

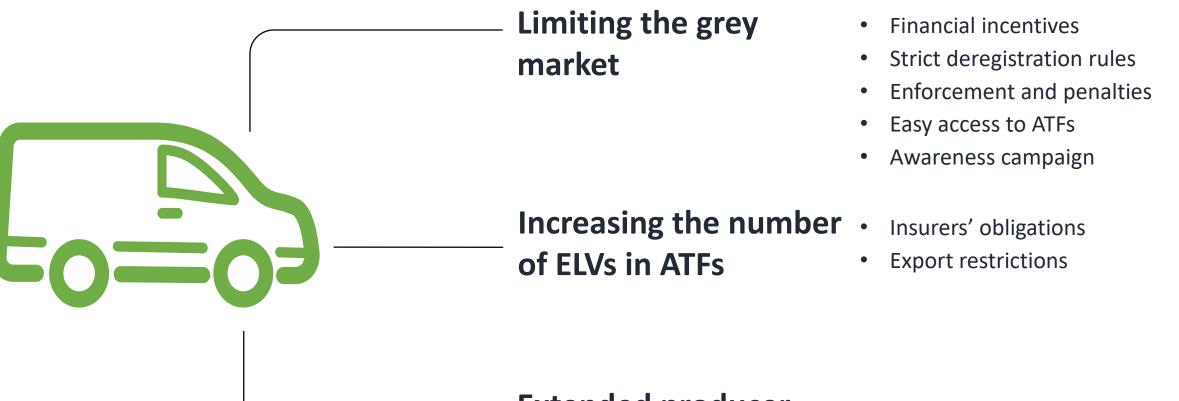
POZNAN UNIVERSITY OF TECHNOLOGY

Good practices in the collection of ELVs Examples of effective systems

prof. dr hab. Agnieszka Merkisz-Guranowska Institute of Transport



GOOD PRACTICES IN ELVs RECYCLING NETWORK



Extended producer responsibility

• Collection rates for ELVs



Financial incentives for vehicle owners



Scrapping premium: Offering money when an ELV is turned in for legal recycling



Refundable Deposits: Introducing a deposit when a vehicle is registered, refunded only when the ELV is handed to an authorized treatment facility



Incentives for Clean Vehicles: Government scrapping premium offered to encourage handing in older, polluting vehicles.



Scrapping premium



Financial incentives for ELV owners (2200 DKK, ~295 EUR) who return vehicles to the official recycling network or car dealers paid no later than two weeks after scrapping of the car and reception of the certificate of destruction. Vehicle must not be exported.

Vehicle owners are required to pay an annual environmental fee (84 DKK, ~11 EUR), which is collected together with the mandatory vehicle insurance.

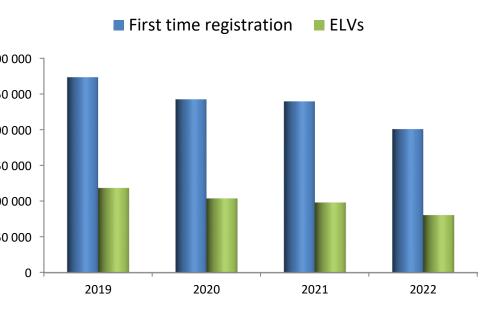
Insurance companies are responsible for collecting this contribution and subsequently transferring it to the Danish Customs and Tax Administration.



Number of ELVs with scrapping premium

First time registation (new or used)	ELVs with scrapping premium	ELVs/first time registration	300 250
273 387	118 344	43%	200
242 535	103 786	43%	150 100
239 600	97 987	41%	50
200 847	80 385	40%	
	(new or used) 273 387 242 535 239 600	(new or used) premium 273 387 118 344 242 535 103 786 239 600 97 987	(new or used)premiumregistration273 387118 34443%242 535103 78643%239 60097 98741%







