









DEAR CUSTOMERS AND PARTNERS OF MTÜ REHVIRINGLUS,

YOU ARE READING OUR THIRD NEWSLETTER.

- The statistics for 2023 will give you an overview of the recovery methods used last year, how many waste tyres were collected in general and how many were recovered.
- As of the first quarter of 2024, the tariffs are more favourable for those who have joined Rehviringlus.
- Long-awaited legislative changes to extend producer responsibility to car importers are still waiting to be submitted to the government.
- There are two waste tyre producer responsibility organisations (PROs) active in Estonia: MTÜ Eesti Rehviringlus and PRO Estonian Tire Recycling MTÜ (hereinafter ETR), founded by the members of the board of the Estonian Tyre Association (MTÜ Eesti Rehviliit). ETR has various concerns regarding our activities, for which they sent a request for clarification to both the Ministry of Climate and the Environmental Board. You can read about our position on these concerns in this newsletter.
- How different handling methods are positioned in the waste hierarchy.
- We can already say that tyre bales have proven their worth as a load-bearing structural element in road construction. Part of our defence capabilities relies on tyre bales.

TYRE RECOVERY 2023

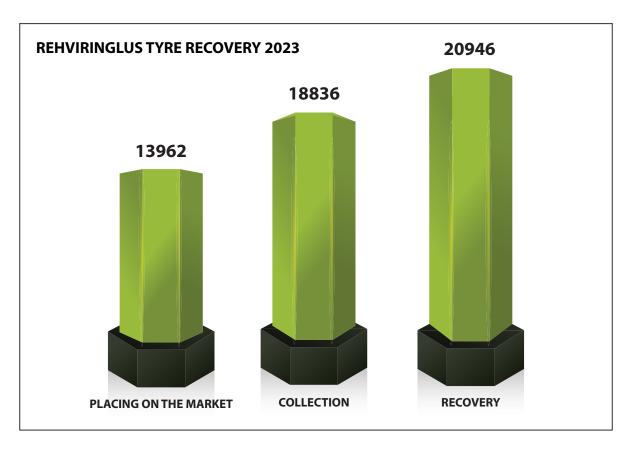
In 2023, 13,692 tonnes of tyres were placed on the market in Estonia, of which 8,146 tonnes were tyres for passenger cars, SUVs and light vans. Nevertheless, we collected 18,836 tonnes of tyres. This large difference between placing on the market and collection may be due to a drop in tyre sales. On the collection side, it could be attributed to a certain amount of previously undisposed tyres, such as those used for covering silage pits, now reaching the recovery system. An even larger amount went to recovery – 20,946 tonnes, attributed to the reduction of tyre stockpiles collected last year and their redirection to recovery. As of today, all the collected waste tyres have been handled and recovered – the stockpile at collection points and handlers is minimal.

59.9% of the recovered tyres were recycled, 18.8% used for energy production, 8.7% used as construction materials and 12.5%, mainly special service tyres, used for quarry backfilling. 67.7% of recovered tyres were exported.

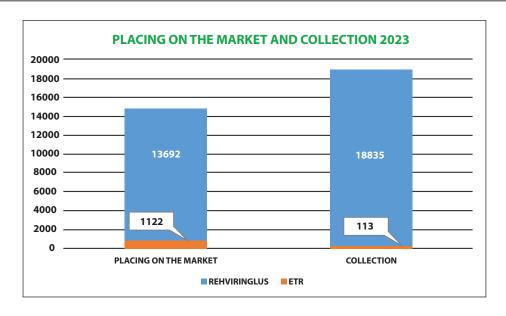
The other PRO in Estonia, ETR, placed 1,122 tonnes on the market in 2023 and collected 112.6 tonnes of tyres, but did not recover any tyres.

ACTIVITIES OF PROS FOR WASTE TYRES IN 2023

PRO	Joined companies	Number of handling methods	Price	Number of collection points in Estonia	Placing on the market / t	Collection / t	Recovery / t
MTÜ Rehviringlus	182	6	110	110	13,962	18,836	20,946
MTÜ Estonian Tire Recycling	11	1	120	75	1,122	113	-

