

Currently, Croatia has a packaging tax in place, as well as a fee for the protection of forests.

security contributions (well above the EU average of 5.76 %).1

## Further options

# **Tradeable livestock** emission permits to combat air pollution

Livestock is an important contributor to NH3 emissions in Croatia where the share of agriculture in total ammonia emissions is 84.55%. A large part of these ammonia emissions from agriculture stems from livestock manure management. Croatia might consider adopting an emissions trading scheme where livestock permits are traded and the permit covers the average annual emissions of NH3 (kg/yr) caused by livestock categories. It is applied on individual farmers with livestock holdings. Revenues could be used to support farmers in reducing NH3 emissions or compensate purchasing power loss of consumers.

### Reforming the landfill tax

Croatia might also consider reforming the current waste tax to reduce the amount of biodegradable waste sent to landfill. The current levels of landfill tax are not considered to play a role in decision- making or rationalising operations on the ground. A rate of €40/tonne would incentivise local authorities to introduce infrastructure for source separation and collection of organic waste.

### Examples of economic instruments

# **PACKAGING WASTE SYSTEM**

The packaging waste management system in Croatia is one of the first positive examples of an proactive approach towards producer responsibility schemes in Croatia. In its original form the ordinance prescribed three types of charges to be paid by manufacturers and importers of packaging and packaging waste: charges for waste management, refundable deposits for nonreusable drinks packaging (to encourage the return of emptied non-reusable packaging) and a reuse target penalty (to encourage the use of environmentallyfriendly packaging). The original system started in 2006 with a deposit-refund scheme for bottles, and with producers financing its costs through fees. Later it was modified and currently the fees for waste producers are set at different rates according to the waste type: PET, Aluminium cans, multilayer packaging at € 55/tonne, paper and cardboard € 50/tonne, steel cans € 30/tonne, wood, textile and glass packaging € 20/tonne while the most expensive packaging are other polymer packaging at rate of € 100/tonne and plastic bags at € 200 per tonne. Additionally, Croatia has set ban on free handout shopping plastic bags which according to publicly available reports halved the production of those in Croatia. In just first 2 years of the system implementation, the recycling rates in Croatia were doubled and currently the system ensures compliance with EU packaging objectives.

The revenues generated from the levy are managed by the Fund for Environmental Protection and Energy Efficiency (Fond za zaštitu okoliša i energetsku učinkovitost) and the funds are used to cover costs of transportation, sorting and recycling, and collection at retail.

During the process of adopting the packaging ordinance and its early implementation in 2006, some producers, especially Coca Cola and Jamnica, the biggest Croatian producers of mineral water and juices, raised the prices of their products by 30%. Some other companies followed their example and raised their prices. Governmental bodies and consumer organisations called for a boycott of some of the producers because of the unjustified price increase. Also, the opposition tried to legally cancel the

ordinance but this was not successful. Environmental NGOs mostly welcomed the Packaging Ordinance, because of its potential to increase recycling rates and address plastic littering. During the Ordinance lifetime (10 changes of original act and new ordinance adopted in 2015) there were several campaigns, especially to include plastic bags in the ordinance (first introduced in 2008) and to include packaging of milk and dairy products in the system. The efforts of environmental NGOs resulted with success with new ordinance which of 2021 includes also milk and dairy packaging into the deposit system.

#### Links to:

NGO Zelena Akcija comments during public consultations for Packaging ordinance, <a href="https://cutt.lv/7j4dyV1">https://cutt.lv/7j4dyV1</a> (in Croatian only)

Plastic industry article after plastic bags taxation implementation; "Plastic bags producers angry on EU, our production I halved and paper bags are failure" <a href="https://www.tportal.hr/biznis/clanak/proizvodaci-plasticnih-vrecica-ljuti-na-eu-prepolovili-su-nam-proizvodnju-a-papirnate-vrecice-su-promasaj-foto-20190210">https://www.tportal.hr/biznis/clanak/proizvodaci-plasticnih-vrecica-ljuti-na-eu-prepolovili-su-nam-proizvodnju-a-papirnate-vrecice-su-promasaj-foto-20190210</a> (in Croatian only)

Fund for Environmental Protection and Energy Efficiency Newsletter – contains all the main positions of all the actors involved in the public debate in 2006. <a href="https://www.yumpu.com/xx/document/read/20989353/eko-revija-broj-5-fond-za-zastitu-okolisa-i-energetsku-ucinkovitost">https://www.yumpu.com/xx/document/read/20989353/eko-revija-broj-5-fond-za-zastitu-okolisa-i-energetsku-ucinkovitost</a>

Zelena akcija press release: "Return of milk packaging in the deposit scheme" <a href="https://zelena-akcija.hr/hr/programi/otpad/povratak\_mlijecne\_ambalaze\_u\_sustav\_povratne\_naknade">https://zelena-akcija.hr/hr/programi/otpad/povratak\_mlijecne\_ambalaze\_u\_sustav\_povratne\_naknade</a> (January 2020)



# FOREST PUBLIC BENEFIT FUNCTION

# FEE IN CROATIA

The Forest Public Benefit Function Fee is a charge which is paid by companies and other business associations, once a year, since the 1983 when the fee was originally introduced. Initially the charge was collected by the State-owned company Hrvatske Šume at a rate of 0,07% of total income, while currently the 0.0265% of total income charge is managed by the ministry of Agriculture and Forestry and distributed to the beneficiaries. Since 2019, the fee has been cancelled for SMEs.

