



"LightRec remains directly connected to the major players in the lighting industry, and can continue to fulfill its role of industry advocate in the Netherlands as well as on the European stage."

Since its foundation, LightRec has published its own Annual Reports as an independent collection entity. This will be our last year doing so in this specific form, because our binding agreement (AVV lamps) has concluded and the responsibility for the collection and recycling of lamps and luminaires has passed to OPEN. We will continue to communicate regularly about our efforts, but we will do so in a different role. The nature of that role will be explained in detail in this Annual Report.

As I wrote here last year, LightRec and its industry partners have invested a great deal of time and energy into building a professional collection system, and we have now transferred the entirety of this valuable legacy to OPEN in full confidence. My fellow Board members and I are glad to report that our trust was honored, and that OPEN has rapidly developed into a robust and highly efficient organization. OPEN has been a pleasure to work with and has shown to be considerate of our partners' specific interests. After all, lighting is and remains a 'special' category of e-waste, subject to different parameters than, say, kitchen appliances or audiovisual electronics.

While I have your attention, I would like to take the opportunity to sincerely thank Zoltan Pilter, who retired as a board member of LightRec this past summer. As we will not seek a replacement, for the coming period the LightRec Board will consist of Judith Keirsmaekers (SG Lighting, Board secretary), Thomas Leenders (Signify), Andreas Adam (Ledvance), Rolf Ibsen (Megaman) and myself. This means that LightRec will remain directly connected to the major players in the lighting industry, and that we can continue to fulfill our role of industry advocate in the Netherlands as well as on the European stage."

Paul Rotteveel, chair of LightRec's Board



2022

In collection volumes

Conventional lamps



⊢ sale:

631 tonnes (843 ; -25.1%)

235% (136%; +72.8%)

 the collected volume (relative to POM) is rising as a consequence of the dwindling numbers of conventional lamps sold, but is stable in absolute numbers

LED



— sale

2,996 tonnes (2,538; +18,0%)

¬ collected volume**

2% (2%; +0.0%)

** relatively low collected volume owing to the long lifespan of LED lamps

(LED) Luminaires



sales

35,642 tonnes (35,730; -0.2 %)

___ collected volume

18% (17%; +0.06%)

NEW ROLE

As a collection entity, LightRec ceased to exist by the end of 2022. At that time, our binding agreement (AVV lamps) concluded, and OPEN became responsible for the collection and recycling of lamps and luminaires. However, LightRec will live on as an industry advocate, and will also continue to manage the accumulated financial reserves. In the coming decade, these reserves will be used to ensure that Extended Producer Responsibility guidelines in the lighting industry will be implemented and applied fairly. For example, as one of the representatives on the OPEN Board, LightRec will seek to keep the waste management fees paid by producers of lamps and luminaires in line with market rates. Our reserves will also be deployed to finance specific (collection) initiatives, for example at schools. In brief: the contributions paid by our members will be used towards their original goal: the responsible collection of lighting and luminaires that are currently still in use, but that will eventually be discarded.



Lamps and luminaires (collected and put on market)

2016-2022 (in tonnes)

Similarly to 2021, the collection of discarded fluorescent tubes, energy-saving lamps and other conventional lamps fell again in 2022 (by 4% compared to the prior year). The collected volume of conventional lamps relative to the POM (sales) has continued to rise to 234%, owing to the dwindling sales of this type of lighting. This is good news, given that the collection of conventional lamps has the most significant environmental impact. These results are also in line with LightRec's and its members' ambitions to continue the collection efforts of conventional lamps in Europe for as long as possible. LED lamps are less problematic, as they contain far fewer (or no) harmful substances, and they are currently only collected in small numbers due to their relatively long lifespan. This long lifespan also means that the target of 65% cannot be reached. To approach the statutory collection goals in the future, efforts will have to continue to aggressively target both conventional and LED lamps.

2021 was the first year that the OPEN Foundation was responsible for the collection of luminaires. OPEN operates in close consultation with LightRec, which has leveraged the financial reserves built up over the past years by producers to support collection efforts and the associated communication. Owing to our high ambitions and significant efforts (including the implementation of a reimbursement system for the return of luminaires by professionals), collected volumes in the luminaire segment rose by 44%, while the POM continues to rise sharply. New collaboration efforts with the metal industry have been initiated and we have redoubled our focus on the construction and demolition industries to help bring the targets within reach.



 ^{*} Before August 2018: only professional luminaires (construction and demolition industry).
From August 2018: also very large volumes of consumer luminaires (legally required since August 2018).



The future 2022 and beyond

In 2023, LightRec expects a further rise in the collection of luminaires thanks to the reimbursement system and OPEN's collaboration with recycling companies. The collection of conventional lamps will gradually decline, but will remain necessary at least until 2029. Alongside OPEN, LightRec will conduct studies on the separate and combined collection and recycling of LED and conventional lamps. For 2024, LightRec seeks to maintain the collection fees at the same level as in 2023.

Responsible management of the accumulated reserves

Now that our traditional role as an independent collection entity is played out, we envision a new role for ourselves: one as a committed advocate for our partners' (i.e. former LightRec members') interests. This new role is expressly not an artificial construct, but a logical consequence of the fact that LightRec is still responsible for the responsible management of the accumulated reserves. These reserves – de facto 'earmarked' funds that may not be used for any other purposes – will be used to flesh out Extended Producer Responsibility in the lighting industry during the next decade.

