Raw material passport

implementation at TenneT

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1.1 Why a raw material passport? – CSR driven

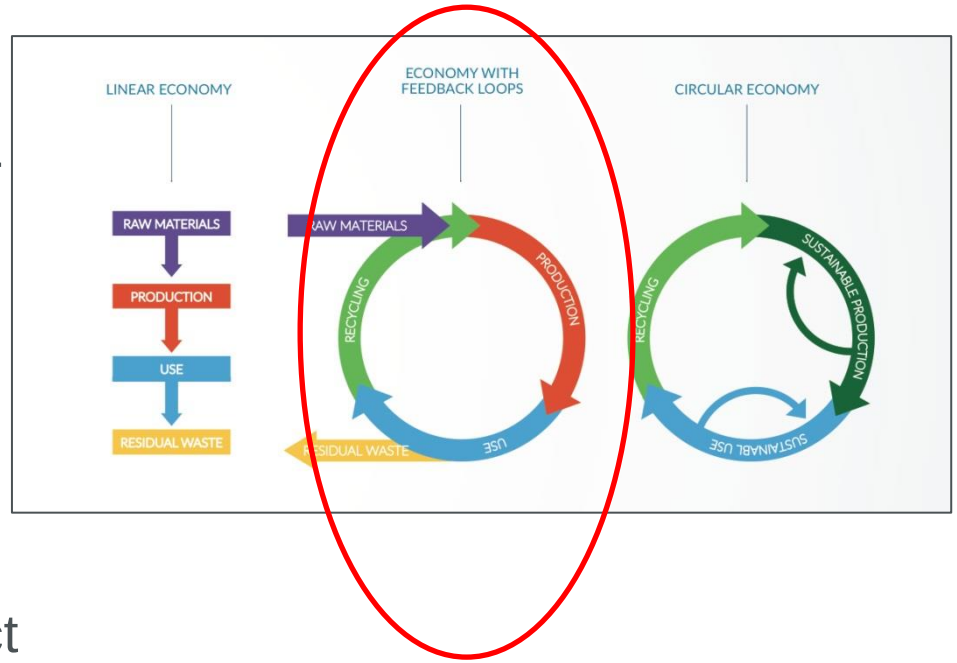
Circularity is on the “planet” theme of our CSR ambition plan 2025. Circularity means minimizing the use of scarce materials, reusing materials and reducing waste in our operations.

We have set ourselves a goal for 2025, but decided to do this step-by-step.

1.2 Circular strategy - approach

We focus on **raw materials** and **waste** to reduce our impact on material use;

- **Raw materials**; focus on copper because of the scarcity in the near future, impact of the ecological and social aspect in the supply chain and high dependency of our operation on copper
- **Waste**; we will reduce our impact on non-recyclable waste to contribute to closing the material loop



Not in scope for implementation raw material passport

1.3 Starting points – agreed by CSR board Oct 2018

- **Insight** is the basis with which we start. At the same time, we also want to start to implement pilot projects.
- With regard to insight, we want to start by asking **raw material passports** when purchasing our strategic assets as a starting point to identify further sustainability opportunities.
- In addition, we want to gain **100% insight** into our waste streams and what value is involved in this potential.
- Our targets will be set on base year **2020**
- We will show our commitment by **reducing** copper use and waste with **25%**, which is giving the clear signal of commitment

Ambition area	Description	Target
Circular	Circularity is minimizing use of scarce materials, reusing materials and reducing waste in our operations.	*In **2025** 25% less impact on virgin copper use and non-recyclable waste.*

1.4 Current situation as of September 2020

- Raw material passport has recently been implemented in the majority of the Dutch tenders
    - For example the recent Dutch substation tender, as well as the Dutch/German tenders for shunt reactors and power transformers
- The insight unfortunately is still rather limited, so therefore we managed to find other ways to identify the use of raw materials like copper and aluminium in offshore cables
- Nevertheless we managed to introduce measures on Climate and Nature like Nature inclusive design by the method of Environmental Cost Identicators

1.5 Targets

Incoming streams

(1) Raw material passport

For new tenders for main components; transformers, cables, conductors, switches and pylons.

(2) 25% less virgin copper use compared to 2020 *

Procurement ambition which will be realized by reuse, challenging the market on recycled copper use and alternatives for copper.

2020 → 2025

Outgoing streams

(3) Starting Annual report 2020

TenneT shows full transparency on her waste streams and destination (operations and projects, recycle/n-recycle)

(4) 25% less non-recyclable waste compared to 2020 *

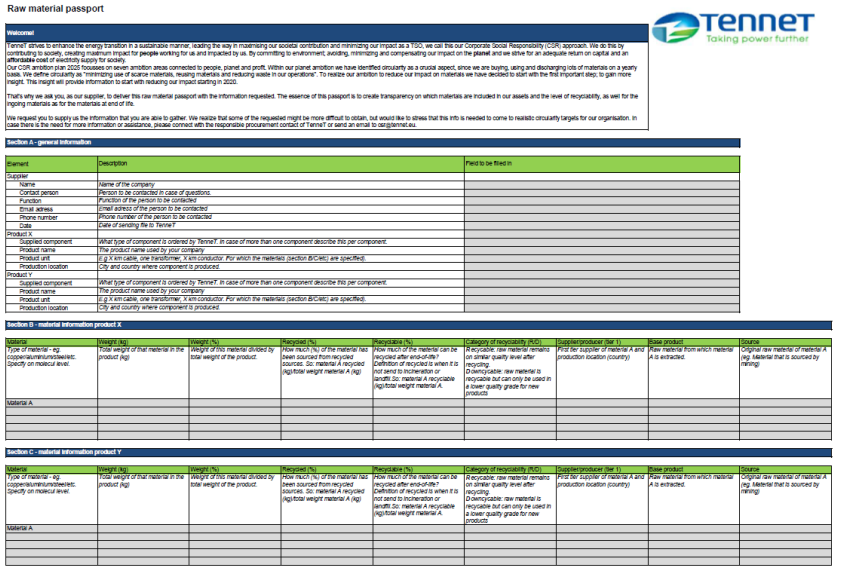
Waste ambition which will be realized by reducing waste, reuse and challenging the market

