

The time and resources available to solve important problems affecting society are limited. Imagine being part of the commission that has to decide how to invest the money for photonics research at European level for the coming years: **knowing that photonics benefits society in many different ways**, how would you distribute funds among the different research fields in photonics? This is not an individual decision: each group must come to a unanimous conclusion by discussing correctly and rationally based on the facts that you have learned so far. There is no right or wrong answer. Like many things in life, it depends on the point of view you assume, the priorities you set, ...



Light for health Option 1

The pandemic that arose in 2020 taught us that public health is an important sector that affects many more aspects of society. A tiny virus can affect the lives of millions of people in all its aspects, not only regarding health, but also the economy, industrial structure, labor market ...

That is why it is important to focus most of our efforts on research projects that can improve and care for people's health.



Light for information and cybersecurity

Option 2

We live in the information age. More and more companies and institutions are collecting and analyzing large amounts of data to improve industrial processes and services for the population. In addition, digital technologies are essential to communicate with each other, whether for work or fun. If information systems fall, strategic structures such as energy networks, traffic control, hospitals, governments, etc. fail, too. Thus, ensuring data security for quick and massive data transfer is of fundamental importance for a digitized society like ours.

That is why it is important to focus most of our efforts on research projects that can improve data collection, analysis, transmission and security.



Light for energy and the environment

Option

We are in the middle of a climate emergency: to be able to solve it we need new environmental policies and the commitment of society as a whole. Science and technology can accelerate the change of paradigm that we need to save the planet with discoveries and innovative tools. If we do nothing now, the Earth will be uninhabitable and unsustainable, but there's still time.

That's why it's important to focus most of our efforts on research projects that can help us take care of our planet.



Photonics everywhere

Option 4

Photonics is everywhere and has a positive impact in many different aspects of our lives. Sometimes, the same technology (such as the laser) can improve the health, information and care for the environment at the same time. There are many global issues and it is difficult to set a priority, especially because they are interconnected.

That's why it's important not to focus our efforts on a single field of application: **it's better to diversify our efforts to have more chances of success.**