For instance, we will continue to promote competitive and market-level remittances for lighting. While it is OPEN's role to make a proposal based on the Put on Market (PoM) numbers, the fees will ultimately be set by LightRec's representative on the OPEN Board. A partial subsidy drawn from our reserves is one conceivable option.

The relatively low current fees are partially a result of the significant financial investments made by LightRec to fund media campaigns promoting public collection efforts. As OPEN will not shoulder the costs of these campaigns, they will not be included in the calculation of the waste management fees. Hence, we expect that the fees will remain level in the coming year.

Finally, a part of our reserves will be used to finance specific collection projects, e.g. at schools, and to fund research, e.g. with regard to lamp sorting.

Playing on several boards at once

Anyone seeking to represent interests, needs to be present in the forums and platforms where those interests may be a subject of discussion. Hence, LightRec is active in the representative organization Fedet-NLA, where we discuss trends and developments and are able to exercise (political) influence over laws and regulations concerning the acceleration of LED lighting in the Netherlands, among other things. Because Fedet-NLA is member of the European umbrella organization Lighting Europe, this also gives us a seat at the table at EU level. This ensures that we have first-hand information on newly developed legislation and other politically sensitive dossiers.

In addition, LightRec is directly represented in the board of EucoLight, the European partnership of foundations involved in the collection and recycling of WEEE lamps and lighting products. On behalf of its 20 members, EucoLight is involved in all developments related to the WEEE guideline, including legislation and standards applicable to the collection and recycling of WEEE lighting. In this way, we aim to play effectively on multiple boards at once.



The necessity of a new collection target

As the individual product-specific foundations of the past, the OPEN foundation is required to meet the collection target set by the EU. This target remains set at 65% of the average weight of electric and electronic devices put on market (PoM) within the Netherlands in the past three years.

However, OPEN believes that this collection target of 65% is outdated. Firstly, the target does not underwrite the urgency of transitioning to a circular society, as described in the European Green Deal and also the last coalition agreement. After all, the target is only concerned with 'collection for recycling', and neglects to mention 'collection for refurbishment or repair'. Furthermore, the target fails to account for the ongoing electrification of our society, which is accelerated by the rise of remote work and the broader energy transition.

And perhaps the most essential point of all: many of the devices put on market have a (significantly) longer life span than three years, and as a result are not counted in the three-year average on which the current target is based. Worse, the 65% target may structurally encourage taking perfectly functional devices off the market after three years, in order to ensure they count towards the collection target.

LightRec supports OPEN's view on the matter, because LED lighting is an eminent example of an electric product with a long lifespan, ranging up to twenty years or more. In addition, many luminaires are perfectly suitable to be re-used, e.g. through the distribution network of thrift shops.

Redesign of the WEEE Directive

At the time of writing this Annual Report, a possible re-design of the current WEEE Directive is under discussion in Brussels. LightRec is directly involved through the EucoLight partnership. Our commitment is to seek to maintain, for the time being, a separate product group for lighting (i.e. the current category 3), as this makes it easier to accurately and transparently monitor the collection of discarded fluorescent tubes and energy saving lamps in the coming years. Additionally, EucoLight strives to realise a level playing field for Extended Producer Responsibility in all of Europe.



€ Costs	Budget 2023*	Actual 2022	Actual 2021	Actual 2020
	(€)	(€)	(€)	(€)
Costs for collection, transport and recycling	0	2,3573,859	2,361,816	3,191,131
Other costs (including Action plan Lightrec)	0	329,392	178,244	175,817
Total	0	2,687,251	2,540,060	3,366,948
Collected volume	Budget 2023*	Actual 2022	Actual 2021	Actual 2020
	(in tonnes)	(in tonnes)	(in tonnes)	(in tonnes)
Fluorescent tubes	0	1,283	1,316	1,505
Energy saving and other lamps	0	197	221	220
LED lamps	0	59	44	42
Luminaires	0	0	0	4,896
Total	0	1,539	1,581	6,663
Marketing expenses and	Budget 2023	Actual 2022	Actual 2021	Actual 2020
publicity campaigns	(€)	(€)	(€)	(€)
Wecycle publicity campaigns	0	0	11,590	101,885
Communication	50,000	16,366	80,394	97,817
Total	50,000	16,366	91,984	199,702
•				
Consumerate	Dudget 2022	Actual 2022	Actual 2021	Matural 2020
Consumer and	Budget 2023			Actual 2020
professional campaigns	(€)	(€)	(€)	(€)
Installer / professional campaigns	850,000	544,453	305,866	387,092
Retail / consumer campaigns	2,025,000	1,610,064	1,292,308	1,381,610
Total	2,875,000	2,154,517	1,598,174	1,768,702
(5) (1) (D., d + 20224	N - L 1 2022	n-t1 2024	N. ch 1 2020
Costs Lightrec Foundation		Actual 2022	Actual 2021	Actual 2020
- Lord Hook for the little	(€)	(€)	(€)	(€)
Installer / professional campaigns	486,950	370,709	347,893	375,889

^{*} As the AVV of the OPEN Foundation has come into force in 2021, all producers of fittings are now members of the OPEN Foundation. Lighting manufacturers remain members of the LightRec Foundation Netherlands. For this reason, starting January 2021, LightRec's budget only covers lights and not fittings.