

cenia

Mgr. Miroslav Havránek
ředitel

Česká informační agentura životního prostředí



Program aplikovaného výzkumu, experimentálního vývoje a inovací v oblasti životního prostředí – Prostředí pro život

Cílem programu je přinést **nová řešení** v oblasti životního prostředí, stabilizovat a **rozšířit znalostní základnu**, která výrazně přispěje k zajištění zdravého a kvalitního **životního prostředí v České republice** a k udržitelnému využívání jejích zdrojů, minimalizuje negativní dopady lidské činnosti na životní prostředí včetně dopadů přesahujících hranice státu a přispěje tak ke **zlepšování kvality života** v Evropě i v globálním kontextu.



Program aplikovaného výzkumu, experimentálního vývoje a inovací v oblasti životního prostředí – Prostředí pro život

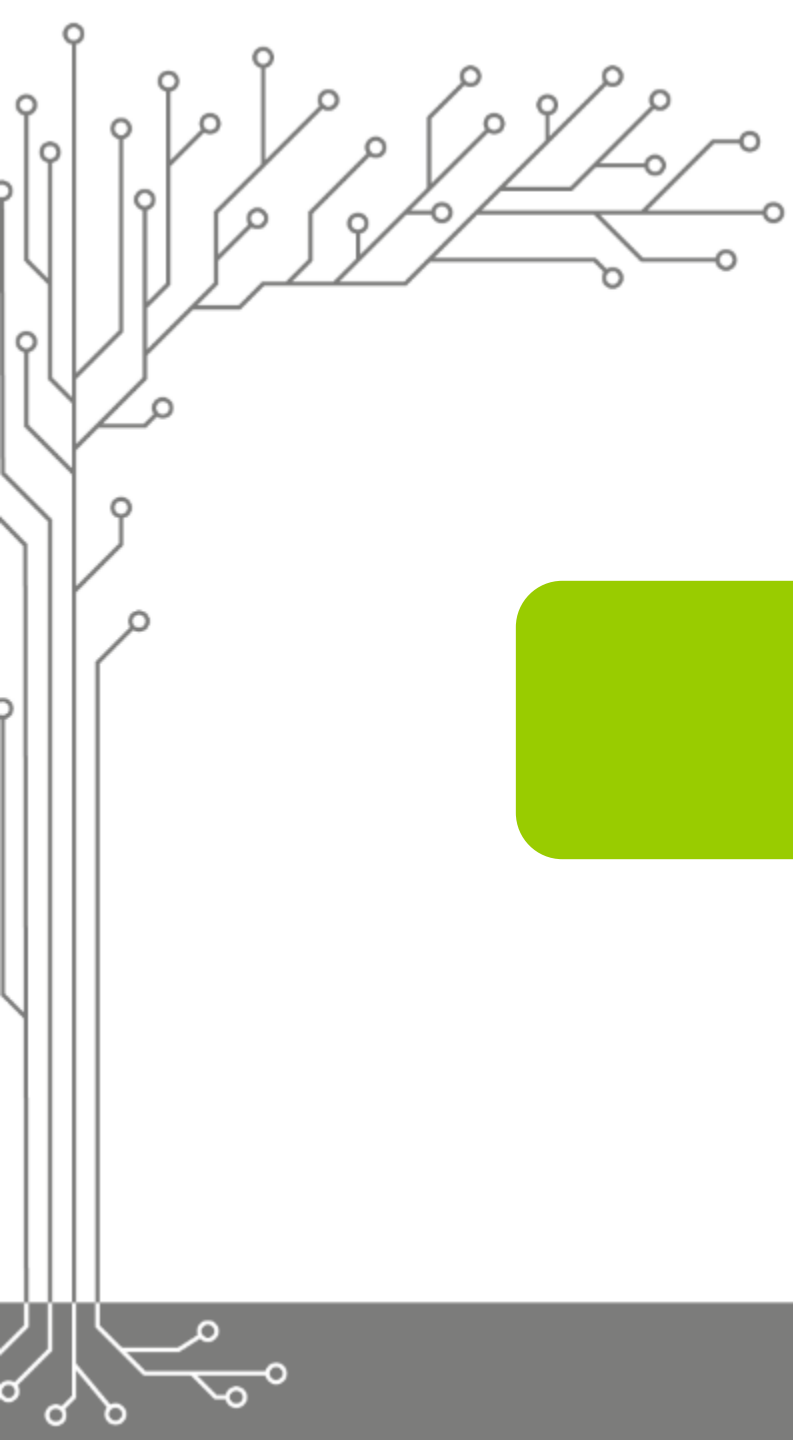
- schválen usnesením vlády ČR č. 204 ze dne 25. března 2019
- poskytovatelem podpory je Technologická agentura ČR
- gestorem obsahu je Ministerstvo životního prostředí

- **Podprogram 1 (PP1)** je určen k podpoře operativního výzkumu ve veřejném zájmu. Výsledky budou převážně nekomercializovatelné.
- **Podprogram 2 (PP2)** se zaměřuje na technologické inovace s komercializovatelnými výsledky.
- **Podprogram 3 (PP3)** je zaměřen na orientovaný výzkum, který vyžaduje stabilní prostředí výzkumných týmů.



Prioritní oblasti programu

- klima – opatření k ochraně klimatu, mitigace a adaptace na zvýšenou extremitu srážek i teplot, a to v sídlech i ve volné krajině,
- ochrana ovzduší,
- odpadové a oběhové hospodářství,
- ochrana vody, půdy, horninového prostředí a dalších přírodních zdrojů,
- biodiverzita, ochrana přírody a krajiny,
- environmentálně příznivá společnost, bezpečné a resilientní prostředí, specifické nástroje ochrany životního prostředí a udržitelného rozvoje.



Organizace konference

Jsme státní agentura



Ministerstvo životního prostředí

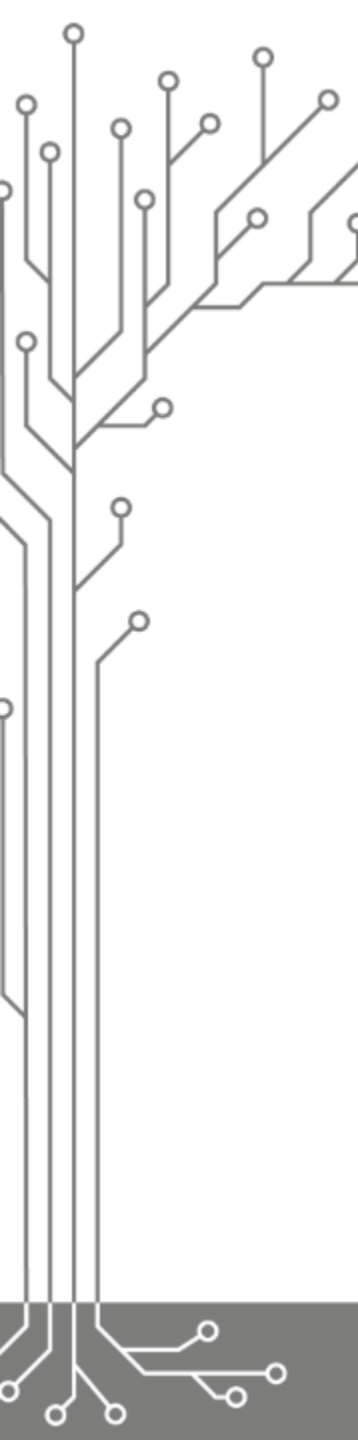


SFŽP ČR

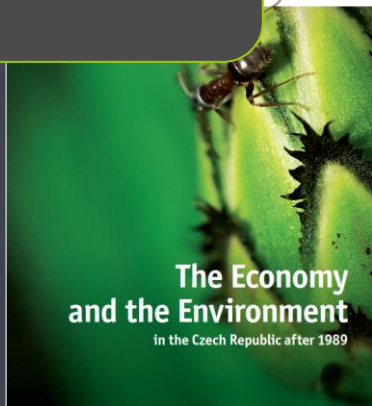


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Jsme hodnotící agentura

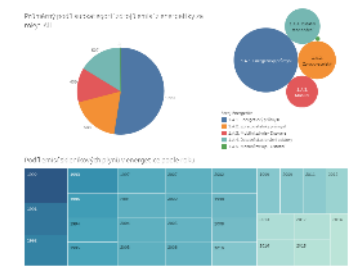
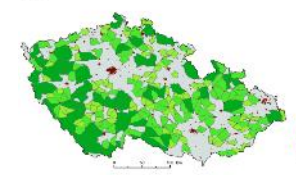




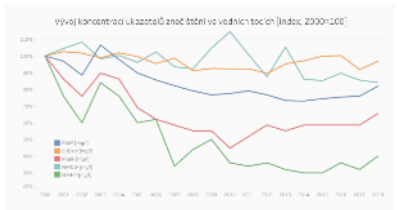
Rok	CO	NH3	NOx	SO2	TZL
2005	934,36	77,20	276,42	208,45	72,61
2006	938,98	77,00	271,45	206,75	74,04
2007	930,66	77,66	269,23	212,04	73,29
2008	885,55	77,14	253,15	170,08	70,40
2009	903,22	72,11	238,64	168,75	67,64
2010	926,61	70,89	232,39	163,85	69,64
2011	896,54	69,42	220,04	167,59	67,19
2012	882,97	69,15	206,57	160,18	66,79
2013	882,97	70,89	191,02	145,23	67,03
2014	843,06	71,32	184,49	134,49	63,58
2015	823,43	72,07	176,30	129,38	63,16
2016	819,78	71,79	166,97	115,13	61,33
2017	819,78	67,00	163,21	109,96	62,26
2018	784,27	65,79	160,08	97,93	59,84