Deposit refund system

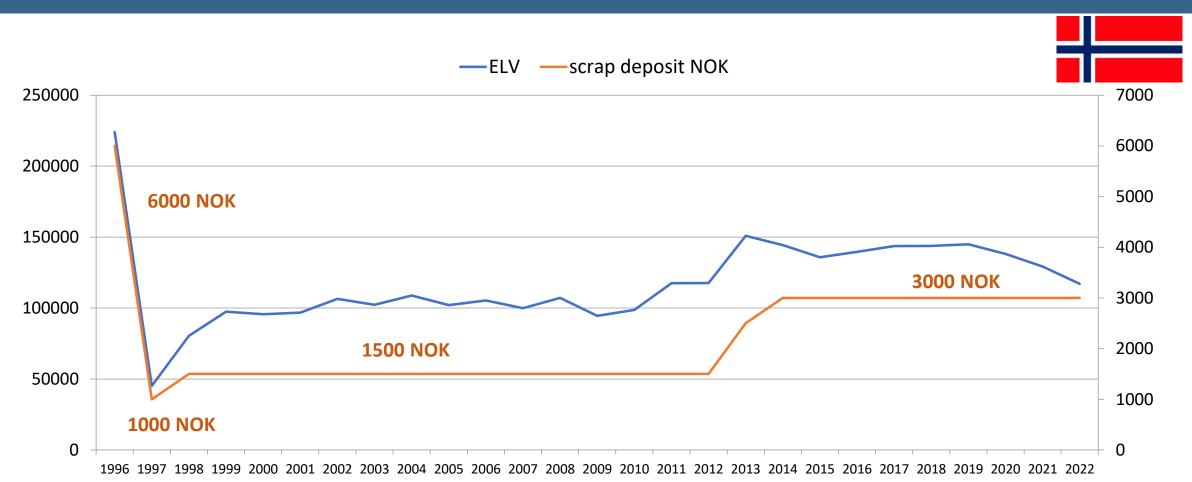


A deposit is paid by the vehicle owner when registering a vehicle (2400 NOK, ~203 EUR) and it's refunded when the ELV is properly recycled through an ATF (3000 NOK, ~255 EUR).

You can only de-register a vehicle after presenting a Certificate of Destruction from an ATF.

The vehicle collection facility will send the certificate of destruction electronically to the Norwegian Tax Administration, who will pay the vehicle scrap deposit to the specified deposit recipient and account number.







Incentives for clean vehicles coupled with scrappage bonuses

Incentives for Clean Vehicles: Government scrappage bonuses ("prime à la conversion") offered to encourage handing in older, polluting vehicles and buying newer less polluting Requirements

- Purchase price ≤ 47 000 EUR
- Up to 80% of the acquisition cost
- Unladen weight < 2.4 tons
- Annual taxable income less than 24900 EUR
- ELV handled to ATF

Type of vehicle (new or used)	Bonus
Electric or hydrogen-powered	€1500 to €5000 depending on annual income
Hybrid, petrol, LPG or E85 emitting less than 132g/km of CO ₂	€500 to €3000 depending on annual income



Strict registration and de-registration controls

Centralized Electronic Systems: Linking vehicle registration databases with recycling and deregistration systems helps monitor vehicle flows and detect illegal activity.

Mandatory proof of recycling for de-registration: The vehicle cannot be officially removed from the registry unless the owner provides a Certificate of Destruction (CoD) from a licensed ATF.

Enforcement and penalties

Stronger Inspections: Regular audits and inspections of scrapyards, garages, and used car dealers.

Heavy Penalties: Significant fines and possible loss of licenses for illegal trading or dismantling without authorization.



Strict registration and de-registration controls – Centralized Electronic Systems

Germany operates a digital system linking vehicle registration and de-registration, issuance and tracking of Certificates of Destruction, vehicle inspection, taxation, insurance data (Zentrale Fahrzeugregister ZFZR managed by the Federal Motor Transport Authority).

In Netherlands every dismantled vehicle is recorded in the national vehicle database maintained by the RDW (Netherlands Vehicle Authority).

Owners of all registered vehicles must pay an annual tax (even if the vehicle is temporarily deregistered).

In France Système d'Immatriculation des Véhicules SIV manages all vehicle registration certificates and tracks changes in ownership or vehicle status (sale, export, destruction). When the Certificate of Destruction issued by an ATF is recorded in the SIV, the vehicle is automatically deregistered from the system to prevent illegal reuse or resale.



Enforcement and penalties

Significant fines and possible loss of licenses for illegal trading or dismantling without authorization.

The last owner must transfer the ELV to an authorised treatment facility. Certificate of destruction serves as proof that the vehicle has been handed over to the authorised recycling system.

Failure to comply with this obligation constitutes an offence under the Road Code, punishable by a 1500 EUR fine (3000 EUR if repeated offence) and 7500 EUR for legal persons (15000 EUR if repeated).

