

Towards an innovative and future-proof biotechnology policy

Biotechnology has become an essential part of our daily lives. From medicines, diagnostics and vaccines to a broad range of vegetables in supermarkets and detergents that enable us to do the laundry at lower temperatures. Through these applications, biotechnology contributes to major societal challenges such as a growing world population, ageing and climate change.

Zooming in on medical ('red') biotech, it becomes clear that developments have accelerated in the past years. We are increasingly able to effectively treat a growing number of diseases whilst decreasing side effects. Breakthrough therapies such as gene therapy and immunotherapy give medical specialists the tools in hands to provide patients, who in the past had no hope for recovery, with a perspective of a longer and better life. And the end of the biotech revolution is not yet in sight: the pipelines are filled with many new products and technological game-changers such as CRISPR-Cas9, offering entirely new perspectives.

In order to make progress, we need to keep an eye on the desirable applications of new technology and other innovations. This means that we need to focus on all these opportunities and fully commit ourselves to turn them into reality. Although notoriously hard to steer, innovation does benefit from a positive attitude towards it.

Today, the Dutch biotech sector is one of Europe's frontrunners. Between 2005 and 2015, the Dutch life sciences sector has managed to double in size. In today's sector, 450 companies employ 24,000 people. The Netherlands has what it takes to evolve into an undisputed global biotech frontrunner in 2030. In order to gain momentum, a stimulating, future-proof and innovation-minded biotechnology policy is crucial.

That is why HollandBIO would like to see the new Dutch biotechnology policy being built on the following guiding principles:

1. Vision: putting sustainability and health first

- a. A modern biotechnology policy is crucial for The Netherlands. That is why HollandBIO calls upon the Dutch government to come up with a visionary biotechnology policy that is based on the pillars health and sustainability. To put it differently: all innovations that fall within society's ethical framework and that contribute to health and/or sustainability, should get a green light. The medicine development process, from lab to patient, needs to be faster and better. This will lead to better outcomes for all parties involved: patients, health care professionals, governments, research institutions and companies.
- b. The Dutch government and authorities should spread this vision with utter conviction, on a national and European level. Innovation by start-ups and SMEs will be stimulated both through words and deeds: The government will assume the role of launching customer in newly developed products or services. In this way, the Netherlands actively contributes to the important European societal challenges. Modern genome editing techniques are uniquely suited to make the difference when it comes to developing groundbreaking therapies, delivering new innovative medicines, vaccines, diagnostics and prognostics – which is the reason that they should be fully supported by the government.

2. Policy: applying the Innovation Principle to balance benefits and risks

- a. The integration of the Innovation Principle will explicate the potential benefits of new products and technologies. The potential risks as they are known at that time, should be weighed against

the potential benefits. It is important to note in this regard, that 100% safety is an illusion. This goes for all new products that are being introduced into our society.

- b. Existing as well as new technologies should be available as broadly as possible for research purposes, enabling scientists to map the potential benefits and risks of a specific and desirable application of a new technology in the best possible way.

- 3. Execution: the Netherlands best-in-class with regards to procedures and implementation**
 - a. Regulation will be limited to what is fundamentally necessary, and be lessened where possible. When there is a case of gold-plating of EU legislation, for example when it comes to using GMOs in human cells, regulation is strictly brought in line with the relevant EU legislation.
 - b. Procedures are clear, quick, lean & mean and do not contain any national gold-plating of EU legislation. In addition, procedures respect the confidential nature of competitive business information and offer sufficient and adequate opportunities for consultation.
 - c. Implementation of the procedures is carried out from a science-based and objective perspective.