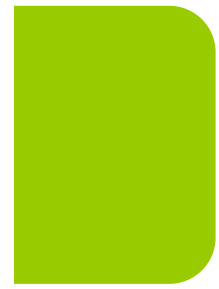
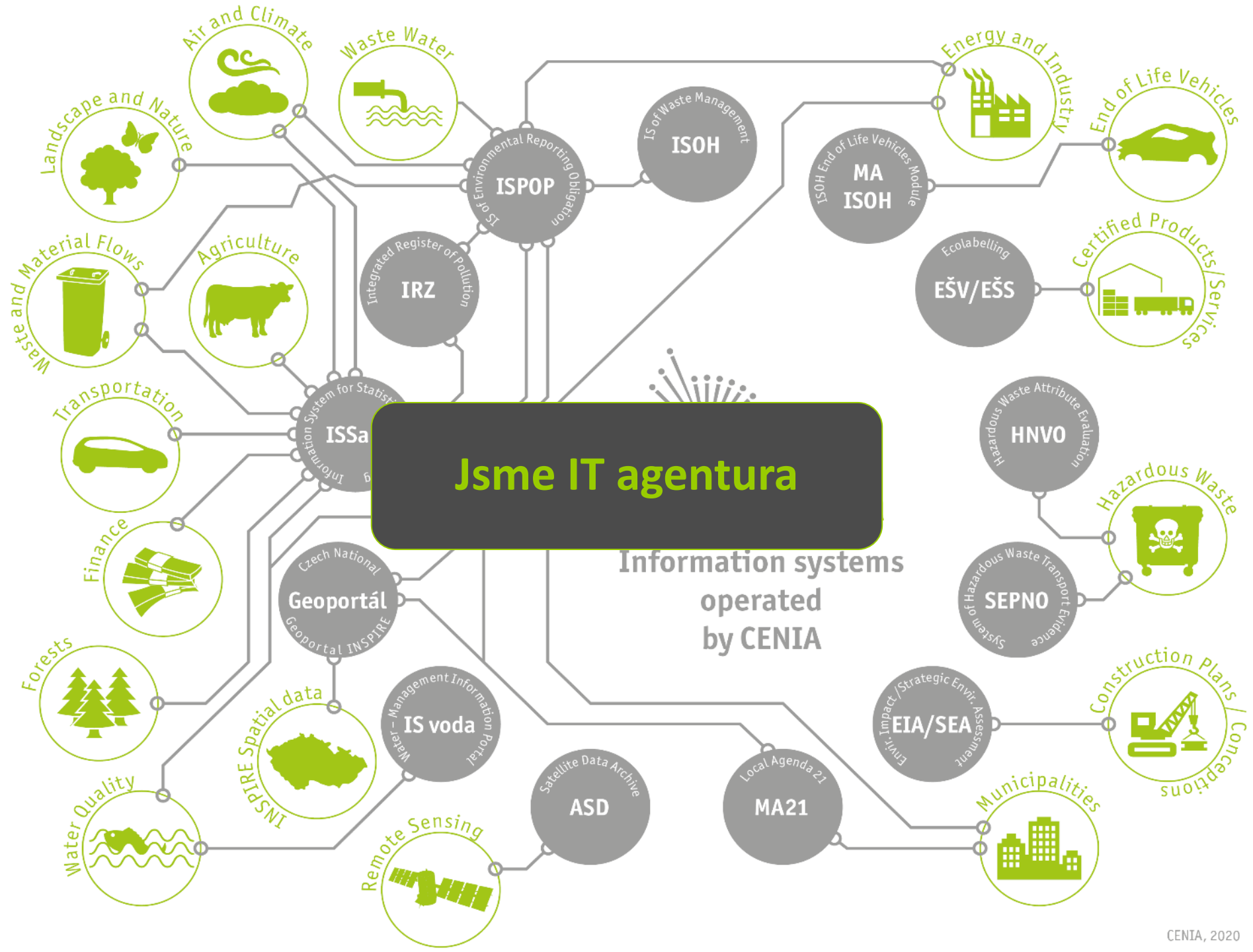
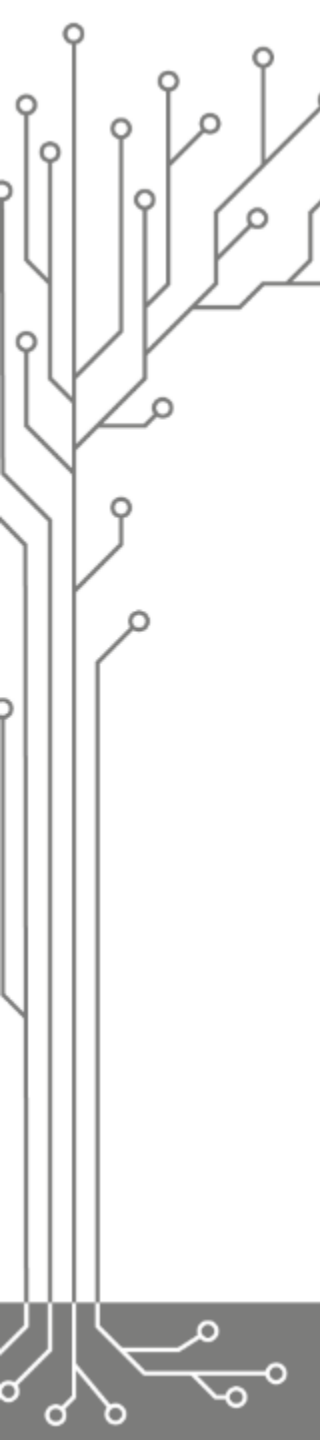
Jsme informační agentura