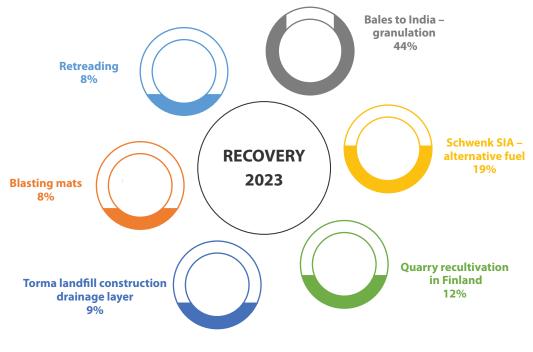






RECOVERY OF TYRES BY HANDLING METHODS 2023

MTÜ Rehviringlus used six different recovery options in 2023. 44% of the collected waste tyres were sent to India for recycling. 19% of the tyres were used as an alternative fuel in the cement industry, replacing fossil fuels. As special service tyres are very bulky and difficult to handle, we sent 12% of the tyres to Finland for quarry backfilling. This method could conditionally also be called 'burying'. However, special service tyres are a good substitute for large amounts of soil that would otherwise need to be excavated. Landfills are facilities that have to be established with various environmental requirements in mind. One such requirement is the need for a drainage layer to enable the controlled treatment of leachate. Thus, 9% of the recovered tyres were used for the construction of a drainage layer at the Torma landfill in Jõgeva County. 8% of the tyres were processed into construction mats, which are used in blasting operations, especially in Scandinavia. While retreading is the best recovery option, a large proportion of old tyres are in such a state that they can no longer be retreaded into new tyres. However, the 8% still represents a significant quantity of tyres that are given a new lifecycle.





RECOVERY FEE 2024

Tariffs of MTÜ Rehviringlus for collection and recovery of tyres (as of 01.01.2024)

for JOINED PRODUCERS:

ТҮРЕ	PRICE
Passenger car, SUV and van tyres	110 €/t
Truck and bus tyres	110 €/t
Special service tyres (lifting equipment and tractor tyres, etc)	190 €/t
Other tyres (bicycle, motorcycle and ATV tyres, etc)	110 €/t

ETR IS CONCERNED ABOUT REHVIRINGLUS

In February, PRO Estonian Tyre Recycling MTÜ sent a request for clarification to the Ministry of Climate and the Environmental Board with various concerns regarding the recovery of waste tyres by MTÜ Rehviringlus.

ETR's concern about Raadi costs

In this regard, we have the following to report:

Since 2010, Rehviringlus is the only consistently operating producer responsibility organisation, having recovered 130,000 tonnes of tyres to date.

- Since the end of 2020, Raadi no longer has any tyre piles or environmental hazards.
- Rehviringlus handed the tyres over to Kuusakoski; we paid for the handling and received certificates of tyre recovery.
- Kuusakoski handed the waste tyres at issue from 2010 to 2014 over to the waste handlers (Netronic OÜ and Rubronic OÜ), both of whom held appropriate waste permits for that period and were issued new permits upon expiration.
- Even though MTÜ Rehviringlus has already paid once for the handling of the tyres at Raadi, we are still ready to negotiate with the state and reach a goodwill agreement. Today, the collection and recovery of tyres is working well, as evidenced by the fact that there are no new tyre piles.
- Five years ago, during the negotiations between the Ministry of Environment and MTÜ Rehviringlus, a proposal was discussed stating that by no later than July 1, 2020, Estonian law would also treat individuals placing tyres on the market for M1 and N1 class vehicles in Estonia as tyre manufacturers on equal terms with other tyre manufacturers. This has not happened to this day. It means that Rehviringlus has also recovered all the collected tyres that are not covered by the producer responsibility and the funds it generates.
- In 2023, around 14,000 tonnes of tyres were placed on the market by the producers who had joined MTÜ Rehviringlus. On the other hand, around 19,000 tonnes of tyres were collected and around 21,000 tonnes were recovered



ETR's concern about the lower tariff for Rehviringlus

Every PRO should set prices based on actual costs. Cost management was also a problem under the predecessor of ETR, the Estonian Tyre Association. Now, the same people are facing the same problems once again.

The Estonian Tyre Association ceased its activities in 2016 on the grounds that they were not able to offer producers a service for less than €150/tonne. The price of Rehviringlus has remained unchanged for producers at €120/tonne since the beginning of 2017. From the beginning of 2024, we were able to reduce the price by 8.3%.

Costs are certainly influenced by the fuel input prices, but also by the organisation of work and logistics. We have been able to optimise the transport service from the collection points to our terminals, with one located in South Estonia and the other in North Estonia. Since we offer our customers various recovery options, we direct waste tyres to the nearest possible handler based on the handling method. That's probably one of the biggest operational differences with ETR, which plans to route all collected tyres from Valga or Kuressaare through Kunda to Narva.

