Research Brief

WWW.RATHENAU.NL • 2014, number 6

Subject resources to minimum standards

It is no longer a given that vital natural resources will always be available. The Dutch government promotes the sustainable use of resources, in a way that benefits the 'triple bottom line': People, Planet and Profit. In its recent report Sustainable alleviation of resource hunger, the Rathenau Instituut posits that a sustainable resources policy must satisfy at least the following minimum requirements: the use of resources must be profitable and must not cause any serious environmental damage or human-rights violations.

The government aims to promote the sustainable use of natural resources, with benefits for *People*, *Planet and Profit*. Like the EU, it therefore focuses on the transition to a circular economy, in which natural resources are used as efficiently as possible, generating a minimum amount of waste.

In its report Sustainable alleviation of resource hunger, the Rathenau Instituut describes two significant challenges in facilitating the sustainable use of natural resources. The first of these challenges is the circular economy itself: the large-scale recycling of 'critical' resources – that is, resources indispensable to the economy – is not profitable as yet. It is therefore important to ensure that the economic outlook for sustainability improves.

One way to make recycling more profitable is by reducing taxes on labour and increasing taxes on the use of natural resources. The Institute recommends

examining what the effects of such a policy would be on social security. The second challenge is that the Netherlands and Europe, even with a circular economy, will remain dependent on foreign natural resources. According to the researchers, these, too, must satisfy the minimum requirements for People, Planet and Profit. Examples of natural resources that are non-compliant include tin from Indonesia (serious environmental damage) and tantalum from Congo (human-rights violations). The Institute recommends that natural resources should be considered 'critical' not only if they are important for the economy, but also if they result in serious environmental damage or human-rights violations.

RECOMMENDATIONS

The Rathenau Instituut advocates an integrated natural resources policy, whereby the use of natural resources is always assessed based on economic, environmental and social sustainability. The recommendations below are relevant to the Ministries and the Dutch Parliament's Standing Committees on Economic Affairs, Foreign Affairs and Infrastructure and the Environment.

- Make sustainability economically feasible:
 - Within Europe: determine if recycling can be made profitable by shifting taxes from labour to resources, whilst retaining social security.
 - Outside Europe: Experiment with a Sustainable Economic Zone.
 Apply the experience gained from the conflict-free tin supply chain and the Special Envoy Natural Resources as a basis for European policy.
- In assessing which resources are 'critical', in addition to economic criteria, also include minimum social and environmental requirements, and use these in negotiations with partner countries:
 - Make the prevention of serious environmental damage a minimum requirement for environmental sustainability, based on the Environmental Performance Index and the Environmental Footprint.
 - Make the prevention of humanrights violations a minimum requirement for social sustainability, using the Human Rights Indicators in addition to the Human Development Index as a basis.



Research & Dialogue | Science, Technology and Innovation



Make sustainability economically feasible

The Dutch government promotes the sustainable use of natural resources, with benefits for the 'triple bottom line' of People, Planet and Profit.

Our use of resources must be at least economically viable and any serious environmental damage and humanrights violations must be excluded. The Rathenau Instituut states in Sustainable alleviation of resource hunger that these minimum requirements are currently not being met.

Access to supplies of natural resources worldwide is increasingly becoming less self-evident. Emerging economies such as China are leveraging their growing power to secure access to resources. These developments significantly increase pressure on the Earth. By creating a circular economy, the Netherlands and Europe therefore intend to achieve the twin objectives of reducing their dependence on foreign resources and making the European economy more sustainable. However, a circular economy is not feasible without large-scale recycling. Still, the recycling of materials considered 'critical' to our economy is not yet cost-effective. This is true, for example, for indium and tantalum - elements used in many electronic devices. For the Netherlands, a country that regards recycling as a minimum standard for processing electronic waste, this constitutes a major problem. One way to make recycling more profitable is by reducing taxes on labour and increasing taxes on resources. The Institute recommends examining what the effects of such a policy would be on social security.

However, the researchers state that a circular economy in itself is not sufficient to achieve a sustainable natural resources policy: even with a circular economy, the Netherlands and Europe must continue

to import resources. According to the researchers, these, too, must satisfy the minimum requirements for *People*, *Planet and Profit*.

The Dutch government is already actively working on this topic. Two examples: tin originating from Congo has been removed from the sphere of armed conflict, thanks in part to the Special Envoy Natural Resources. There have also been talks with China on environmental problems in the mining sector. The Institute recommends that this policy be implemented at the international level; this is possible outside Europe, for example, by experimenting with a Sustainable Economic Zone and using the minimum sustainability requirements as a basis for cooperation with resource-rich countries. The experiences with the conflict-free tin supply chain and the Special Envoy have shown that economic growth can be combined with benefits for people and the environment. Therefore, it is recommended to apply this experience as a basis for European policy.

The sustainable use of natural resources requires an integrated policy, in which resource use is assessed based on the minimum requirements for People, Planet and Profit. The Institute recommends that resources should be considered 'critical' not only if they are important for our economy, but also if they result in serious environmental damage or human-rights violations. In Sustainable alleviation of resource hunger, the researchers discuss several indicators that could be suitable for implementing the proposed minimum requirements for People, Planet and Profit.

SUMMARY

In its forthcoming report Sustainable alleviation of resource hunger, the Rathenau Instituut discusses strategies that bring the objective of the Dutch natural resources policy closer, i.e. safeguarding natural resources which are vital to our economy, in a sustainable manner.

The report cites two specific natural resources (indium and tantalum) as examples of a broader group of materials that are critical to our economy, or which are extracted in conflict areas (i.e. tantalum). In addition, it also examines a number of international trends and developments. China's activities in Africa serve as examples of the shifting balance of power in the world, which offer both opportunities and challenges for the Netherlands and Europe to guarantee security of supply on a sustainable basis.

The report reveals that:

- Making recycling profitable is a substantial challenge in the transition to a circular economy;
- Even in a circular economy, the Netherlands and Europe will need to import natural resources from abroad;
- Minimum requirements are necessary for economic, environmental and social sustainability (People, Planet, Profit) in order to implement the Dutch natural resources policy;
- The Netherlands can, and must, make an effort internationally to make natural resources chains more sustainable, while at the same time achieving security of supply.



This Research Brief is based on the report *Sustainable alleviation of resource hunger* by Krom, A., A. van Waes, R. van Est & F. Brom (editors), a publication of the Rathenau Instituut, The Hague, the Netherlands, 2015.

For further information, please visit www.rathenau.nl or contact André Krom, a.krom@rathenau.nl



Rathenau Instituut