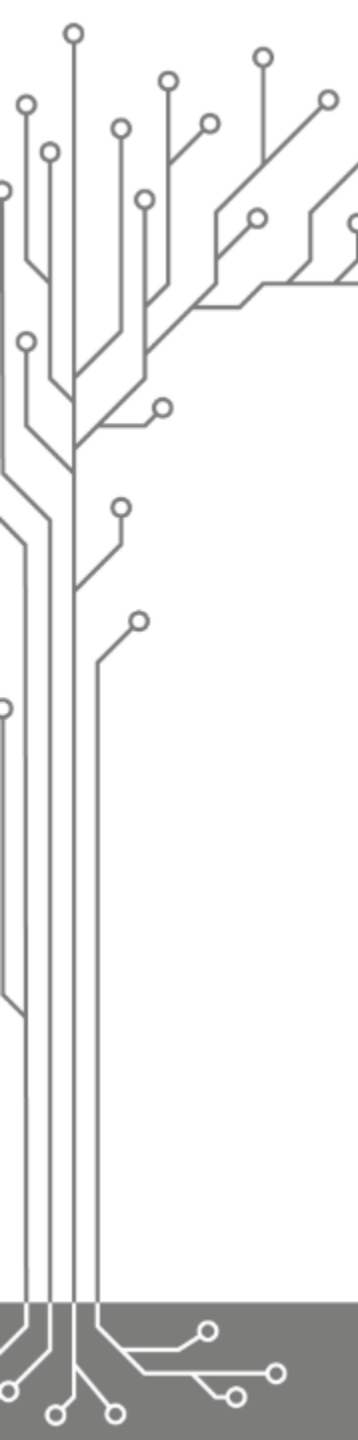
Fragmentace krajiny dopravní v ČR, 2010



Obrázek 4: Stav zdravotnosti ČR

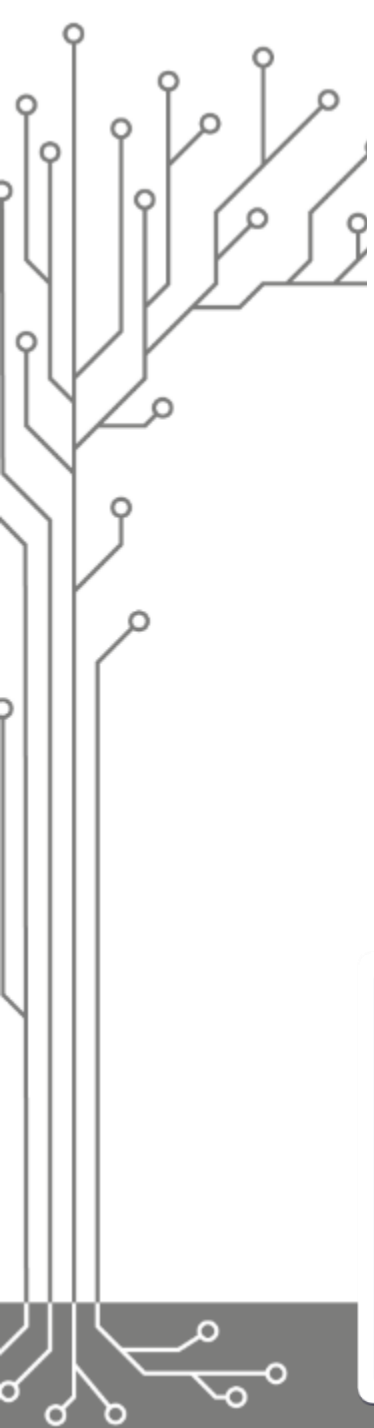






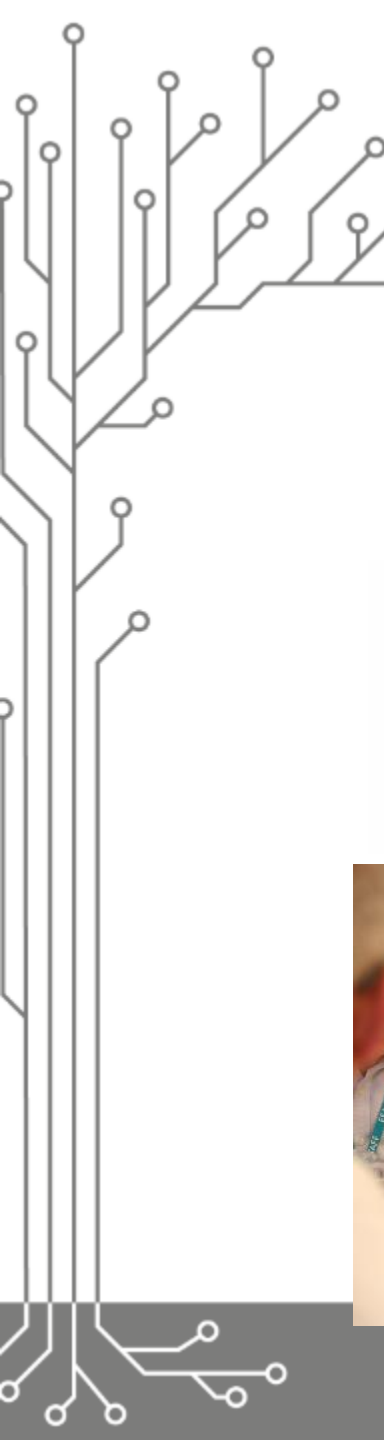
Jsme evaluační agentura



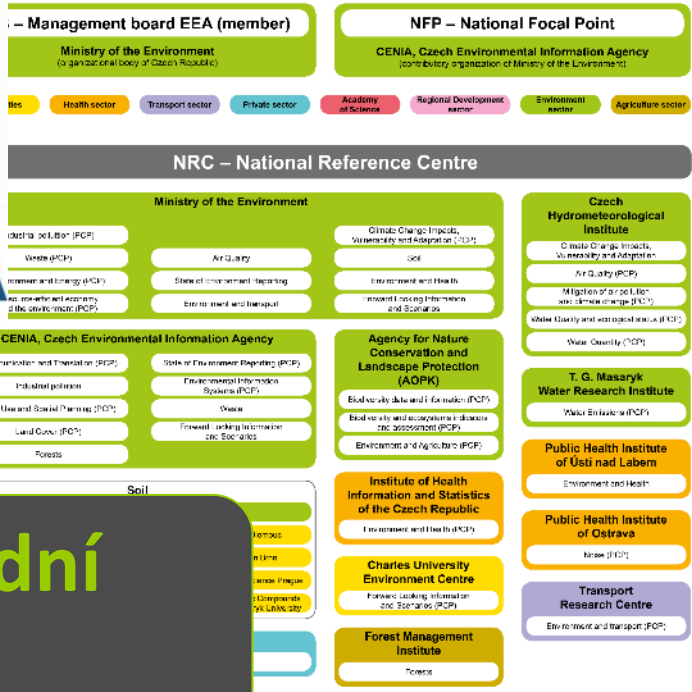


Jsmo certifikační agentura



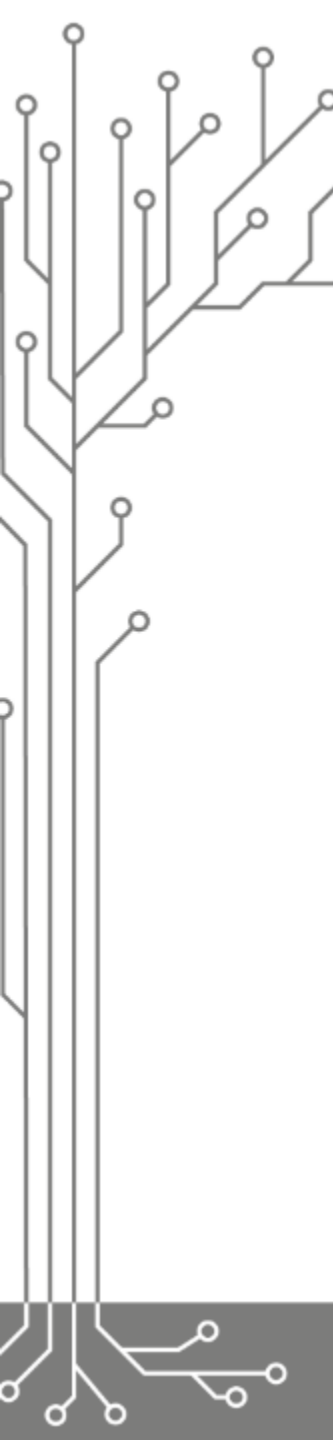


EIONET CZECH REPUBLIC

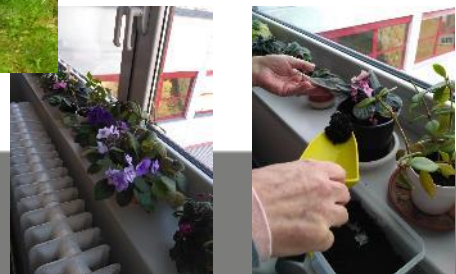


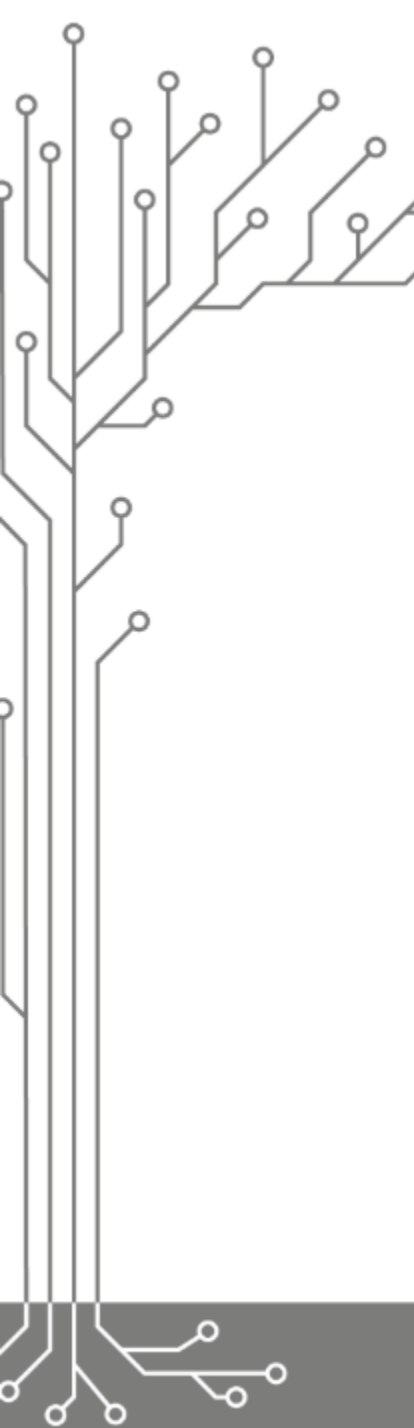
Jsme mezinárodní agentura





Jsme environmentální agentura

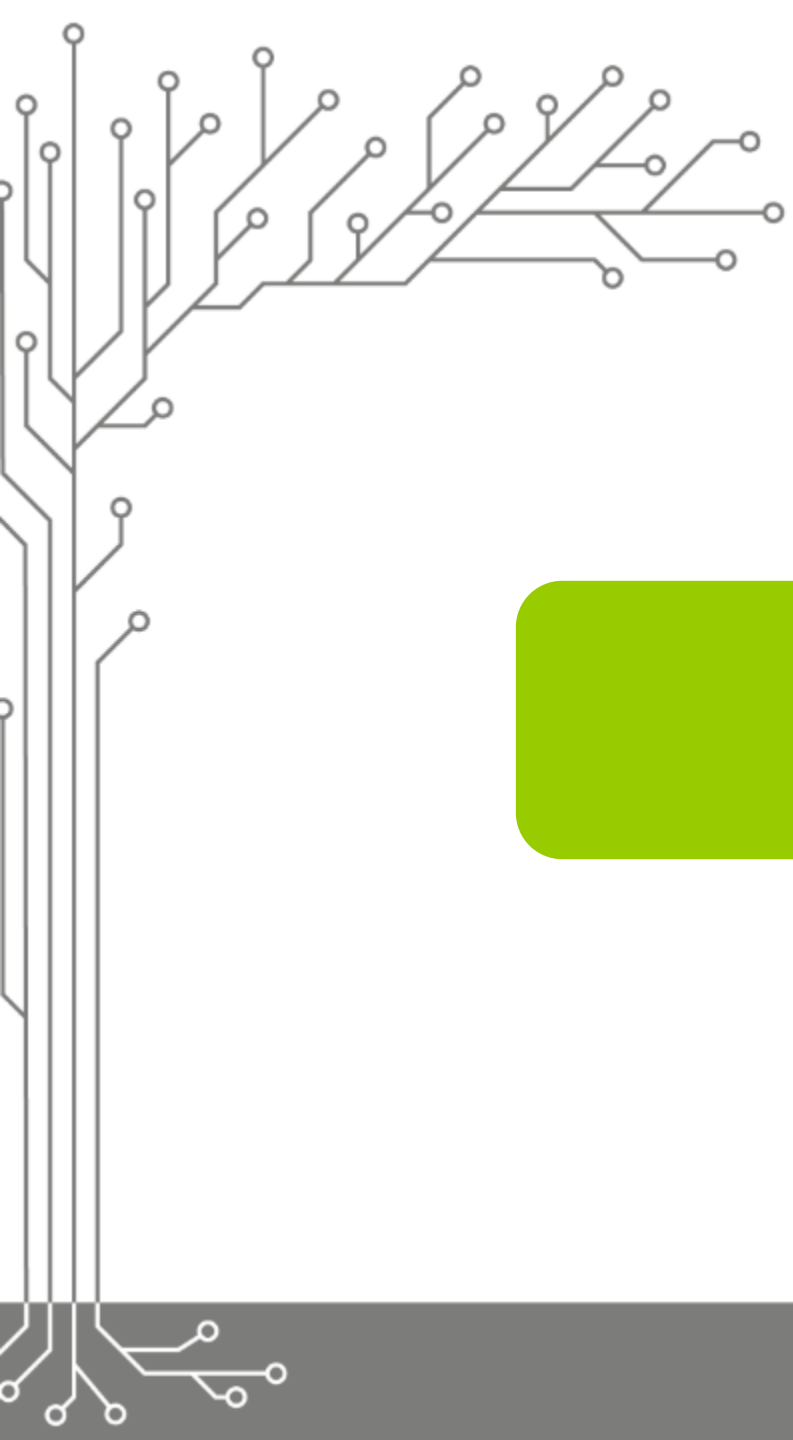




Jsme CENIA

**Jsme Česká informační agentura
životního prostředí**





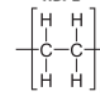
Plast



Polyolefins



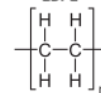
HDPE



High-density polyethylene:
Milk jugs
Cutting boards
(Straight chains, UHMW is longer chains.)



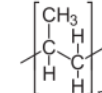
LDPE



Low-density polyethylene:
Ziplock bags
(Branched chains)

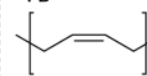


PP



Polypropylene:
Storage tubs
Outdoorwear
EPP foam

PB



Polybutadiene:
Synthetic rubber
Rubbery copolymer

Combustion: clean burn, waxy smell. Weldable, but high shrinkage.

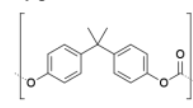
Aromatic

PEG



Polyoxyethylene:
Medicine
Solvent

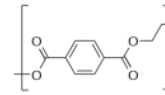
PC



Polycarbonate / Lexan:
Bulletproof glass
DVDs



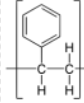
PETE



Polyester:
Thin clear bottles
Textiles
3D printing filament



PS



Polystyrene:
Plastic spoons
EPS Foam

Combustion: sooty, benzene/PAH.

PMMA



Methacrylate / Acrylic:
Glass replacement
Huge family of acrylics
3D printing UV resin

PLA



Poly(lactic Acid):
3D printing filament
Biopolymers

PAN



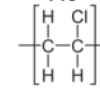
Polyacrylonitrile:
Component of ABS
Component of Nitrile
Carbon fiber precursor

Copolymerized to make ABS

Halogenated



PVC



Polyvinyl Chloride:
PVC pipe
PVC-insulated wire
Vinyl siding & windows
(CPVC has more Cl.)

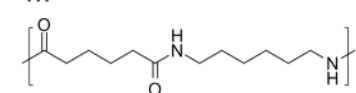
PTFE



Polytetrafluoroethylene:
Teflon
PTFE Hotend tubing
Space applications
(PVDF or EFTE has less F.)

Combustion: awful acid gas (HCl or HF). Don't.

PA

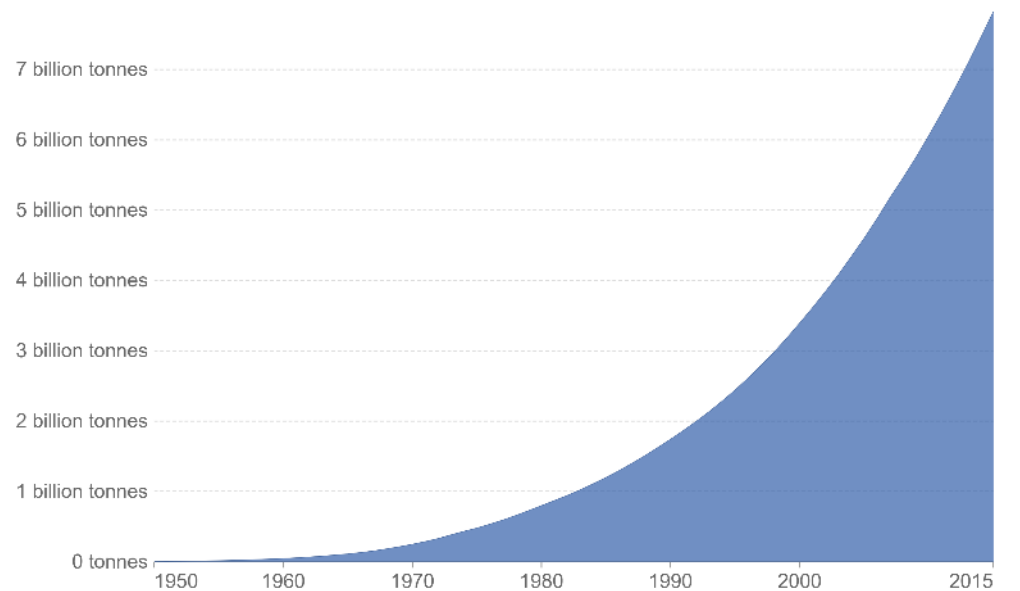


Polyamide / Nylon:
Textiles
Cookware
Plastic gears

Cumulative global plastics production, 1950 to 2015

Cumulative global production of plastics, measured in tonnes.

Our World
In Data



Source: Geyer et al. (2017)

CC BY

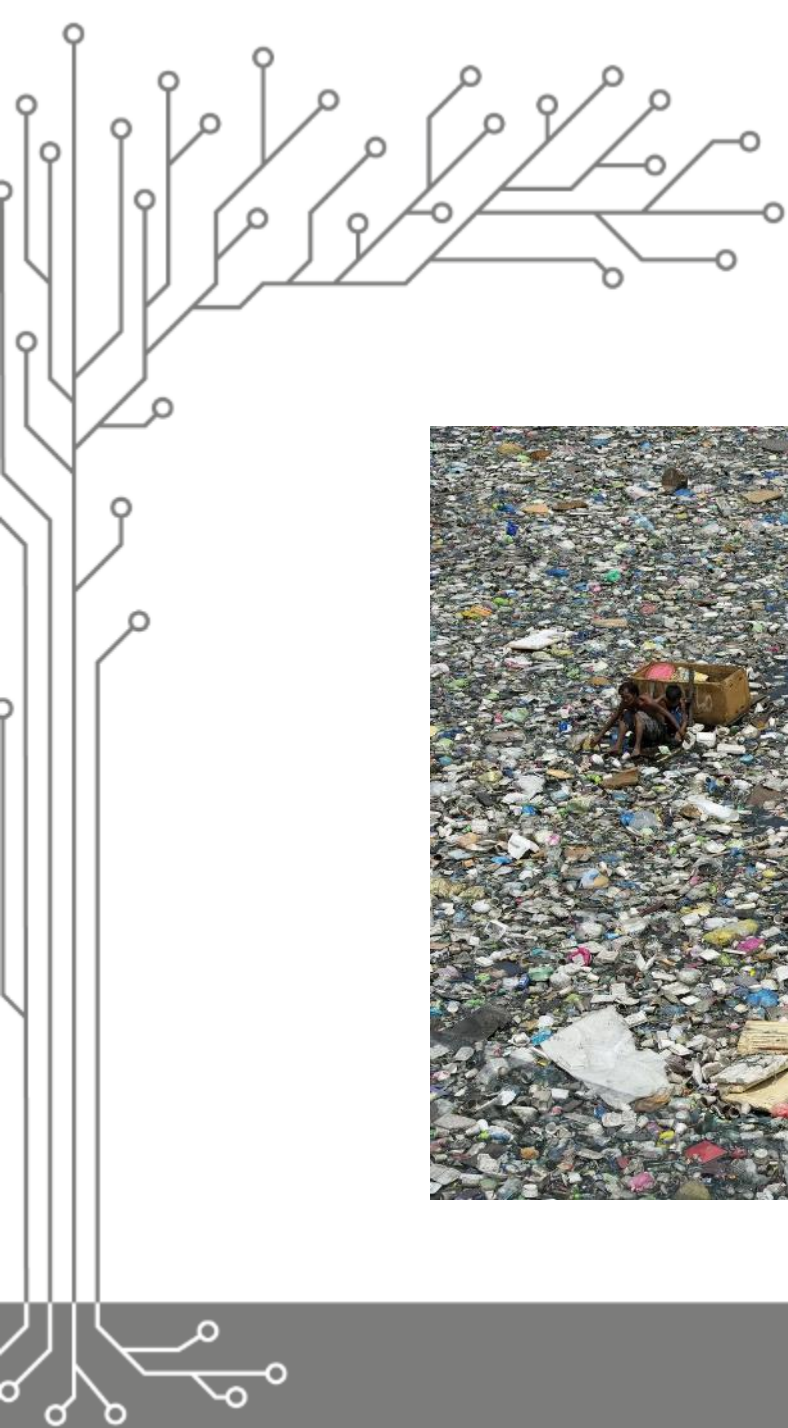
Zhruba 400 milionů tun plastu v roce 2020