Illegal treatment or detention of ELVs is a criminal offence under the Environmental Code, carrying a penalty of up to 4 years of imprisonment and a 150000 EUR fine (375000 EUR for legal persons).



POZNAN UNIVERSITY OF TECHNOLOGY

VÉHICULE HORS D'USAGE :

GUIDE À L'USAGE DES MAIRES ET DES POLICES MUNICIPALES

LIMITING THE GREY MARKET

Awareness campaign

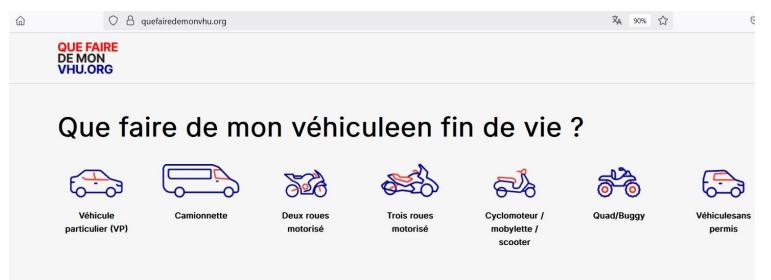
Educating the public about the importance of proper ELV recycling, the risks of illegal dismantling (e.g., environmental harm, loss of materials), and how to identify licensed ATFs.





Easy access to ATF

One-stop information service set up by the approved eco-organizations and manufacturers' individual systems (<u>https://quefairedemonvhu.org</u>) for individuals wishing to dispose their vehicles.



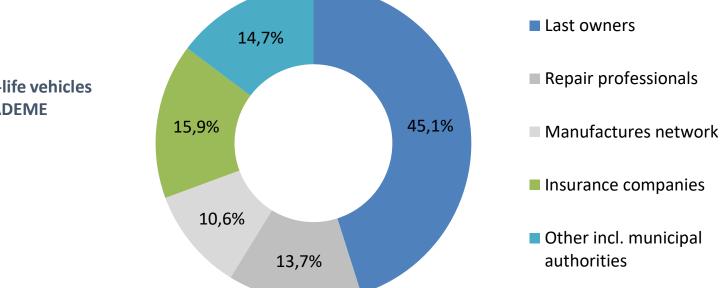




INCREASING THE NUMBER OF ELVs TREATED IN ATFs

Insurers' obligations

Mandatory transfer by insurers of vehicles classified as total losses to authorized treatment facilities (France, the Netherlands, Sweden)



Sources of origin of end-of-life vehicles in France (2016–2022) by ADEME



INCREASING THE NUMBER OF ELVs TREATED IN ATFs

Export restrictions for end-of-life or used vehicles

In Spain for heavily damaged vehicles (impact on safety) or total loss vehicles, ownership can only be transferred or export permitted if the vehicle passes a roadworthiness test with a date later than the date of damage notification to the insurer.

In the case of export to another country, and as proof that the vehicle is not waste, a certificate of passing the technical inspection is required, within 30 days before submitting the deregistration application for export to another country (i.e., exported vehicles must have a technical inspection confirming they are roadworthy and allowed for use).





EPR / SUPPORTING THE ATFs

Extended Producer Responsibility (EPR) in France

Manufacturers and importers through Producer Responsibility Organisations (PRO) or Individual Producer Responsibility Systems (IPRS) **must ensure a network of ATFs**.

Each PRO/IPRS ensures activities related to prevention, collection at the place of storage, transport, reception, storage, removal of hazardous substances, dismantling, and treatment, including operations carried out by industrial shredders.

The agreement between an ATF and a PRO/IPRS must specify the conditions and the amount of financial support provided to the ATFs to cover the costs of ELV management operations necessary to achieve recycling and recovery targets.

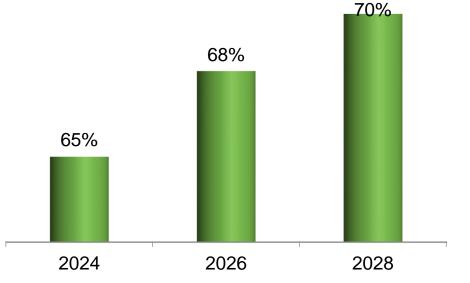


EPR / SUPPORTING THE ATFs

Extended Producer Responsibility (EPR)

Collection rate for vehicles

Number of ELVs accepted for processing by ATF/ number of new vehicles placed on the national market during the same period.