Besides management and restoration of forests on karst, significant fee revenues are spent for demining activities (10%), firefighting (5%) and scientific work (5%). The control of the spending is done through Committees nominated by the minister which approve the operational plans and monitor the spending, select the scientific research projects, approve and monitor demining processes and funds for firefighting.

Public opinion on the Forest Public Benefit Function Fee is generally bad. One of the identified reasons is that the purpose of the instrument is not clear to the public, and the public is unaware of the contribution of the fee to the protection of forests. This strong negative opinion, together with the business association advocacy, has already resulted in two changes of legislation where the percentage of the fee was cut from 0.07% to 0.0265% of total income of the companies that pay the fee. These cuts were officially justified with decreasing the tax burden of the Croatian industry. However, instead of strengthening the fee, in 2018 Croatian Parliament adopted law changes and the fee has been cancelled for all the companies with incomes below 3M kuna (app.400.000 €)

During 2012 and 2013 the Croatian Chamber of Forestry and Wood Technology Engineers conducted an advocacy campaign to keep the fee. The Chamber insisted that Government shall put more efforts into presenting the benefits of the fee and that the reduction of the fee directly affects the budget for firefighters and reduces demining activities. During that campaign, the Chamber obtained a written position statement from the Ministry of Environment and Nature Protection that the fee should stay in place, with a proposal to return to the original 0.07% level after the economy recovers.

#### Links to:

Article: Should the Forest Public Benefit Function Fee in Croatia be cancelled <a href="https://www.agroklub.com/sumarstvo/treba-li-ukinuti-naknadu-za-koristenje-opcekorisnih-funkcija-suma/37933/">https://www.agroklub.com/sumarstvo/treba-li-ukinuti-naknadu-za-koristenje-opcekorisnih-funkcija-suma/37933/</a> (in Croatian only). Description of the fee with quantification of spending and investments.

Letter from Croatian Chamber of Forestry and Wood Technology Engineers to Croatian Government; <a href="http://www.hkisdt.hr/podaci/2013/dopis\_OKFS\_studeni\_2012.pdf">http://www.hkisdt.hr/podaci/2013/dopis\_OKFS\_studeni\_2012.pdf</a>. Official letter explaining the reasons why the fee shouldn't be cancelled.

Majority of Croatian companies don't pay Forest Public Benefit Function Fee anymore, "Forest Public Benefit Function Fee" <a href="https://www.poslovni.hr/hrvatska/vecina-tvrtki-u-hrvatskoj-vec-ne-placa-naknadu-za-sume-4229922">https://www.poslovni.hr/hrvatska/vecina-tvrtki-u-hrvatskoj-vec-ne-placa-naknadu-za-sume-4229922</a> (in Croatian only) interview with Mr. Jakupović which explains the fee benefits and payment methodology.

More about Forest Public Benefit Function Fee – case study: <a href="https://ieep.eu/uploads/articles/attachments/dea2cd38-da43-495a-aaf1-fc103878e17b/HR%20">https://ieep.eu/uploads/articles/attachments/dea2cd38-da43-495a-aaf1-fc103878e17b/HR%20</a> Forest%20Public%20Benefit%20Fee%20final. <a href="https://pdf?v=63680923242">pdf?v=63680923242</a> (English)

Presentation: Payments for Ecosystem Services: What role for a green economy? System explanation <a href="https://unece.org/fileadmin/DAM/timber/meetings/20110704/4-lvana-pesut-PES\_croatia.pdf">https://unece.org/fileadmin/DAM/timber/meetings/20110704/4-lvana-pesut-PES\_croatia.pdf</a>



### Key stakeholders

**Academics** working in this field (universities, thinktanks research institutes, independent researchers)

University of Zagreb, Forestry department, <a href="https://www.sumfak.unizg.hr/">https://www.sumfak.unizg.hr/</a>, prof. dr. sc. Ivica Tikvić, actively worked on promotion of the Forest Public Benefit Function Fee, speaking and presenting it on many national and international meetings. (i.e. <a href="https://sunce-st.org/wp-content/uploads/2018/02/Assessment forest-ecosystem-services.pdf">https://sunce-st.org/wp-content/uploads/2018/02/Assessment forest-ecosystem-services.pdf</a>)

University of Zagreb, Engineering Department, <a href="http://www.fsb.unizg.hr">http://www.fsb.unizg.hr</a>, Dr. sc. Slaven Dobrović, Dipl.ing. (former minister of Environment), <a href="slaven.dobrovic@fsb.hr">slaven.dobrovic@fsb.hr</a> (waste sector). Mr. Dobrović has created some of the most successful Croatian waste management system and through his work in Croatian government he became the most progressive environmental minister in Croatian History (preparation and adoption new waste management plan with high focus on separate collection and recycling)

NGOs (environmental, consumer, green business networks, citizen science groups, etc.)

Zelena akcija / Friends of the Earth Croatia, Organization active on the issue of packaging since the ordinance implemtation, e-mail: <a href="mailto:za@zelena-akcija.hr">za@zelena-akcija.hr</a> (contact: mr. Marko Košak)

Croatian wood Cluster, <a href="https://www.drvniklaster.hr">https://www.drvniklaster.hr</a>, advocacy organization in favour of the Forest Public Benefit Function Fee, Marijan Kavran Director e-mail: <a href="marijan.ri@gmail.com">marijan.ri@gmail.com</a>



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<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/eurostat/databrowser/view/env\_ac\_tax/default/table?lang=en