action to rise to the scales required, far stronger consensus and **collective will** among the nations is needed around the values demanded by the current stage of humanity's development.

Vision of the future

44cont. It also calls for much greater resolve in putting those **values into practice**, recommitting to that which is beneficial to the common good and discarding whatever stands in the way of answering the moral and practical call of the present hour. This is a high endeavor indeed, and its benefits a priceless legacy that must be left to the generations to come. Let us join together in rising to its demands.

Source

Bahá'í International Community. *One Planet, One Habitation: A Bahá'í Perspective on Recasting Humanity's Relationship with the Natural World*, 1 June 2022. https://iefworld.org/2022bic_OPOH