

# Global Issues Survey 2023



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# 1. Foreword

**We live in an interconnected and interdependent world that is being reshaped by complex systemic issues, such as climate change and biodiversity loss.**

Perception surveys are a valuable tool to inform decision-making in the face of volatility, uncertainty, complexity and ambiguity. The search for clarity in a complex world begins by uncovering what people think by asking their opinions, particular those in our communities whose opinions are effectively ignored. For example, the opinions of leaders from government, industry, science, and civil society about global challenges are well documented in this regard. However, this survey focuses on an underserved and overlooked population, our youth. Adolescents represent 16% of the global population.

Simply put, our future leaders are our youth today. Youth will be responsible for achieving long-term goals such as achieving net-zero greenhouse gas emissions by 2050. This is why the *Villars Institute's Global Issues Survey* examines youth perceptions about six distinct topics that will shape their future and the future of our planet. Our interconnected and interdependent world can be characterized as a complex system, which is why *Systems Leadership* and *Systems Thinking* were combined as a sixth topic of inquiry. Our aim is to catalyse public debate by highlighting the importance and impact of these six global issues across generations and by emphasising the need for greater intergenerational collaboration.

**By Jade Hameister OAM**  
Youth Advisor, Villars Institute

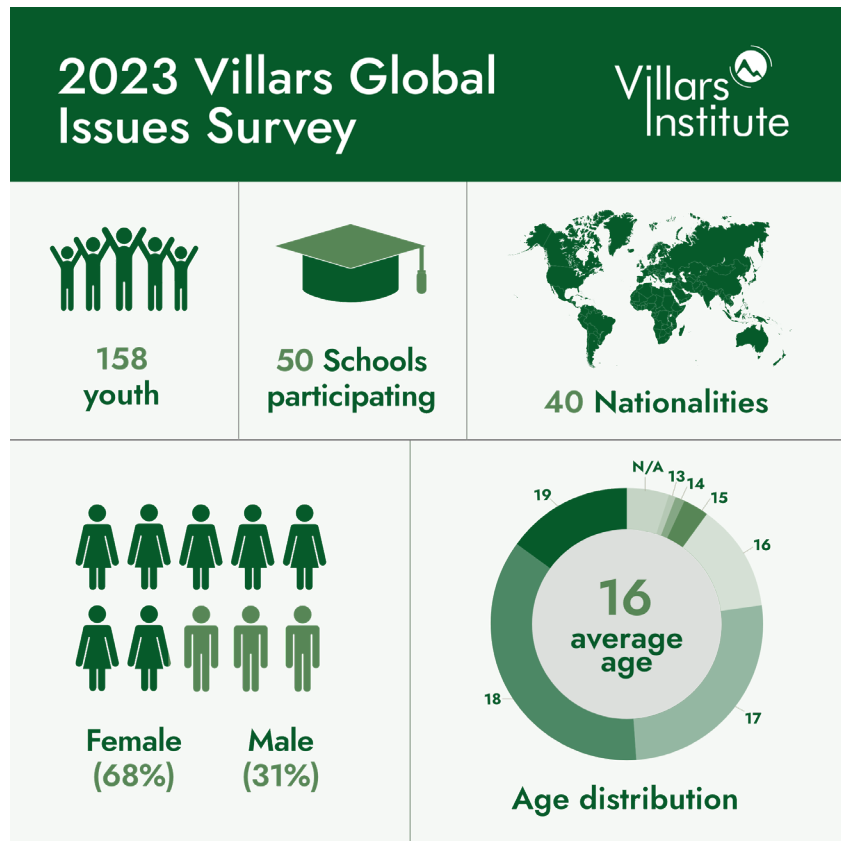


# 2. Methodology

**Over 150 youth representing more than 50 schools and 40 nationalities worldwide were surveyed. 16 years old was the average age of the respondents. For this inaugural survey, the respondents were members of the Villars Fellowship program.**

The youth were asked about five global issues: *Planetary Health; Net-Zero and Nature-Positive Economy; Energy Transition; Nature-Based Solutions; and Emerging Technologies.* *Systems Thinking and Systems Leadership* were combined to form a sixth topic. The survey builds on past research on youth sentiment, where issues such as “eco-anxiety” have emerged to shape narratives about climate change and biodiversity loss. We are interested to see if youth perceptions shift over time towards “eco-ambition.”