8 miliard tun plastu za celou historii lidstva

50 % tohoto množství za posledních 19 let

Plastic waste at the Thilafushi waste disposal site, Maldives - by Mohamed Abdulraheem

Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7), e1700782. DOI: 10.1126/sciadv.1700782



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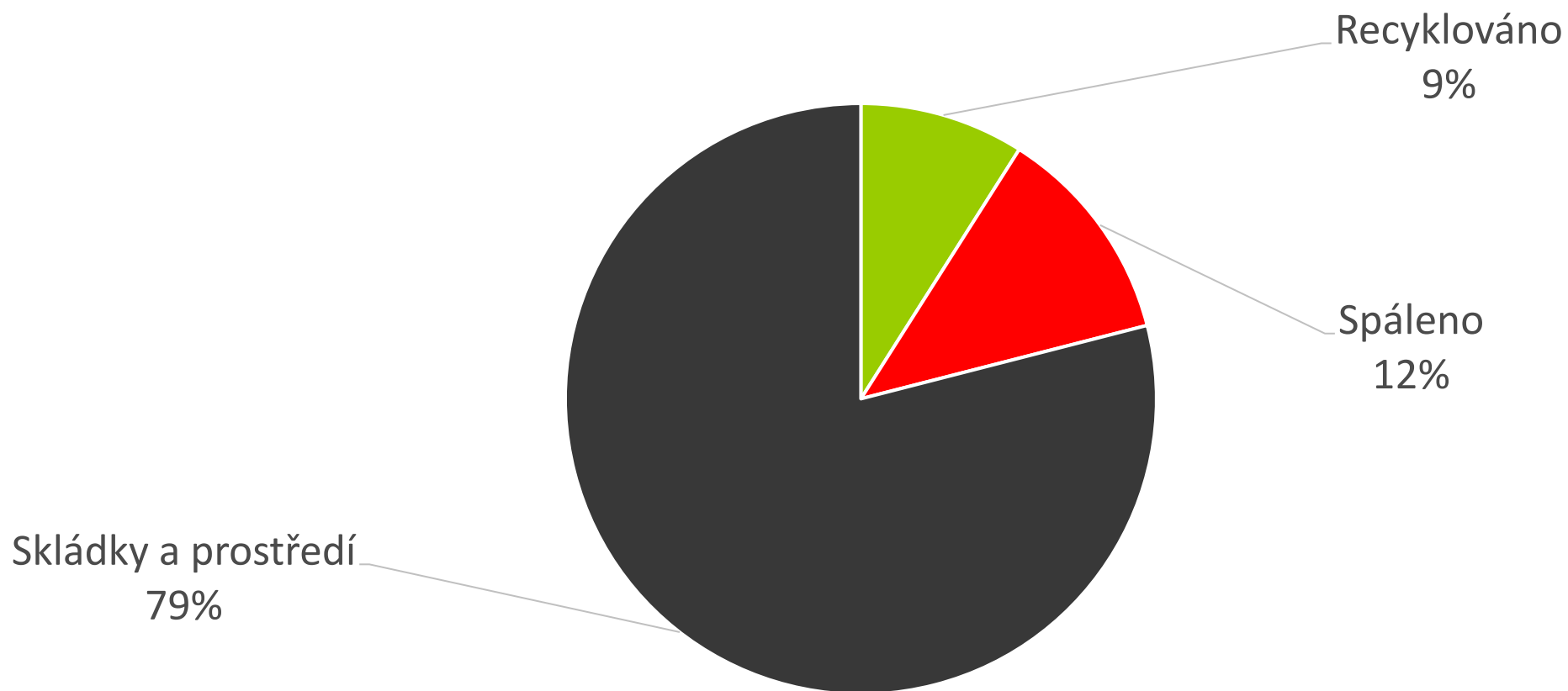
GESAMP
Joint Group of Experts on the
Scientific Aspects of Marine
Environmental Protection