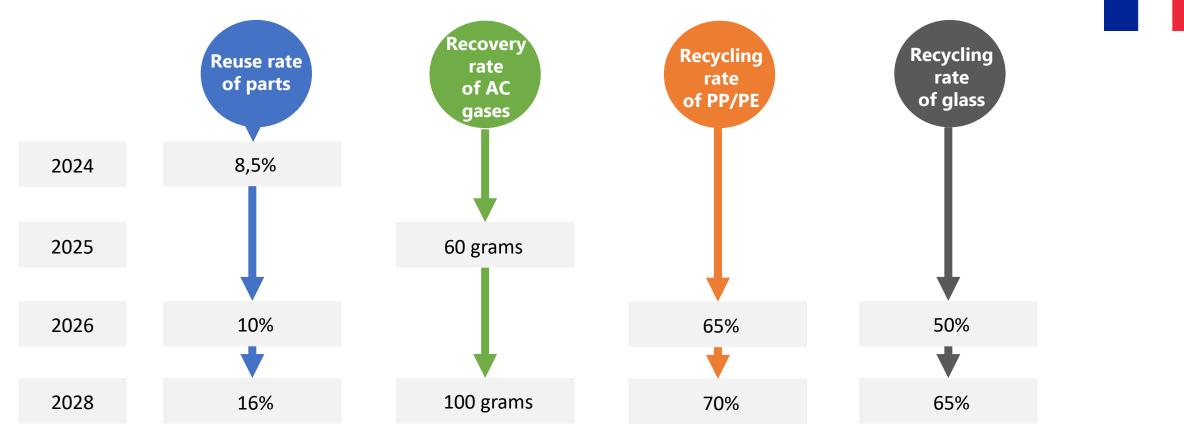
Producer responsibility organisations have assumed obligations regarding recycling and recovery rates (85% and 95%, respectively).



6th International FORS Conference 22-23.05.2025

EPR / SUPPORTING THE ATFs

Extended Producer Responsibility (EPR)





EPR/ SUPPORTING THE ATFs

Extended Producer Responsibility (EPR) in Norway



Since 2002, a non-profit joint-stock company, Autoretur AS, has been operating to manage the recycling network and ELV processing on behalf of vehicle manufacturers and importers.

Autoretur guarantees ATFs a minimum steel scrap sale price and covers the costs of transporting scrap from the dismantling station to the nearest shredder.

Participation in the system is free of charge for producers (the system is intended to be self-financing), but if the ELV value is too low, Autoretur may impose a fee (in 2023, NOK 100, approx. EUR 8.5) for each imported new or used vehicle, including petrol, diesel, electric, hydrogen, and plug-in hybrid cars.





EPR/ SUPPORTING THE ATFs

Extended Producer Responsibility (EPR) in Japan



Vehicle owners pay a recycling fee, which is transferred to the vehicle manufacturer as compensation for the ELV management costs.

The amount of the fee is determined by the manufacturers (for the vehicles they sell) – on average, the equivalent of EUR 75–100.

Problematic waste, such as chlorofluorocarbon (CFC)-based refrigerants from AC systems, airbags, and the automotive shredder residue (ASR), is handed over to manufacturers and importers for proper treatment. ATFs charge manufacturers for the removal of problematic waste (CFCs, airbags).

Designated producer responsibility organizations collect problematic waste on behalf of manufacturers (the Japan Automobile Recycling Partnership airbags and CFCs, and two separate organizations the ASR).



GOOD PRACTICES IN ELVs RECYCLING NETWORK

MOST EFFICIENT

- Financial incentives for vehicle owners
- Strict registration and de-registration controls
- Insurers' obligations
- Export restrictions
- Extended Producer Responsibility (EPR) or involving producers in organisation of recycling network

GOOD PRACTICES BUT LESS EFFICIENT

- Awareness campaigns
- Enforcement and penalties
- Tightening export controls and cooperation between authorities





6th International FORS Conference 22-23.05.2025

POLITECHNIKA POZNAŃSKA Instytut Transportu

Adres: ul. Piotrowo 3, 60-965 Poznań Telefon: +48 (61) 665 2260

instytut.transportu@put.poznan.pl
www.transport.put.poznan.pl