The survey questions are based on a 5-point Likert scale and explored how six global topics might shape the work, career, or daily life of young people in the next five to 10 years. The survey also asked an open-field question on what young people would be interested in learning about each issue in the year ahead. Our aim is to catalyze public debate by highlighting the importance and impact of these global issues across generations and by emphasizing the need for greater intergenerational dialogue and collaboration.





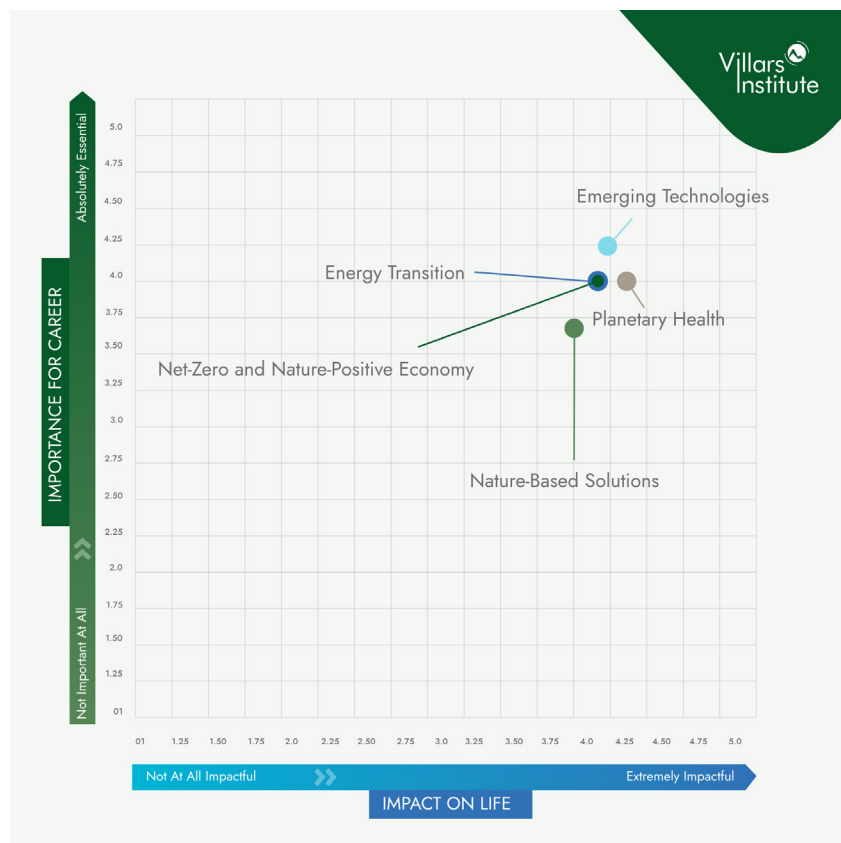
# 3. Findings

**80% respondents believe that all of the survey issues will be either very important or essential in their work or career in the next 5-10 years. And close to 80% of respondents also believe that these issues will significantly impact their daily life. A key insight for educators and employers is that youth consider these issues equally relevant to their future career and in their daily lives. In fact, only 2% believe the survey issues will be of little importance in their work or career and just 3% believe they will have only a slight impact on their daily life.**

Participants were also asked what they would like to learn in the year ahead for each of the global issues. Practical solutions to systemic challenges emerged as a popular response to this question.

We hope that asking this open question each year will help educators and employers with the design of their teaching and training programs in the year ahead.