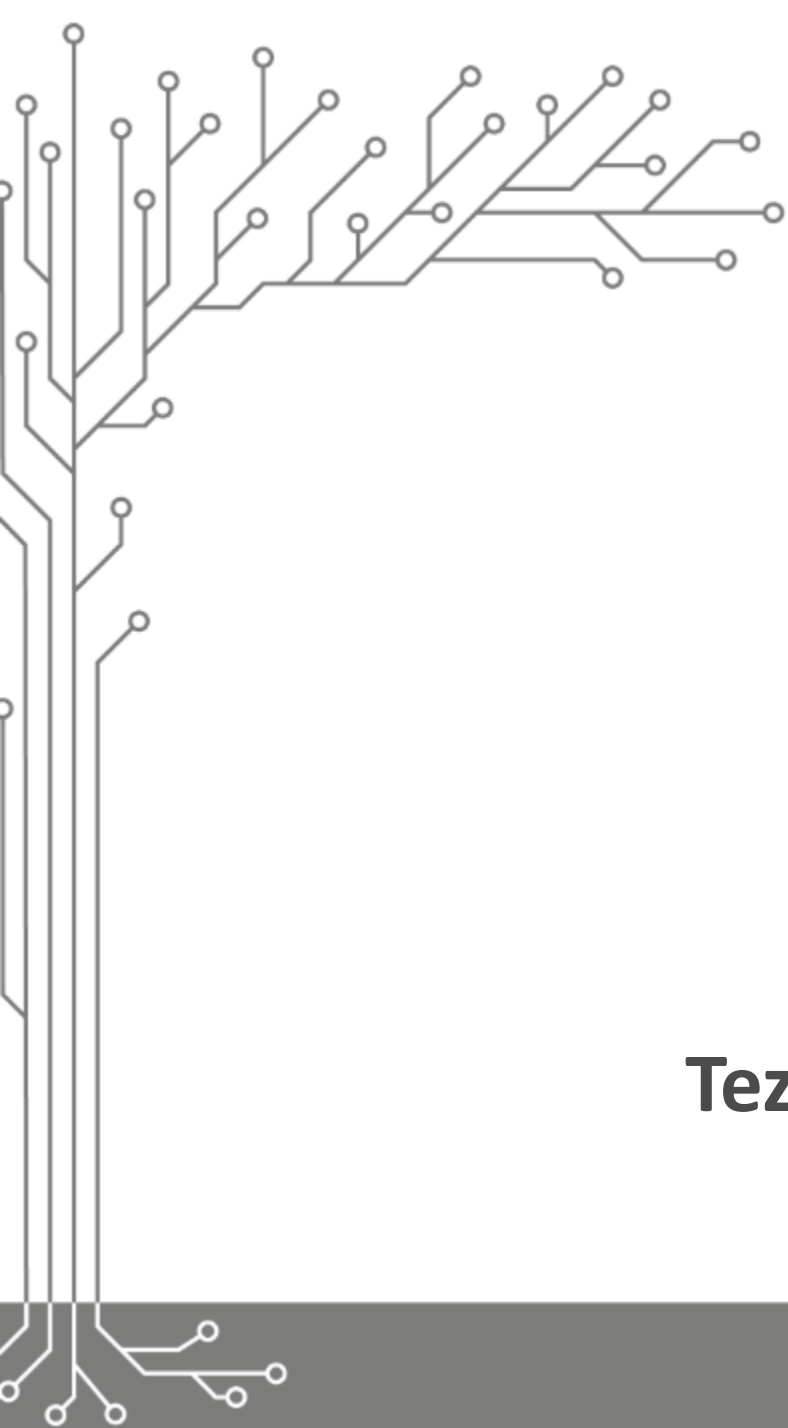
REPORTS AND STUDIES

**SOURCES, FATE AND EFFECTS OF
MICROPLASTICS IN THE
MARINE ENVIRONMENT:
A GLOBAL ASSESSMENT**



Osud veškerých dosud vyrobených plastů





**Teze: V tržní ekonomice recyklace funguje,
pokud generuje profit**

Recyklace

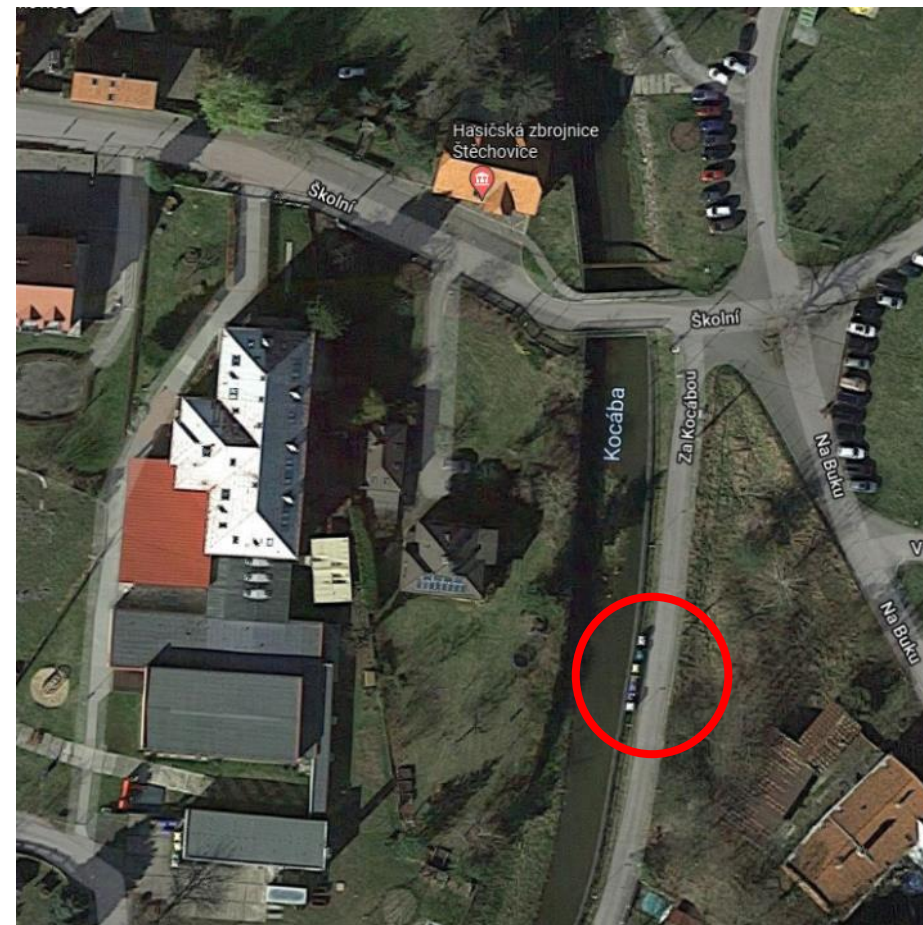
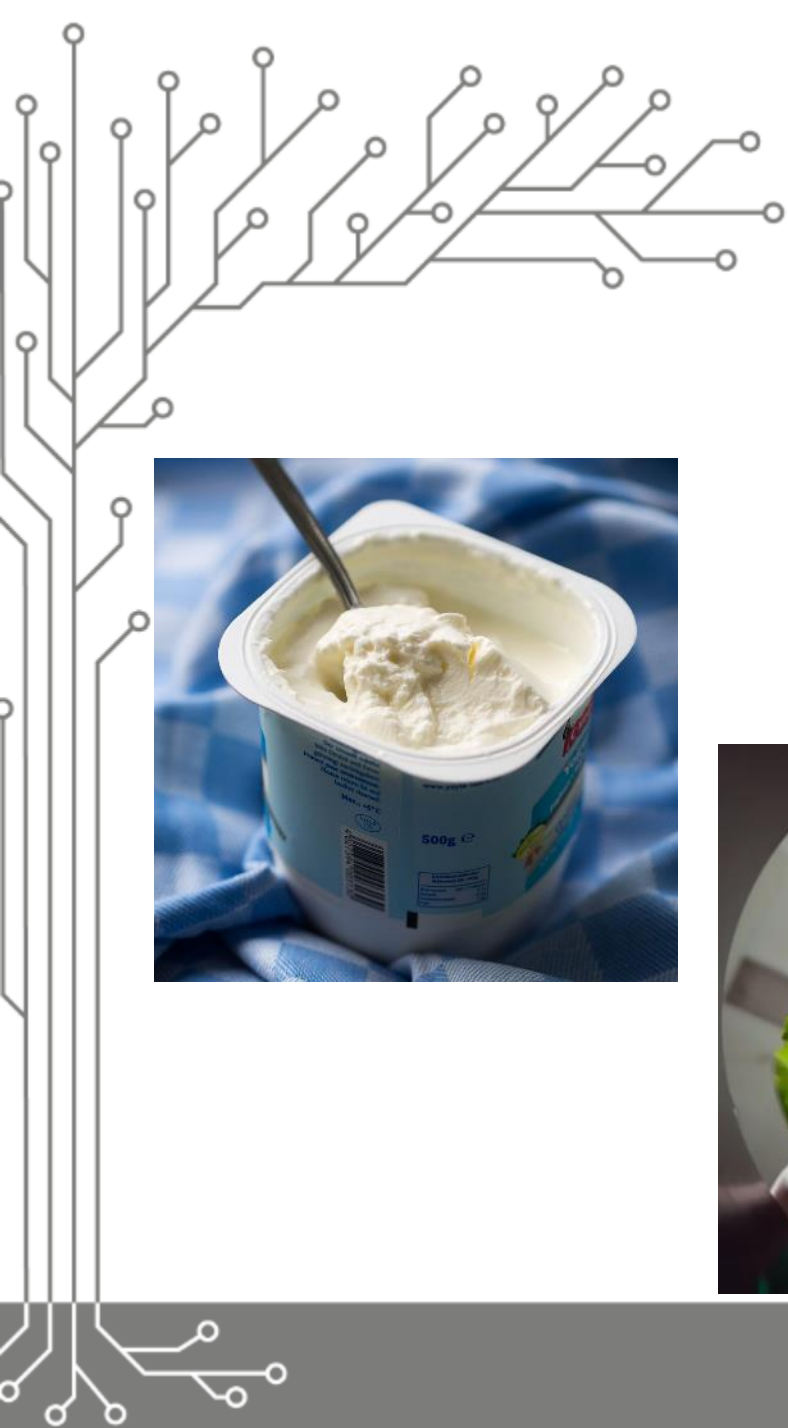