* In 2020 the ambitions will be set, and whether they should be absolute (kg) or relative (kg/invested euro)

2. What is a raw material passport?

A **raw material passport** is;

- A document that is filled in by our suppliers
- Which specifies which materials are in his/her product
- How much of the material is recycled
- And what the recyclability is
- Next, it specifies where the material comes from
- And what the basis source is



Raw material passport

TenneT
Taking power further

Welcome!

TenneT strives to enhance the energy transition in a sustainable manner, leading the way in maximising our societal contribution and minimizing our impact as a TSO, we call this our Corporate Social Responsibility (CSR) approach. We do this by contributing to society, creating maximum impact for **people** working for us and impacted by us. By committing to environment, avoiding, minimizing and compensating our impact on the **planet** and we strive for an adequate return on capital and an **affordable** cost of electricity supply for society.
Our CSR ambition plan 2025 focusses on seven ambition areas connected to people, planet and profit. Within our planet ambition we have identified circularity as a crucial aspect, since we are buying, using and discharging lots of materials on a yearly basis. We define circularity as "minimizing use of scarce materials, reusing materials and reducing waste in our operations". To realize our ambition to reduce our impact on materials we have decided to start with the first important step, to gain more insight. This insight will provide information to start with reducing our impact starting in 2020.

That's why we ask you, as our supplier, to deliver this raw material passport with the information requested. The essence of this passport is to create transparency on which materials are included in our assets and the level of recyclability, as well for the ingoing materials as for the materials at end of life.

We request you to supply us the information that you are able to gather. We realize that some of the requested might be more difficult to obtain, but would like to stress that this info is needed to come to realistic circularity targets for our organisation. In case there is the need for more information or assistance, please connect with the responsible procurement contact of TenneT or send an email to csr@tennet.eu.

Section A - general information

Element	Description	Field to be filled in
Supplier		
Name	*Name of the company*	
Contact person	*Person to be contacted in case of questions.*	
Function	*Function of the person to be contacted*	
Email adress	*Email adress of the person to be contacted*	
Phone number	*Phone number of the person to be contacted*	
Date	*Date of sending file to TenneT*	
Product X		
Supplied component	*What type of component is ordered by TenneT. In case of more than one component describe this per component.*	
Product name	*The product name used by your company*	
Product unit	*E.g X km cable, one transformer, X km conductor. For which the materials (section B/C/etc) are specified).*	
Production location	*City and country where component is produced.*	
Product Y		
Supplied component	*What type of component is ordered by TenneT. In case of more than one component describe this per component.*	
Product name	*The product name used by your company*	
Product unit	*E.g X km cable, one transformer, X km conductor. For which the materials (section B/C/etc) are specified).*	
Production location	*City and country where component is produced.*	

Section B - material information product X

Material	Weight (kg)	Weight (%)	Recycled (%)	Recyclable (%)	Category of recyclability (R/D)	Supplier/producer (tier 1)	Base product	Source
Type of material - eg copper/aluminium/steel/etc. Specify on molecul level.	*Total weight of that material in the product (kg)*	*Weight of this material divided by total weight of the product.*	*How much (%) of the material has been sourced from recycled sources. So: material A recycled (kg)/total weight material A (kg)*	*How much of the material can be recycled after end-of-life? Definition of recycled is when it is not send to incineration or landfill. So: material A recyclable (kg)/total weight material A*	*R:recyclable: raw material remains on similar quality level after recycling. D:demicyclable: raw material is recyclable but can only be used in a lower quality grade for new products*	*First tier supplier of material A and production location (country)*	*Raw material from which material A is extracted.*	*Original raw material of material A (eg. Material that is sourced by mining)*
Material A								

Section C - material information product Y

Material	Weight (kg)	Weight (%)	Recycled (%)	Recyclable (%)	Category of recyclability (R/D)	Supplier/producer (tier 1)	Base product	Source
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Material A								

A **raw material passport** gives us insight in our impact on scare materials and is essential to determine how we can take next steps, that are achievable for our suppliers.

3. How are we implementing the raw material passport?

The implementation consist of three steps:

1. Increase awareness and knowledge on the necessity of the raw material passport
2. Availability of the tools; the “raw materials passport system”, way to implement it in the procurement process and clear route on what to do with “complete” passport
3. Asking for raw materials passport from suppliers starting Jan 2019 as information request, but not as knock-out

4. Future challenges

1. How can we prevent using more tools to register the raw material passport (“internal TenneT database” vs KSANDR application)?
2. TenneT specific vision: introducing not a national or even bi-national but a European standard, since we are based in two countries and our suppliers serve the world market

www.tennet.eu

TenneT is de eerste grensoverschrijdende elektriciteitstransporteur van Europa. Met 21.000 kilometer aan hoogspanningsverbindingen en 41 miljoen eindgebruikers in Nederland en Duitsland behoren we tot de top 5 elektriciteitstransporteurs van Europa. Onze focus is gericht op de ontwikkeling van een Noordwest-Europese energiemarkt en op de integratie van duurzame energie.

Taking power further