The table below shows that **Emerging Technologies** scored the highest in terms of career importance and lifestyle impact. In contrast, **Nature-Based Solutions** was the lowest among the five topics assessed using this framework.



# 4. Systems Thinking/ Systems Leadership

**Our interconnected and interdependent world can be characterized as a complex system, which is why Systems Thinking and Systems Leadership were combined as a sixth topic of inquiry.**

*Systems Thinking* is an approach to problem-solving that considers the interconnectedness of different systems. It encourages us to approach problems in a holistic way, and to consider the impact of our actions on the environment and society as a whole. It is a way of thinking that is fundamental for systems leaders.

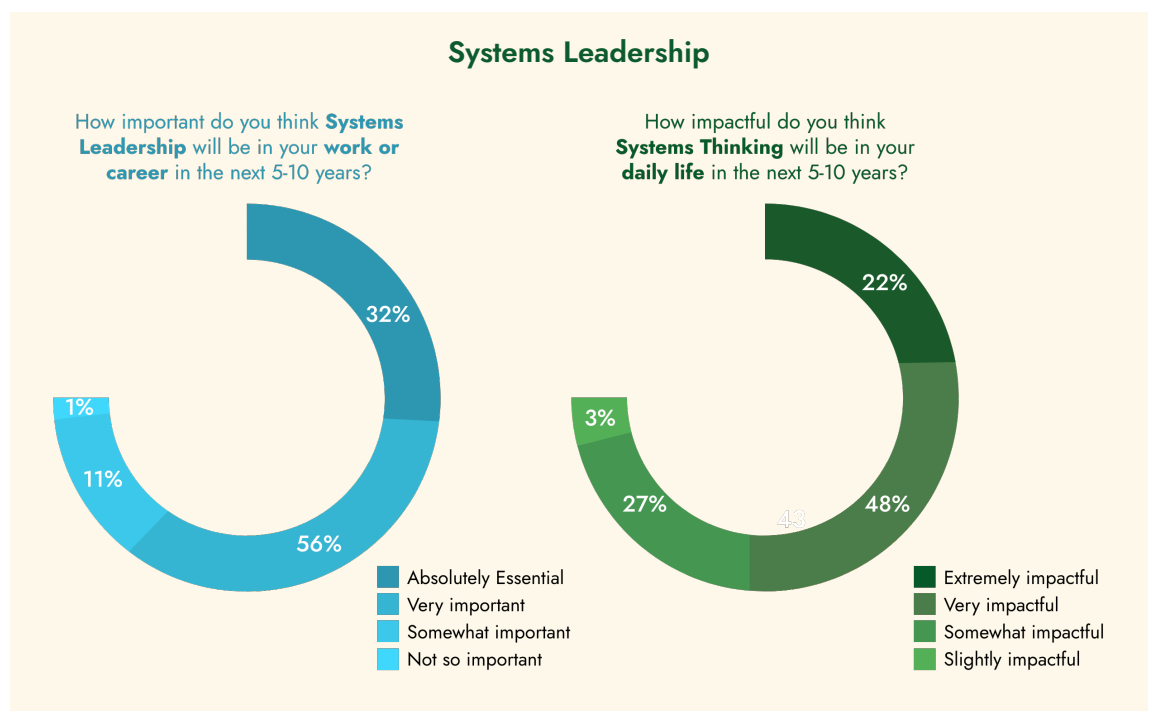
*Systems Leadership* is the application of *Systems Thinking* that involves working with others through using *Systems Thinking* to generate a shared vision of the world we live in, and working together for a better future for all.

We asked youth to assess the importance of *Systems Leadership* for their work or career, and the impact of *Systems Thinking* on their daily life, in the next 5-10 years.

It is worth observing the difference in the importance and impact of these issues on career and daily life. For example, 32% believe *Systems Leadership* will be absolutely essential in their work or career in the next 5-10 years, compared with just 22% who think *Systems Thinking* will have the same impact in their daily life.