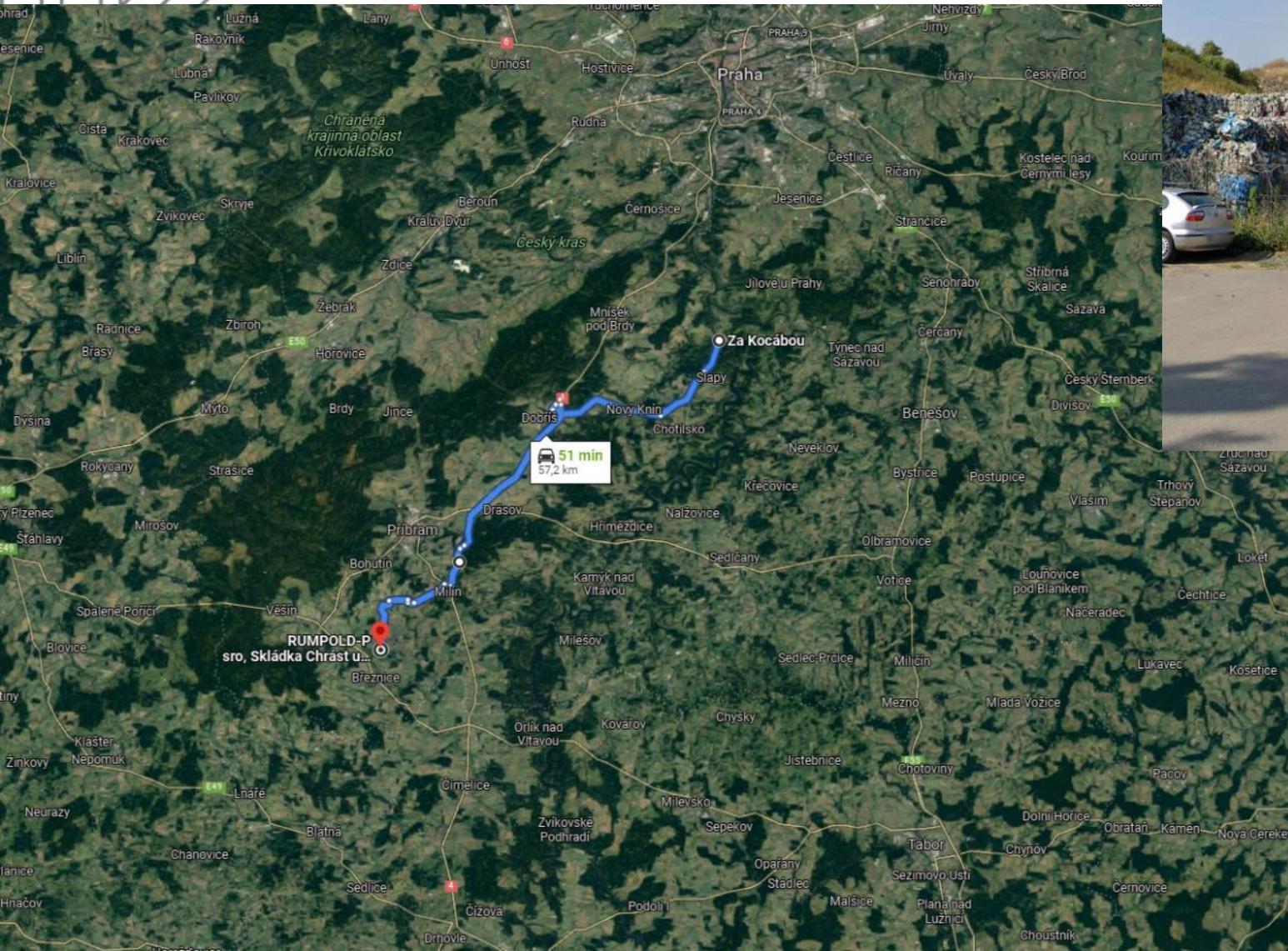


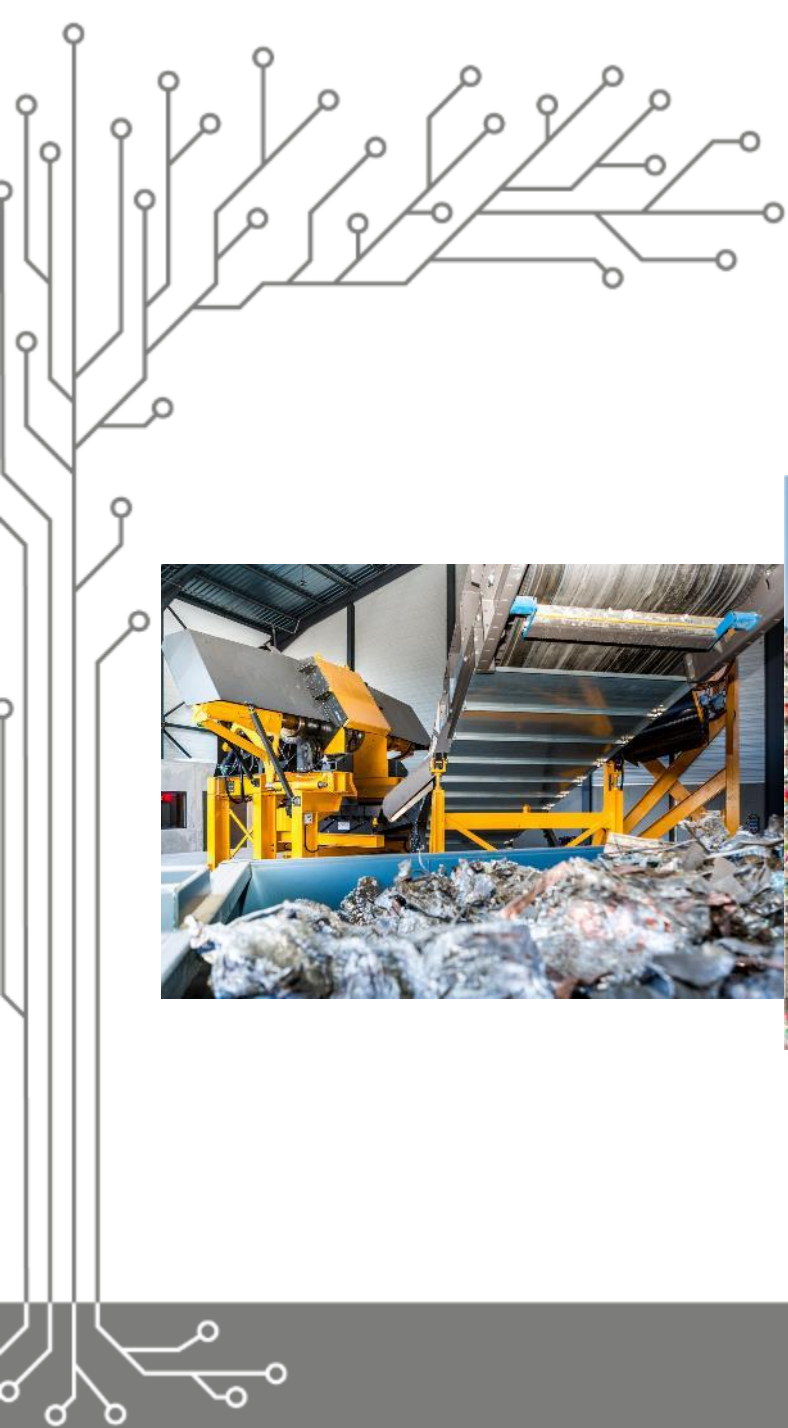
Nové PET pelety 1,02 USD/kg



Recyklované PET pelety 1,26 USD/kg









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+/- Cena

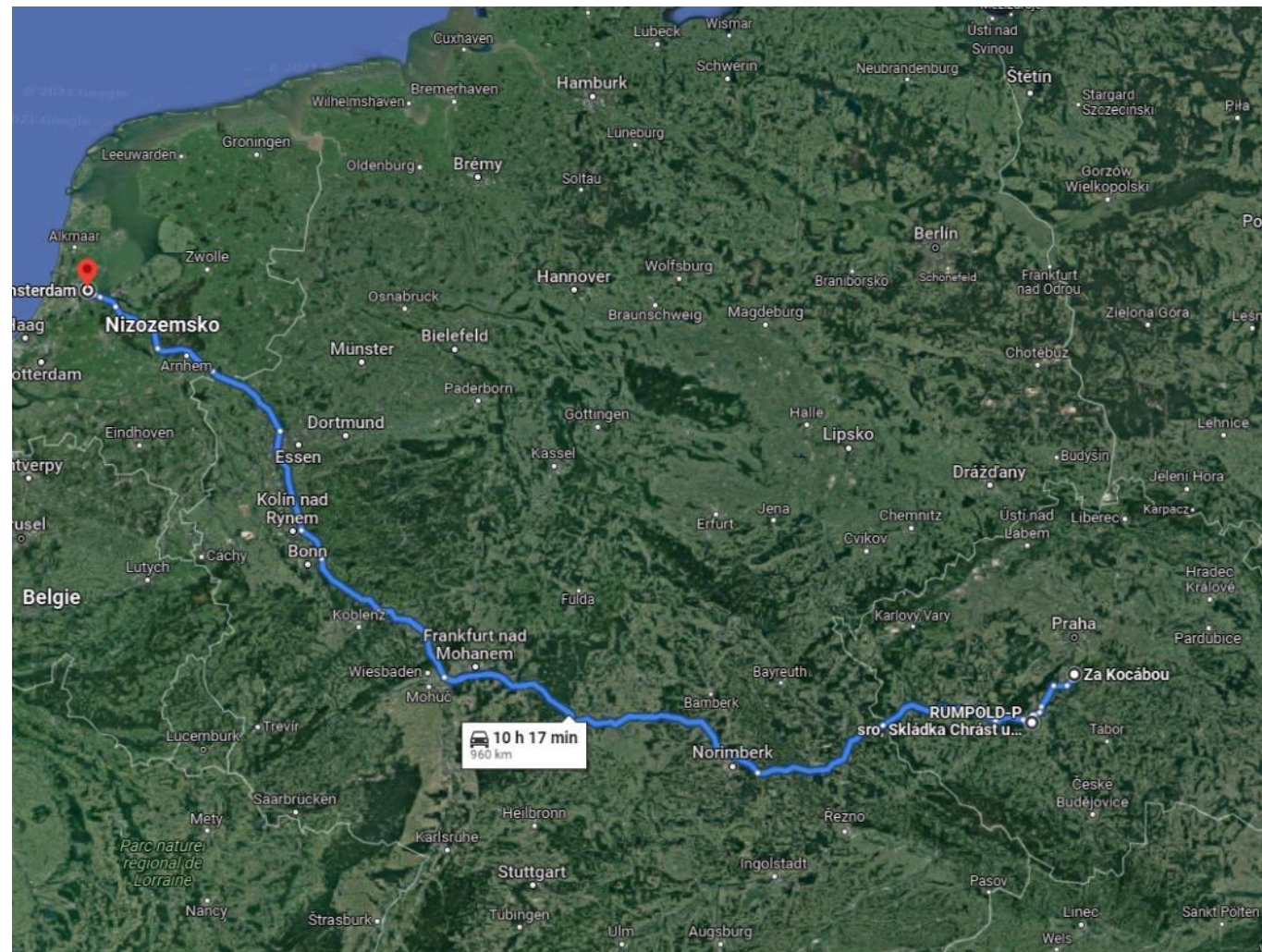


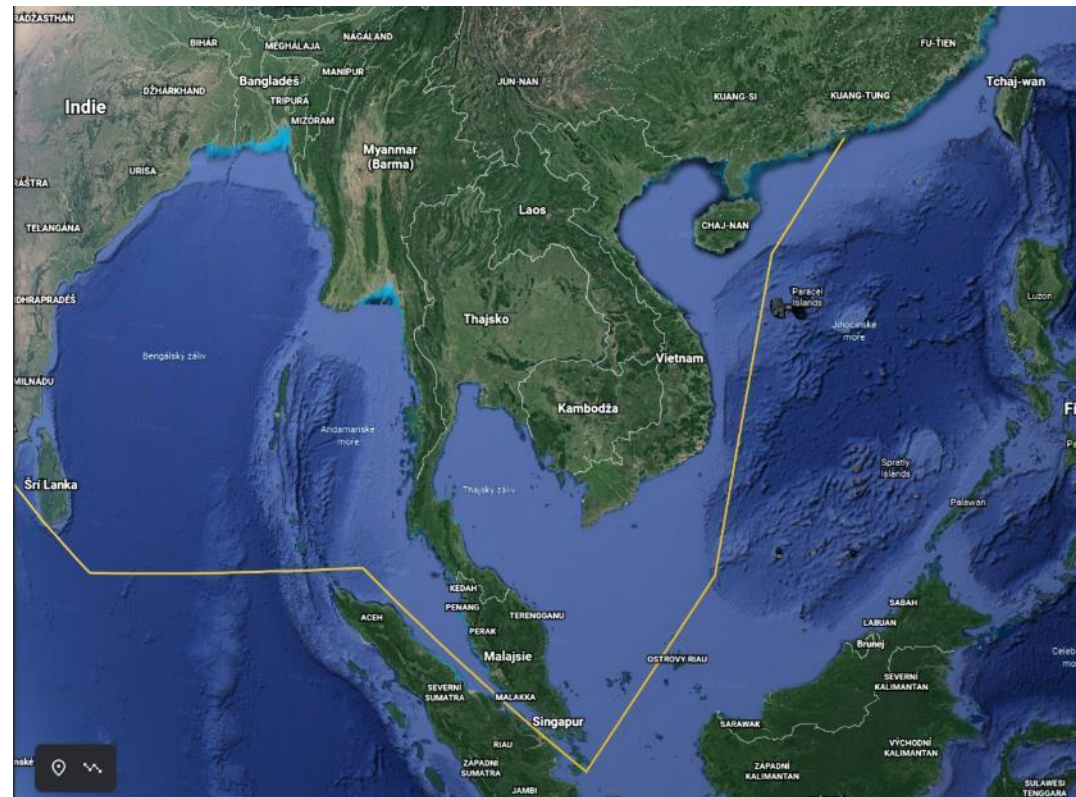
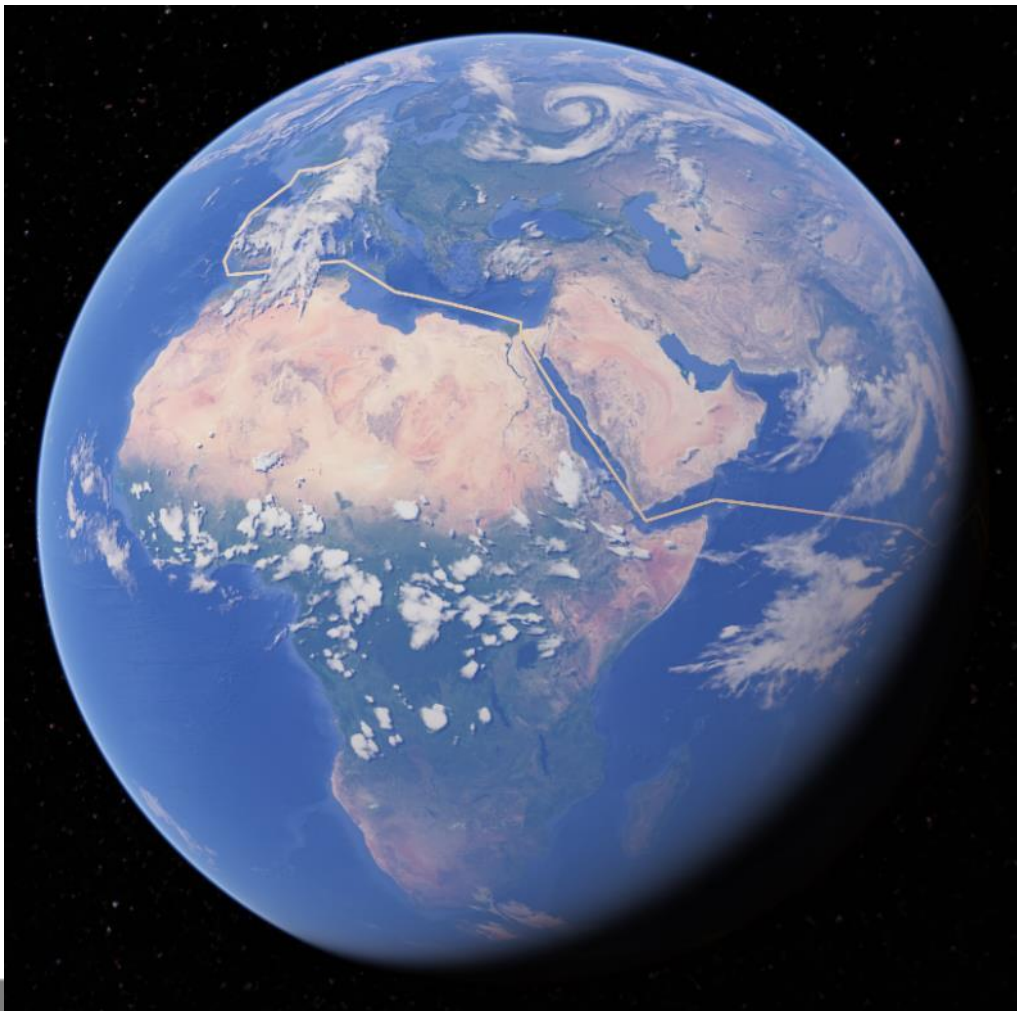
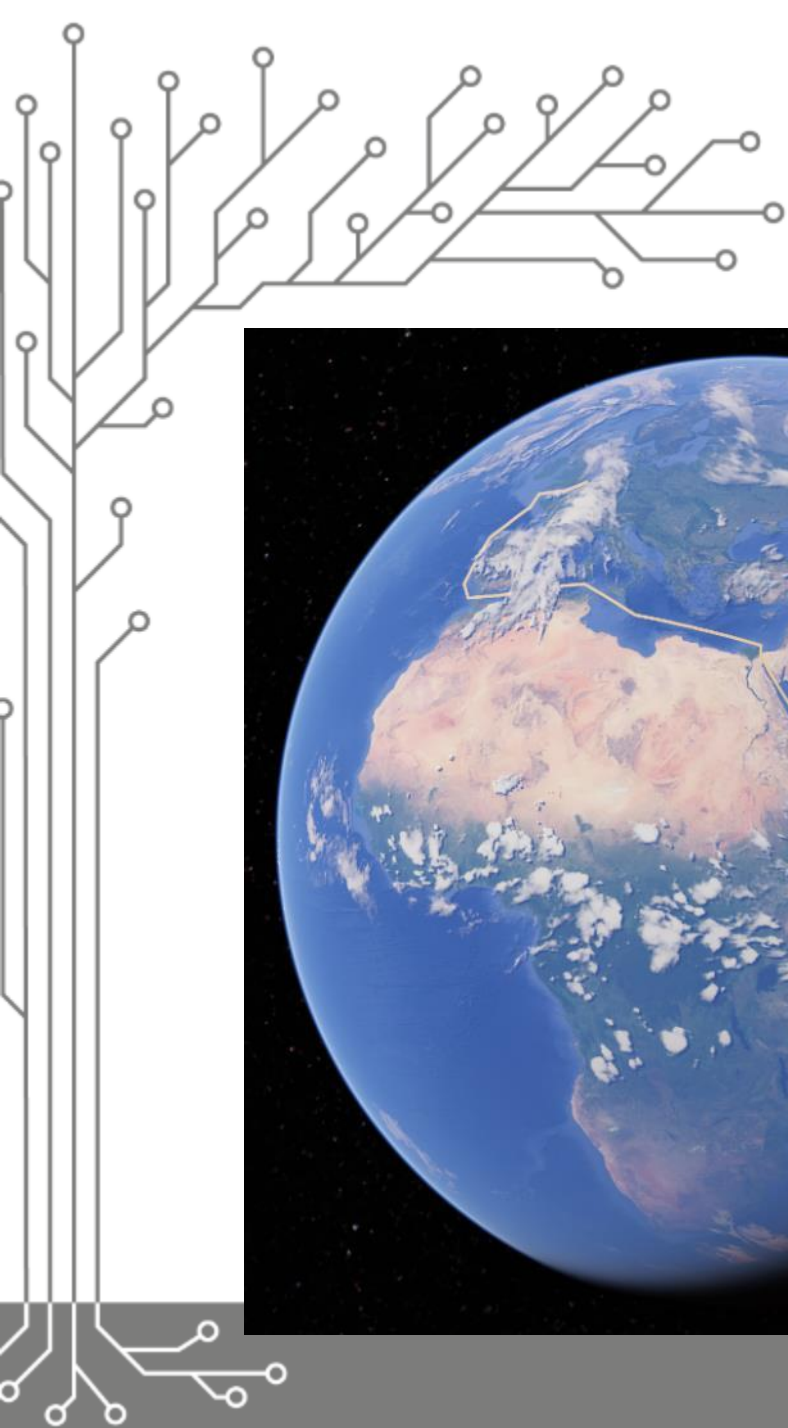
- Cena





