

Create value

Summary

Citizens, the business community, scientists and academics, and the government are all facing serious societal challenges. But in addition to presenting us with problems, these challenges are also opportunities to be seized. For businesses, they are the markets of the future. For ambitious entrepreneurs, they represent the opportunity to create new value. For creative scientists and academics, they are a path towards recognition by peers and wider society. For citizens, they are an invitation to become involved in the development of a safer, more sustainable and healthier society. And for government, societal challenges are both a call and an opportunity to redefine the meaning of public service. The government's new role might be one of participant and supporter, broker or coordinator of a mutual approach, or even as an entrepreneurial trailblazer. In today's world, challenges in society call for a government with the expert knowledge required to inspire and motivate, confident in its role and consistent in its policy.

AWT (the Advisory Council for Science and Technology Policy) firmly believes that we in the Netherlands can take better advantage of the potential presented by societal challenges. The top economic sectors and institutes of knowledge already understand how imperative it is to tackle societal challenges. At the same time, we at AWT have noted a continued lack of practical decisiveness and coordination. Opportunities are being missed as a result.

Our recommendations are based on three cornerstones: leadership, governance and market development. When challenges in society are at stake, there is a need for more robust leadership, for shared responsibility, initiative and coordination. Leadership is required in order to create a sense of urgency, set priorities and communicate them, to provide inspiration and guarantee continuity. Effective leadership and clarity about responsibilities facilitate governance and enable productive cooperation between government and parties in the field and between the Ministry of Economic Affairs and the specialist government departments or directorates involved. A government that demonstrates leadership provides direction for businesses and institutes of knowledge by doing so. Effective cooperation can support the creation of new markets as a response to societal challenges.

We at AWT are convinced that the three cornerstones together form firm foundations on which a new dynamism can develop in the Netherlands. This will help to create economic and societal value based on societal challenges. Against this backdrop, we have formulated the recommendations summarized below (see the main text for the full recommendations):

For the government:

1. **Demonstrate more leadership.**

Build on the top-sector and profiling policy and provide inspirational and effective leadership with regard to key societal challenges. Inspire and encourage businesses and institutes of knowledge to find uniquely Dutch solutions for global challenges. Where possible, engage with industrial realities.

2. **Provide greater focus.**

Together with the relevant businesses, centres of expertise and universities, choose a limited number of themes or iconic projects as potential points on the horizon. Ideal candidates are the subsidiary themes in the Grand

Challenges of Horizon 2020. Select the subsidiary areas in which the Netherlands can excel and make choices and commit funding now for the period leading up to 2020.

3. Promote the creation of markets.

Promote the development of markets for products and services that can be instrumental in tackling societal challenges. Facilitate markets for sustainably-produced products by means of regulations, appropriate response to market disruptions and innovative government procurement policy.

4. Adopt an approach that is emphatically collaborative.

Take control, invest in building mutual trust between departments and present a united front to the outside world: 'you are all in it together'.

AWT has the following recommendations for the minister of economic affairs:

1. In the top-sector policy, place greater emphasis on societal challenges.

Approach this jointly with the business community, institutes of knowledge and government agencies. Supervise this process by: i) joining forces in approaching the key areas within the Grand Challenges to be selected by the Netherlands; ii) collaborating more intensively with other departments; iii) organizing the governance structure within the top sectors to give specialist departments greater freedom to play an advisory role; iv) deploying specific mechanisms to boost the top sectors' contribution to societal challenges; v) making better collective use of the broad range of available policy instruments for achieving transition agendas, and in doing so seeking greater room to manoeuvre within the confines of European regulations.

2. Adopt a customized approach.

Societal challenges differ in terms of how and to what extent they can be addressed within the frameworks of the top-sector policy. Vary the approach as needed.

AWT has the following recommendations for the minister of education, culture & science:

1. Place greater organizational emphasis on societal challenges.

Encourage universities, colleges and centres of expertise to place emphasis in their organizational profile on the key areas within the Grand Challenges to be selected by the Netherlands. Allocate government resources more effectively in line with this emphasis. Do so in dialogue with the boards of universities and centres of expertise, the NWO and the specialist government departments.

2. Adopt a more concerted approach in Brussels.

Ensure that the Netherlands forges effective links to Horizon 2020 by making optimum use of specialist departments and involving parties the field more effectively in the process.

AWT has the following recommendations for the other specialist departments:

1. Place greater emphasis on innovation.

Accept your share of responsibility for knowledge development and innovation within the top economic sectors. *Within the context of top-sector policy*, focus to the greatest extent possible on the jointly chosen areas that are within the department's remit. In this process, act as a coordinator and trailblazer when necessary.

2. Take the initiative.

Engage in more dialogue with the Ministry of Economic Affairs on your own research and innovation agenda if it can be involved within top-sector policy.

3. Bring in new expertise.

Invest more in specialist knowledge in technology and the social sciences as they relate to the department's remit on societal challenges, and where necessary reallocate existing departmental capacity in order to enable

the department to play a more effective role as an authoritative partner in dialogue with businesses and institutes of knowledge.

Following these recommendations will ensure that the Netherlands will truly take the lead in Europe: this strategy will give rise to an integrated approach to the three cornerstones identified in Horizon 2020: academic and scientific excellence, industrial leadership and societal challenges.