Comment from a respondent about *Systems Thinking* and *Systems Leadership*:

*“I would like to learn how Systems Thinking and Systems Leadership could be implemented in any area of career, social and day-to-day life, and how using this approach can influence problem-solving and finding more successful solutions.”*





# 5. Planetary Health

**Planetary Health** – although defined as the health of human civilization – depends on the overall state of the natural systems worldwide. Nature’s goods and services are the main foundation of life in every form, yet public and private resources are often managed unsustainably, which has led to a decline in the earth’s overall planetary health as a result of harm done to critical earth systems.

Potsdam Institute’s Director for Climate Impact Research, Johan Rockström worked with an international team of scientists to develop the planetary boundaries framework in 2009.

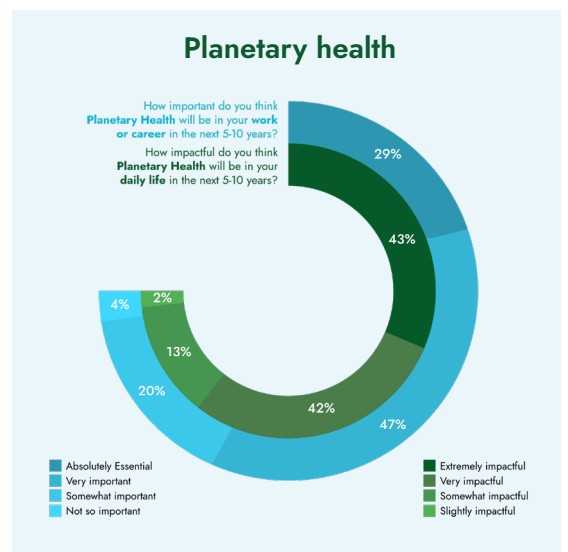
These are argued to be fundamental to maintaining a ‘safe operating space for humanity’, and the unique framework guides governments, international organizations, NGOs and companies considering sustainable development to make the right climate-related decisions. They can also use the framework to set goals to preserve these boundaries, six of which we have crossed as of this year.

Here’s how the youth assessed the importance of *Planetary Health* for their work or career, and its impact on their daily life, in the next 5-10 years:

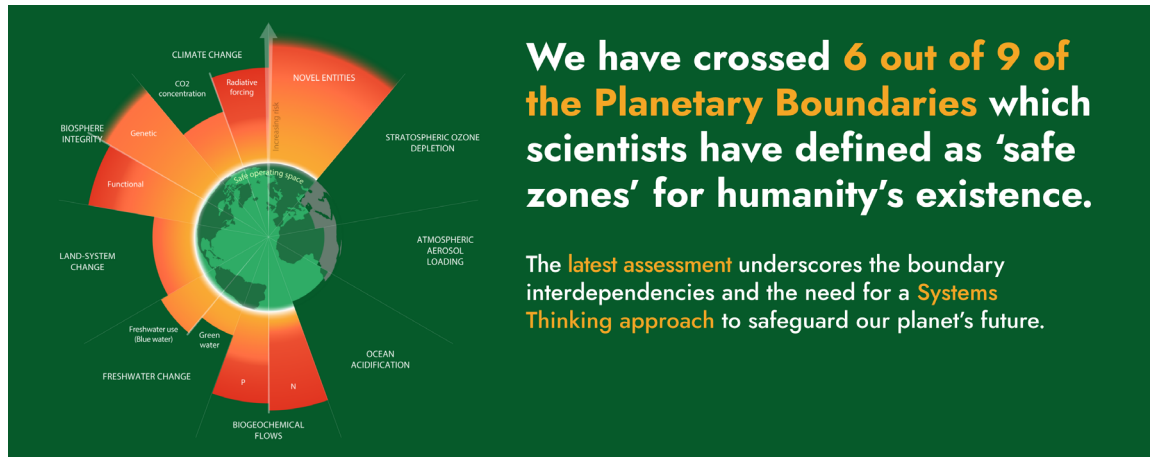
Based on the data collected, 29% of youth surveyed think the concept of *Planetary Health* will be absolutely essential in their work or career in the next 5-10 years. Interestingly, a greater proportion of respondents (43%) said they feel *Planetary Health* will be extremely impactful in their daily lives during that time frame.