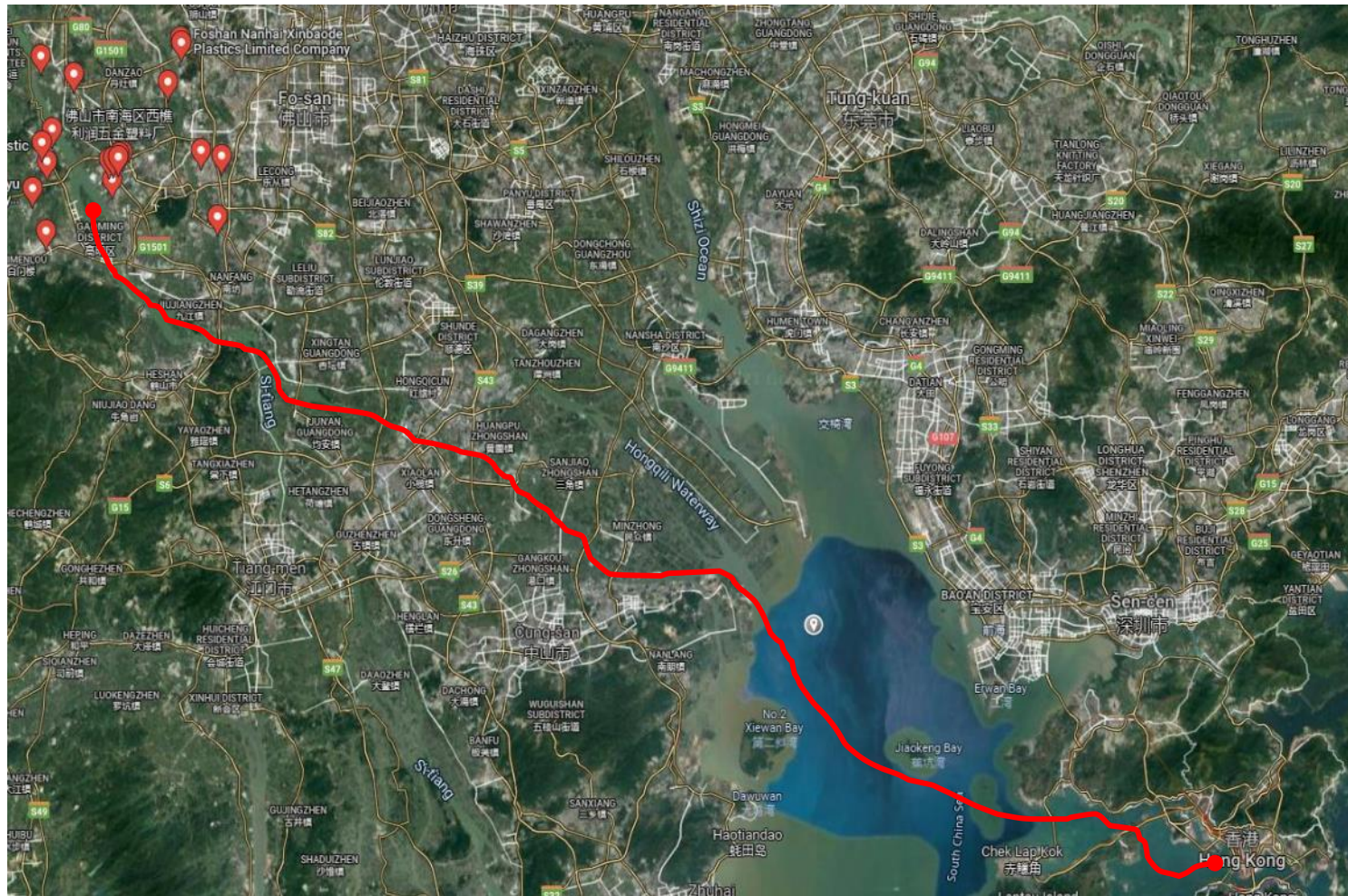
Waste being processed at HKS, Amsterdam © Kadir van Lohuizen/NOOR