Competition among companies using various handling methods through Rehviringlus prevents unjustified price increases.

ETR's concern about the current monopoly of Rehviringlus

A producer responsibility organisation is a non-profit organisation tasked with fulfilling specific duties as mandated by law. With two or more PROs, the costs for a double collection network and management increase. Importers do not benefit from this so-called competition. The main objective is to ensure that recovery costs are covered. At the same time, the law allows for the possibility of more than one PRO. In 2016, this did not work out, and ETR's predecessor, Estonian Tyre Association, ceased operations as a PRO. Today, the same individuals are making a fresh attempt by establishing a new PRO, despite the fact that MTÜ Eesti Rehviliit remains registered in the commercial register and continues to submit annual reports.

ETR's concern about stock surplus of Rehviringlus

ETR is concerned that Rehviringlus may leave tyres lying in piles. We understand their concerns. On September 29, 2016, the Estonian Tyre Association issued a press release to the public, stating that, by decision of the general meeting, Estonia's primary PRO for collecting and recovering waste tyres ceased its operations. The press release mentions that the Estonian Tyre Association could have considered continuing its operations and waiting for the resolution of systemic issues if it had been possible to find even temporary storage facilities for the incoming tyres. However, all options were unfortunately stalled by long-term bureaucracy or economically unfeasible solutions. They have a negative experience based on their own example.

By the end of 2023, our handling partners had a stock surplus of around 3,000 tonnes. These are tyres stored with our partners to ensure that there is sufficient stock for pre-recovery handling. In addition to this there are about 1,000 tons of tyres still located at collection points, of which there are approximately 110 nationwide.

At present, tyre collection faces a challenge where, during off-peak seasons (summer, winter), there is insufficient tyre volume to maintain the efficient operation of handling units. During this time, tyres are collected and employees are given (sometimes involuntarily) time off. Even transportation partners must seek alternative cargo or waste to transport during these periods.

The Environmental Board confirms in its reply to request for clarification that the stock surplus of MTÜ Rehviringlus has not increased and promises to supervise both PROs and inspect waste management partners in 2024.



ETR's concerns regarding the handling methods of Rehviringlus

MTÜ Rehviringlus is Estonia's only PRO for waste tyres, offering a variety of handling methods for optimal tire recovery.

MTÜ Rehviringlus directs tyres to partners utilising various handling methods for recovery, aiming to mitigate risks and ensure optimal handling costs through competition.

- All tyres that are suitable for retreading are handed over directly from the end-user for retreading. Today, these still mainly include truck and special service tyres, but we are also developing the collection of passenger car tyres for this purpose.
- The production of blasting and construction mats accounted for 8% of recovery in 2023. If demand were to decrease, we could vary between our other handling methods.
- The production of tyre bales appropriately sorted and bound up bales is a promising road construction material where geological conditions would require the use of large quantities of soil, for example in the city of Helsinki next to a Natura 2000 site. In Estonia, however, it could be used for the construction of noise barriers and protective embankments at shooting ranges. The footprint of tyre bale production is over 10 times smaller than that of tyre chip pyrolysis.
- Bale production for transport optimisation. Export to India serves two main purposes: primarily as raw material for the production of new products, including new tyres, and to a very limited extent for energy generation, the cloth is burned.
- Tyre chips are regarded as an alternative fuel in the cement industry, serving as a substitute for fossil fuels and contributing to the sustainable development policies.
- Some of the tyre chips crushed in Estonia are used or constructing drainage layers in landfills.
- Special service tyres and solid tyres used under quarry machinery do not allow cost-effective shredding or other processing, and are sent to Finland as substitutes for soil in quarry backfilling. Thus, Rehviringlus currently has seven different recovery options for the waste tyres collected in Estonia.

Although tyre pyrolysis has a high carbon footprint, it is one internal option for tyre handling in Estonia. Diversifying recovery options could be considered.

If Ragn-Sells truly wants to contribute to solving the waste tyre problem in Estonia, it has the opportunity to enter negotiations with Rehviringlus. We will learn about Ragn-Sells' actual plans when the tyre shredder under construction in Kunda becomes operational. Some of these tires, specifically those collected through ETR, are definitely of Estonian origin. According to our current knowledge, they amount to 15% of waste tyres recovered in Estonia. As of today, we have no knowledge of ETR's (Ragn-Sells) plans for special service tyres that are difficult to handle, although they, too, need to be recovered.