An observation from one young person on the topic of *Planetary Health*:

*“I would like to learn how to apply the concepts of the planetary boundaries to larger companies and business models, so that they can work with sustainable principles that allow the global economy to function without negatively impacting planetary health.”*



Based on the data collected, 29% of youth surveyed think the concept of Planetary Health will be absolutely essential in their work or career in the next 5-10 years



We have crossed **6 out of 9** of the **Planetary Boundaries** which scientists have defined as 'safe zones' for humanity's existence.

The **latest assessment** underscores the boundary interdependencies and the need for a **Systems Thinking approach** to safeguard our planet's future.

### 01. Stratospheric Ozone Depletion



This boundary is connected to the release of harmful gases that led to long-lasting depletion of Earth's ozone layer.

The 1987 Montreal Protocol was a major milestone in international cooperation, which helped reverse ozone depletion.



### 02. Biosphere Integrity



The current rate of species extinctions is estimated to be at tens to hundreds of times higher than the average rate over the past 10 million years, and it's accelerating.

Of an estimated 8 million plant and animal species, around 1 million are threatened with extinction, and over 10% of genetic diversity may have been lost over the last 150 years.

Global biodiversity monitoring schemes can prevent ecosystem damage.



### 03. Novel Entities



Novel entities include the introduction and accumulation of all new chemical compounds created by humans, such as pesticides, microplastics and nuclear waste.

The planetary boundaries framework is only concerned with the stability and resilience of the Earth system, and it remains a scientific challenge to assess how much loading of novel entities it can tolerate before irreversible shifts occur.



### 04. Climate Change



Climate change is forced by increased atmospheric carbon dioxide levels, and has been outside of its safe operating space since 1988.

The new report warns that we have moved even further outside this safe zone since the last update.

Reducing personal consumption, investing in renewable energy and restoring nature to absorb more carbon can help reduce our footprint.



### 05. Ocean Acidification



The current rate of acidification is likely 100 times faster than any other time during the last hundreds of millennia, which weakens ocean biosphere integrity.

Yet, the boundary is at the margin of the safe operating space.

Dramatically reducing global CO<sub>2</sub> emissions, over-fishing and pollution, and preventing habitat destruction can halt ocean acidification.



### 06. Freshwater Change



For the first time, the freshwater boundary now addresses both green water (invisible water held in soil and plants) and blue water (visible water in rivers), and both boundaries are crossed.

Global water initiatives are key to scaling innovative technologies, business models, policy and governance to improve the health and resilience of our freshwater systems.



### 07. Land System Change



3 major forest biomes – tropical, temperate and boreal – are key to the web of life on Earth.

Forests cover 1/3 of all land on Earth, and over 1.6 billion people depend on forests for food or fuel, while 70 million people worldwide call forests their home.

Controlled deforestation, sustainable land management and reforestation can all help conserve the lungs of our planet.



### 08. Biogeochemical Cycles



Industry and agriculture are altering the flows of key natural elements like nitrogen and phosphorus, causing a profound impact on ecosystems and Earth's natural cycles.

Changing our agrifood systems can alleviate environmental pollution.



### 09. Atmospheric Aerosol Loading



New scientific evidence now allows scientists to quantify this boundary. Although not yet crossed, evidence suggests a global doubling of dust deposition since 1750.

Higher filtration standards for heavy industry, power generation, diesel engines and cookstoves can mitigate aerosol damage.





# 6. Net-Zero and Nature-Positive Economy

**A *Net-Zero and Nature-Positive Economy* focuses on balancing growth with efforts to preserve, restore and sustainably manage nature, with the aim of halting climate change, biodiversity loss, land degradation, food insecurity and social inequality.**

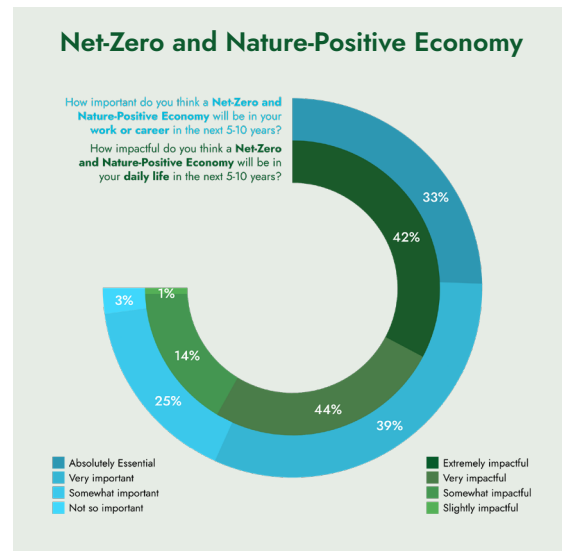
Private and public sectors in countries around the world need to not only make climate-related decisions that will halt climate change, turning the global economy from nature-negative to nature-positive.

Businesses worldwide are taking steps towards net-zero – removing the same amount of emissions as they put into the atmosphere.

In order to go beyond net-zero to not only halt the climate crisis but repair the damage done so far, businesses must set concrete aims and take action at scale to have a net positive impact on the environment as a whole.

To achieve a *Nature-Positive Economy*, businesses, governments and financial institutions need to create a new operating model based on regeneration, resilience and circularity to counter resource extraction, habitat destruction, and all forms of pollution. Businesses will also need to re-evaluate their relationship with nature, and strike a balance between safeguarding their operations and taking responsibility for their impact on the natural environment.

We asked the youth to assess the importance of *Net-Zero and Nature-Positive Economy* for their work or career, and the impact of *Systems Thinking* on their daily life, in the next 5-10 years:



33% of those who took part in the Global Issues Survey rated the *Net-Zero and Nature-Positive Economy* as being absolutely essential in their work life or career in the next decade, while 42% found that this topic will be extremely impactful in their daily lives.

The youth shared that they are interested in learning how they can contribute to a *Net-Zero and Nature-Positive Economy*, and how they can become more involved in the decision making processes that will directly impact their future.

Here's what one of the youth said they'd like to learn about *Net-Zero and Nature-Positive Economy*:

*“How can a nature-positive economy be made realistic considering the current nature of the world economy? How can regeneration of nature and net-zero be incentivized? How can we (consumers) easily identify how sustainable products are?”*

# 7. Energy Transition

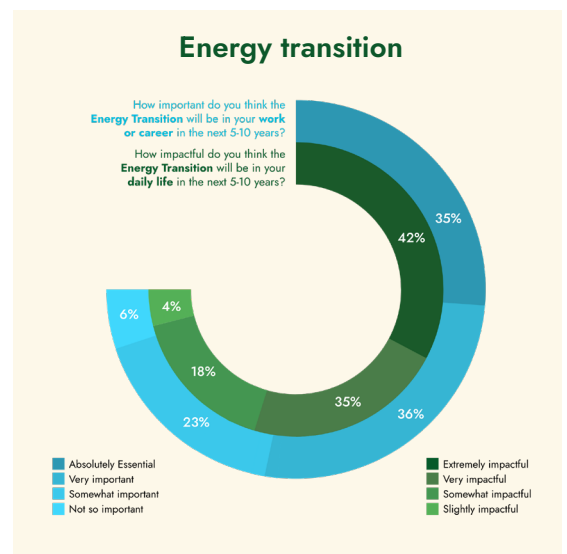
**The Energy Transition can be defined as humanity’s collective move away from traditional energy sources, otherwise known as non-renewable fossil fuels, and towards their renewable counterparts such as solar, wind, hydropower and hydrogen, as well as exciting emerging technologies such as nuclear fusion.**

An Energy Transition is already underway around the world, and it has the potential to save the world at least \$12 trillion if the transition to a decarbonized energy system can be achieved by 2050. In the near-term, this transition faces geopolitical headwinds including the war in Ukraine and a decline in global cooperation.