The information on the ETR website about innovative handling is misleading for consumers. At Enefit Power, shale oil is pyrolysed from waste tyres together with oil shale, mainly for use as marine fuel.

If Enefit Power is able to realise its future plans, the situation will change. Rehviringlus underlines that pyrolysis is a legal handling method, but a considerable quantity of the new residue - ash is produced by this method of handling.

ETR's concern regarding the proposals of Rehviringlus for the Waste Act

Rehviringlus has submitted its views and proposals for amending the Waste Act on November 14, 2023, aiming for the law to exclude simultaneous membership in multiple PROs. According to Rehviringlus, it would be impossible to fulfil the obligation laid down in subsection 2 of § 251 of the Waste Act if the scope of obligations transferred by the producer to the producer association is indefinite.

Furthermore, Rehviringlus considers that it is not possible to submit confirmation to the problem product register that the data submitted by the association is correct and provides accurate information on the joined producer and the quantity of problem products placed on the market by the joined producer if the obligations of the producer have been divided between two different associations in an unknown manner. According to ETR, the proposal is problematic from a competition law perspective. Producers must retain the right and the possibility to choose to whom and to what extent to transfer their obligations.

Rehviringlus sees the proposal as neutral in terms of competition. The proposal is not made to preserve its customer base but to establish legal clarity. Rights must be balanced by responsibility. In the case of more than one PRO, the importer has the choice between one or the other PRO.



ONCE AGAIN ABOUT TYRE BALES

Some of you may have already envisioned how Rehviringlus includes burying tyres as one of its handling options. The photos give you an idea of how the tyre bales become part of the Läpi-Ojaküla road embankment. In the vicinity of Bedford in Great Britain, tyre bales were even used in the construction of the A421 dual motorway, as part of the embankment on weak clay soil.

Approximately 3 km of roads have been completed, where the tyre bale has proved to be even better than traditional road construction methods. There are significantly fewer holes and no tracks. Road maintenance costs are lower on roads where, in addition to trucks and passenger cars, tanks and other military machinery operate. Therefore, it can be said that our defence capabilities partially rely on tyre bales. This is even more true if you add the berms of shooting ranges to the list.

Tyre bales are recommended for:

- 1. Large-scale projects requiring large-scale filling (such as roads, plots, embankments, etc).
- 2 Weak soils with low load-bearing capacity. For example, areas covered with peat, which would sink into the lower-lying soils under their weight when using traditional construction materials such as sand, gravel, etc. An alternative is to use logs or tyre bales. The structure of tyre bales, for example, is approximately three times lighter than traditional construction materials.
- 3 When suitable construction material is not readily available. Since the specific gravity of tyre bales is three times lower compared to compacted sand, transporting tyre bales requires approximately three times fewer trucks or involves three times fewer vehicle kilometres to transport the material to the site.

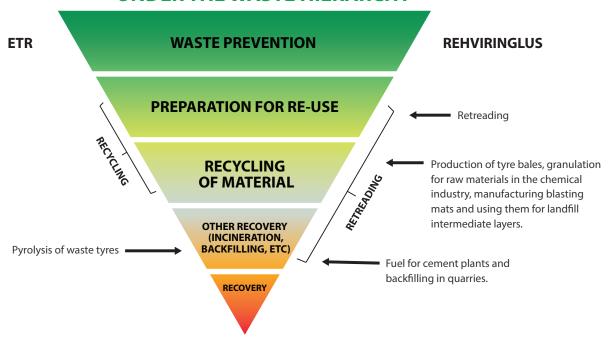
The production of tyre bales does not generate new waste.







HANDLING METHODS OF WASTE TYRES IN ESTONIA UNDER THE WASTE HIERARCHY



Motor vehicles have the ability to move

According to the Estonian Transport Administration, 56,543 vehicles were imported to Estonia, of which 43,505 were passenger cars. Although years may not be identical, in 2023, a total of 19,939 motor vehicles, including 12,920 passenger cars, were deleted from the Estonian motor register due to transfers or changes of residence. This means that a significant number of undeclared tyres remain in Estonia to be handled.

The Waste Act draft extending the scope of PRO tyre manufacturers has not yet reached the Riigikogu

In the autumn newsletter, we already wrote about the Waste Act draft, which has gone through the approval process and also turns car importers into tyre manufacturers.

Unfortunately, as of now, the draft has not been submitted to the Riigikogu.

If you have any questions or proposals on how to improve the work of Rehviringlus, please get in touch with Einar Teesalu +372 512 5833, info@rehviringlus.ee

Share your good ideas and observations with us!