However, the situation in Ukraine has also renewed interest in nuclear energy, which could significantly accelerate the energy transition away from unabated fossil fuels, by reducing 1.5 gigatons (Gt) of global emissions and 180 billion cubic meters of global gas demand a year. Interest among youth in the Energy Transition is likely to be linked to their interest in Emerging Technologies. For example, social media shares of news stories about nuclear fusion and other energy technologies are on the rise. This is not surprising when considering that the UK Nuclear Energy Authority recently took a major step towards limitless low-carbon energy by developing a prototype fusion energy plant, which will demonstrate the ability to deliver electricity to the grid from fusion energy by 2040. This energy type has the potential to become a near-limitless low-carbon energy source which has captured the imagination of young and old alike.

Here’s what the youth think of the importance of the Energy Transition for their work or career, as well as its impact on their daily life, in the next 5-10 years:



Energy Transition ranks the same for impact on daily life and the importance for work and career among the youth as Net-Zero and Nature-Positive Economy. We suspect that this is more than just coincidence as many respondents shared that they wish to start their careers in the energy sector when it came to answers to the open question related to the Net-Zero and Nature-Positive Economy. Many respondents were also keen to learn more about renewable energy sources and possible career paths within these fields, as well as companies and initiatives to support.

Here’s what one of the young people said they’d like to learn more about when it comes to the Energy Transition:

*“Understanding the social and economic implications of the energy transition, including job creation, community engagement, and equity considerations for vulnerable populations.”*

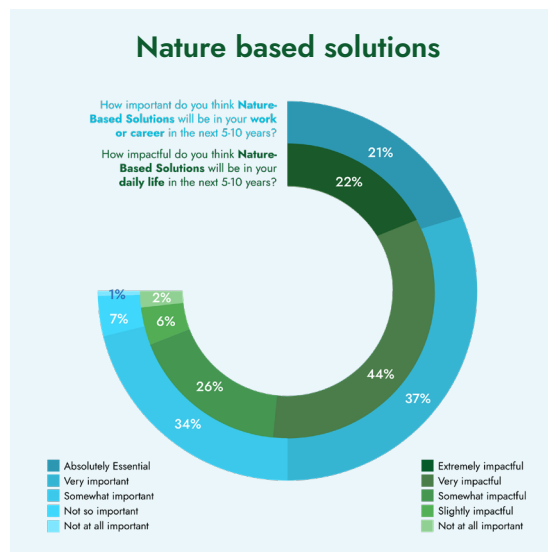


# 8. Nature-Based Solutions

Although the planet’s natural cycles produce carbon in the atmosphere, human activities, such as the burning of fossil fuels, deforestation and farming, are also disturbing the natural balance. Last year alone, human activity produced roughly 37.5 billion metric tonnes of CO<sub>2</sub> – 64% more than we produced 30 years ago, in 1993.

Nature-Based Solutions are gaining attention as a result. They are the climate remedies rooted in nature, such as natural carbon sinks like plants, oceans and soil. They are fundamental to action for climate and biodiversity, as they can provide over 1/3 of the cost-effective climate mitigation needed between now and 2030 to stabilize global warming to below 2°C. In this regard, Nature-Based Solutions are also referred to as “Natural Climate Solutions” (NCS) in climate mitigation and in biodiversity protection efforts worldwide.

We asked the youth to assess how important they think Nature-Based Solutions will be for their work or career, and the impact of such initiatives in their daily life, in the next 5-10 years:



Responses to the open-field questions showed that the youth were particularly interested in the nexus of Nature-Based Solutions and Emerging Technologies, and shared a particular interest for learning more about biotechnology, particularly biomimicry, and food systems. All of these areas rely upon nature for the answer to addressing the current climate crisis.

Here’s what one youth said they would like to learn about Nature-Based Solutions:

*“How can we ensure that by seeking and adapting Nature-Based Solutions, we do not cross the line into simply consuming the natural resources and creating new environmental issues?”*

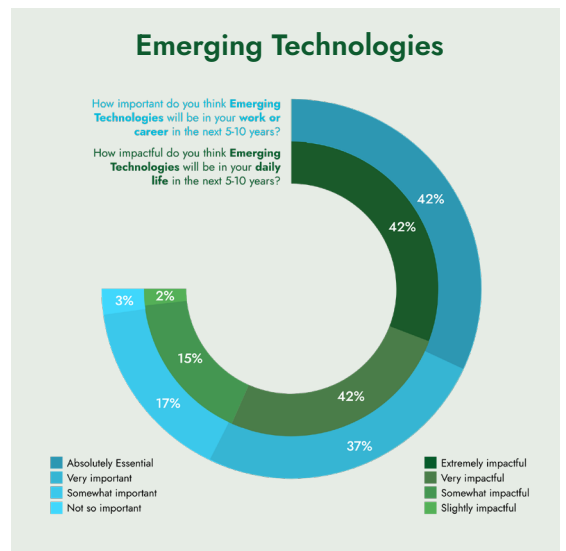
# 9. Emerging Technologies

**The term *Emerging Technologies* is commonly used to describe technological breakthroughs, but this can also include finding new and innovative applications for existing technologies.**

There are numerous lists published annually that rank or curate the potential for applying *Emerging Technologies* to create new services, products and hopefully solutions to global challenges such as climate change and biodiversity loss. Understanding which technology works in a particular context is therefore important if we are to apply the best solutions to the planet’s diverse environments and communities, as soon as these technologies emerge. For example, the Geneva Science and Diplomacy Anticipator (GESDA) base their work around understanding what researchers worldwide anticipate will be emerging as scientific breakthroughs in 5, 10 and 20 years from now.

They then compile their findings onto their Science Breakthrough Radar which is used to convene leaders from science and diplomacy to reflect and act on possible future use cases. The *Global Issues Survey*

aims to complement the GESDA’s ongoing research by asking youth how important *Emerging Technologies* generally will be for their work or career in the next 5-10 years, and how impactful it will be on their daily life:



Of all the topics in the survey, *Emerging Technologies* scored the highest in terms of overall importance for the youth respondents among all of the topics covered in the *Global Issues Survey*.

42% said they felt that *Emerging Technologies* would be absolutely essential for their work or career and the same proportion said it would be extremely impactful in their daily life.

However, young people are also concerned about the ethical and environmental impacts of *Emerging Technologies*:

*“I am interested in learning more about the ethical considerations of certain technologies such as nuclear fusion and green hydrogen and how we can determine whether emerging technologies’ impacts on the environment will be beneficial or detrimental overall.”*





# 10. Survey Conclusions

**The *Global Issues Survey* aims to share insights from an underrepresented demographic: the young people who will play a crucial role in the transition to *Net-Zero* and *Nature-Positive Economy* for every person on our planet. The desire for equitable and just solutions to the climate challenge is also a chief concern among youth that is well-documented in other surveys.**

We hope this data – and future data from our annual research – will inform the work of our partners and their stakeholders in the six survey topics. The *Global Issues Survey* builds upon the Villars Institute's core principles of intergenerational collaboration, interdisciplinary knowledge, and systems leadership.

Most importantly, we hope it provides agency and ambition to our youth to create innovative and entrepreneurial approaches that will result in their future prosperity within planetary boundaries.





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