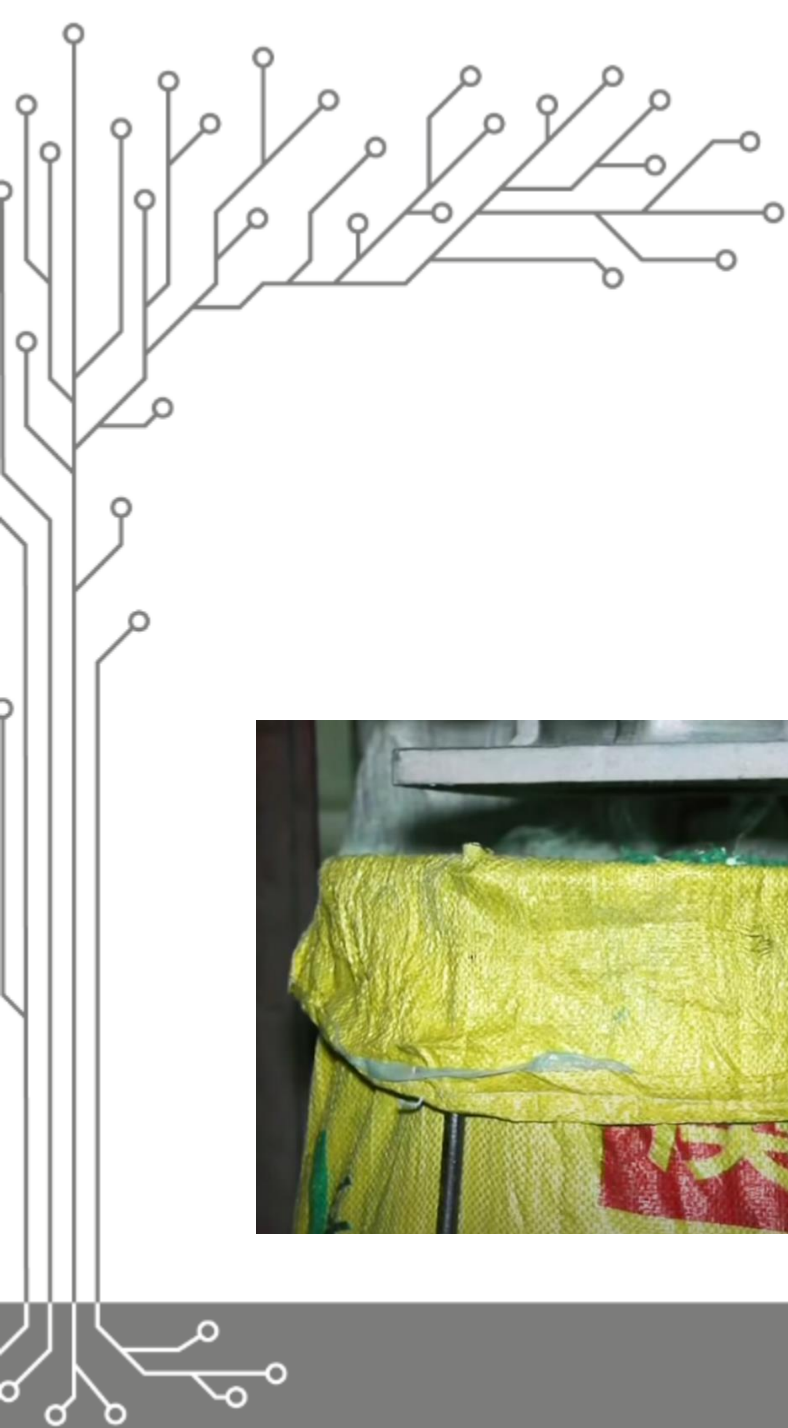


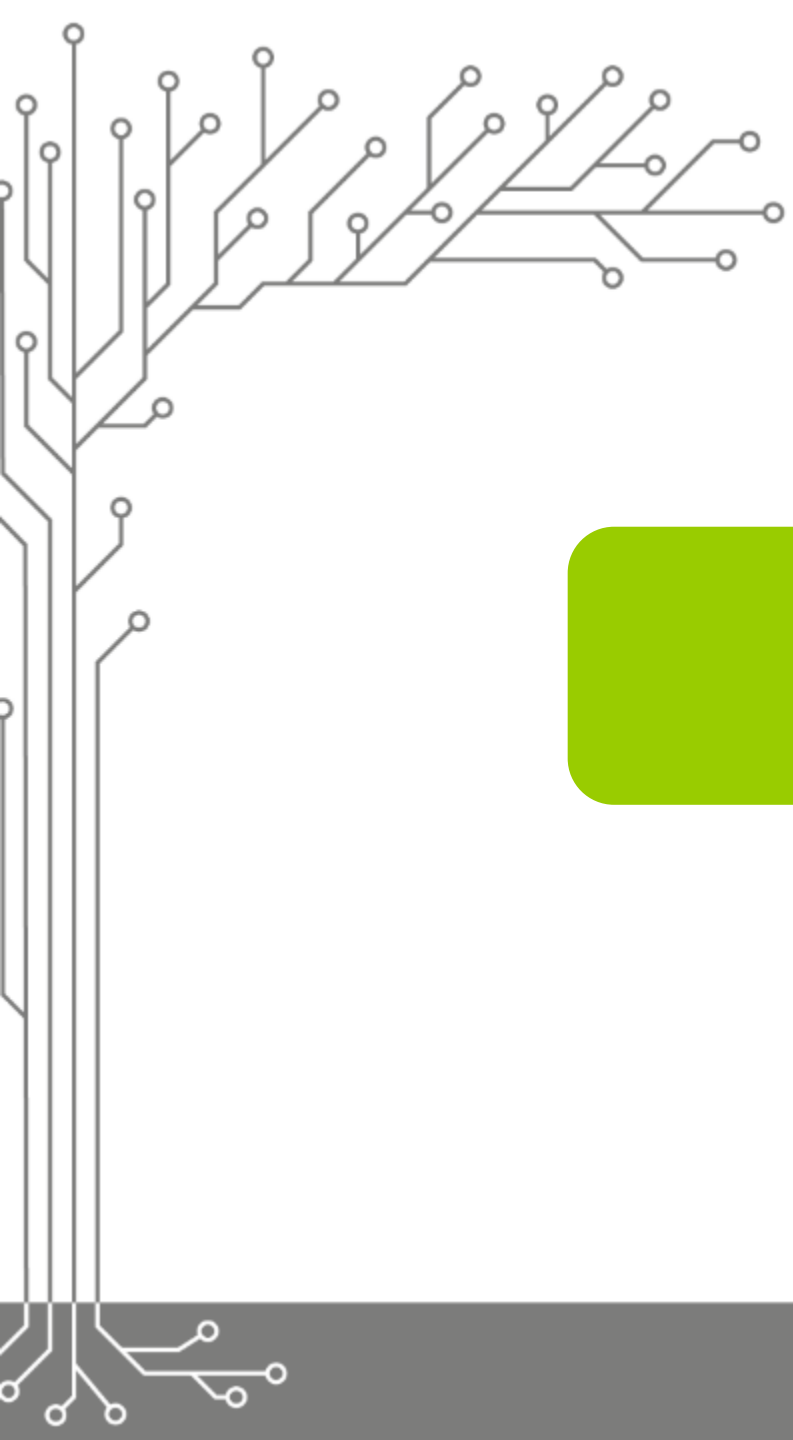


WELLPINE 威松塑胶









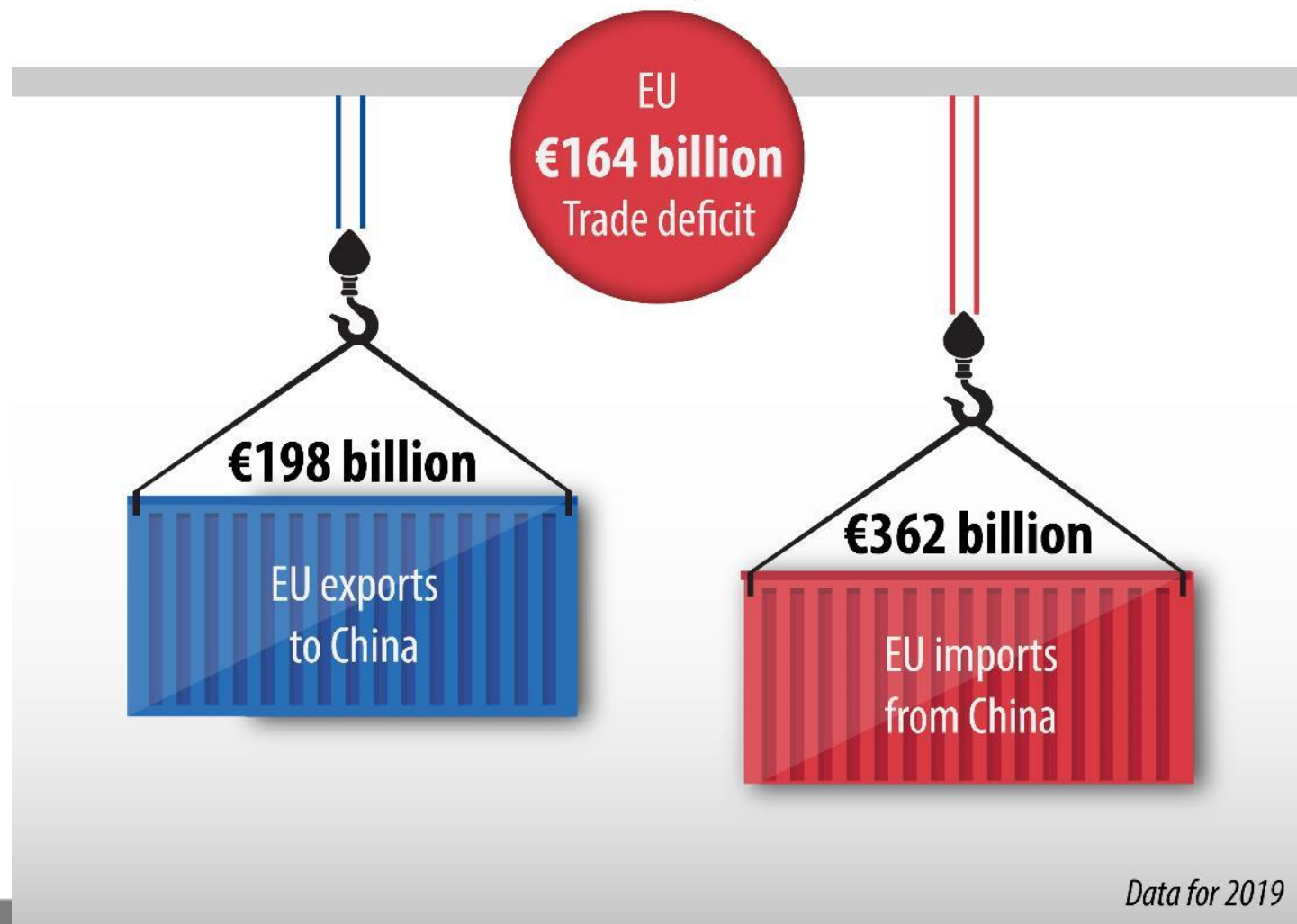
Jak tohle mohlo fungovat?



EU - China trade balance

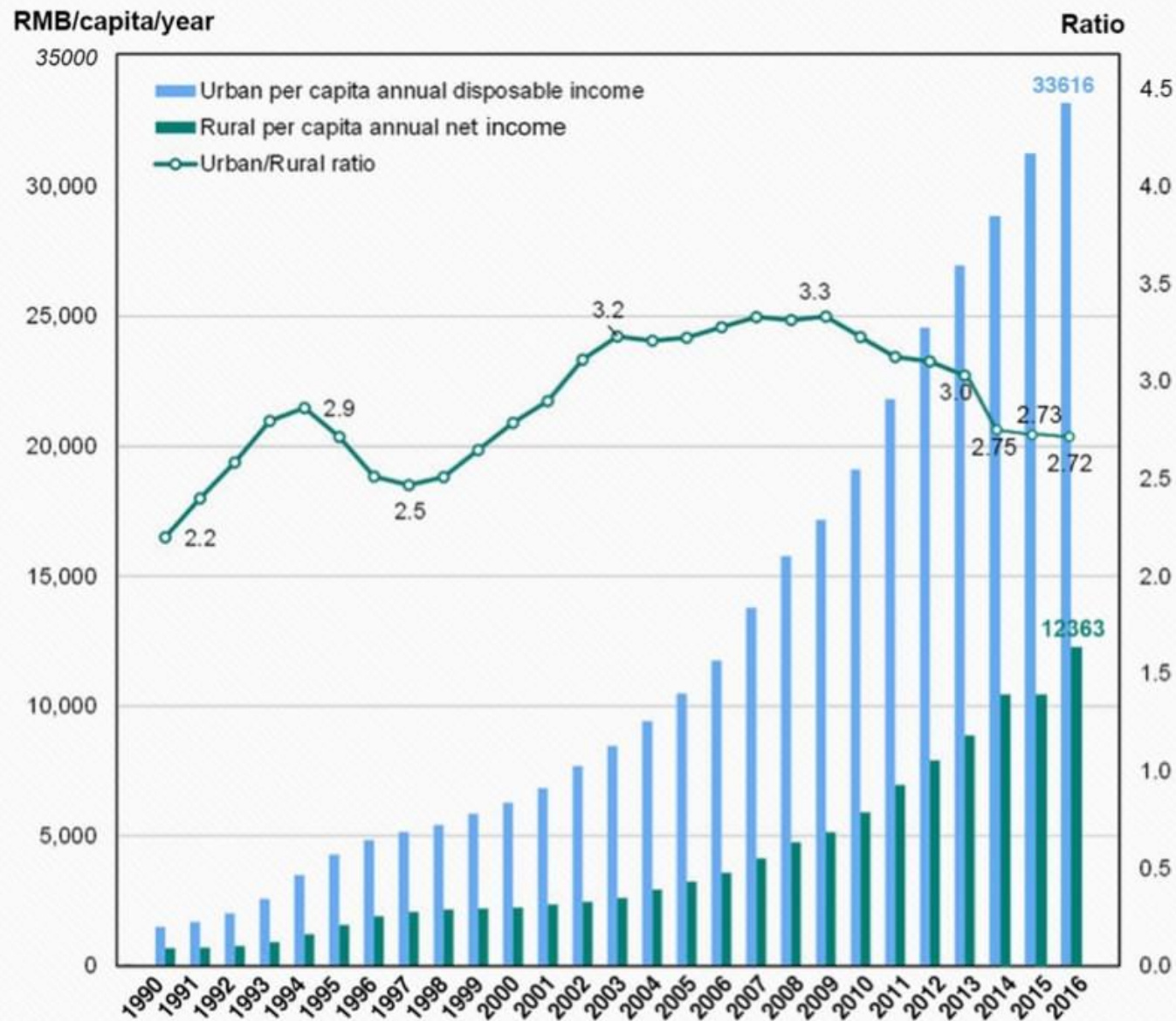
Trade in goods

Tři hlavní faktory



Tři hlavní faktory

China's urban-rural income ratio

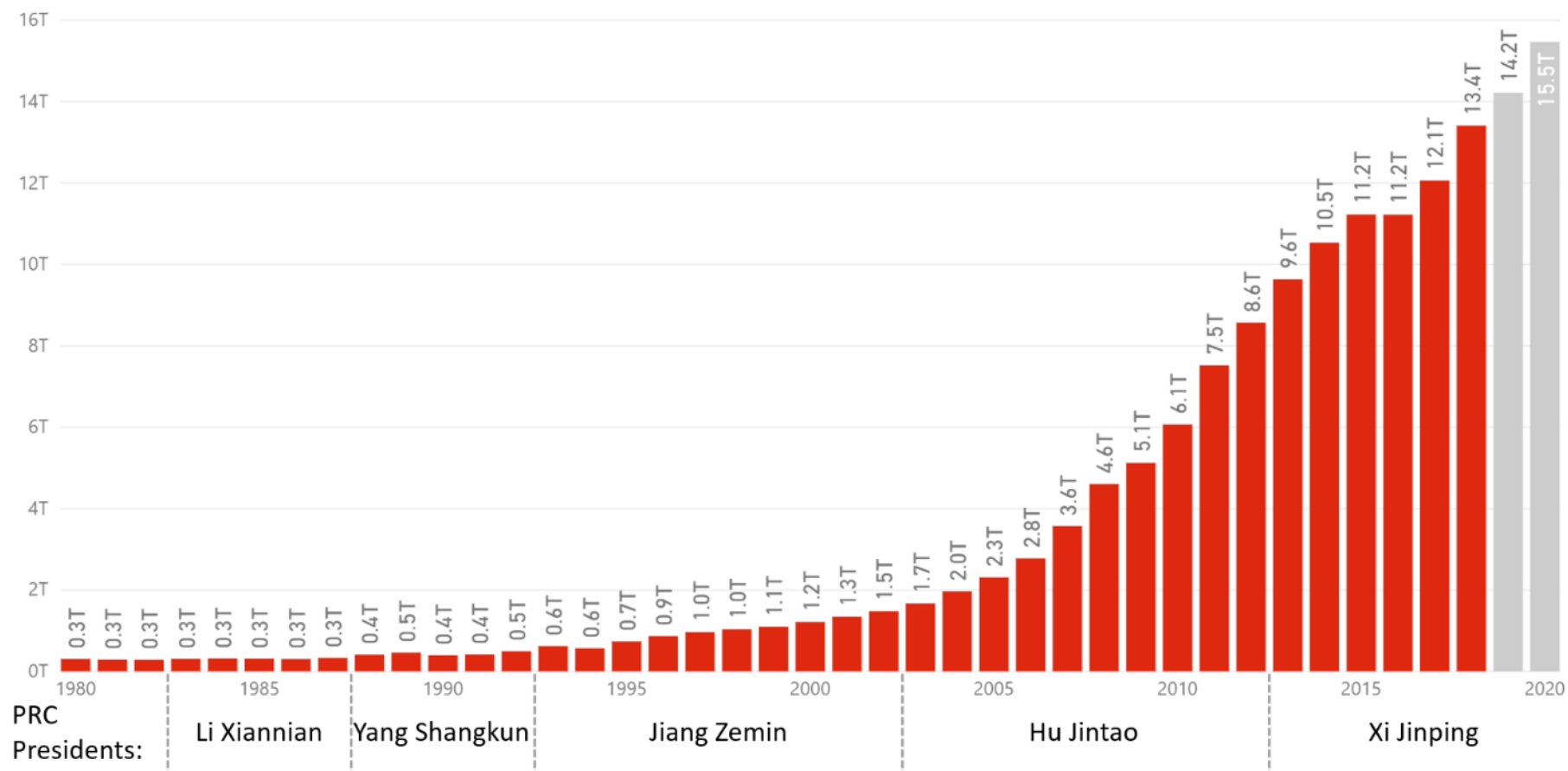


Source: National Bureau of Statistics of China

Tři hlavní faktory

China GDP

GDP in current prices (trillions of US dollars)



Data Source: IMF World Economic Outlook, April 2019

Data Analysis by: MGM Research



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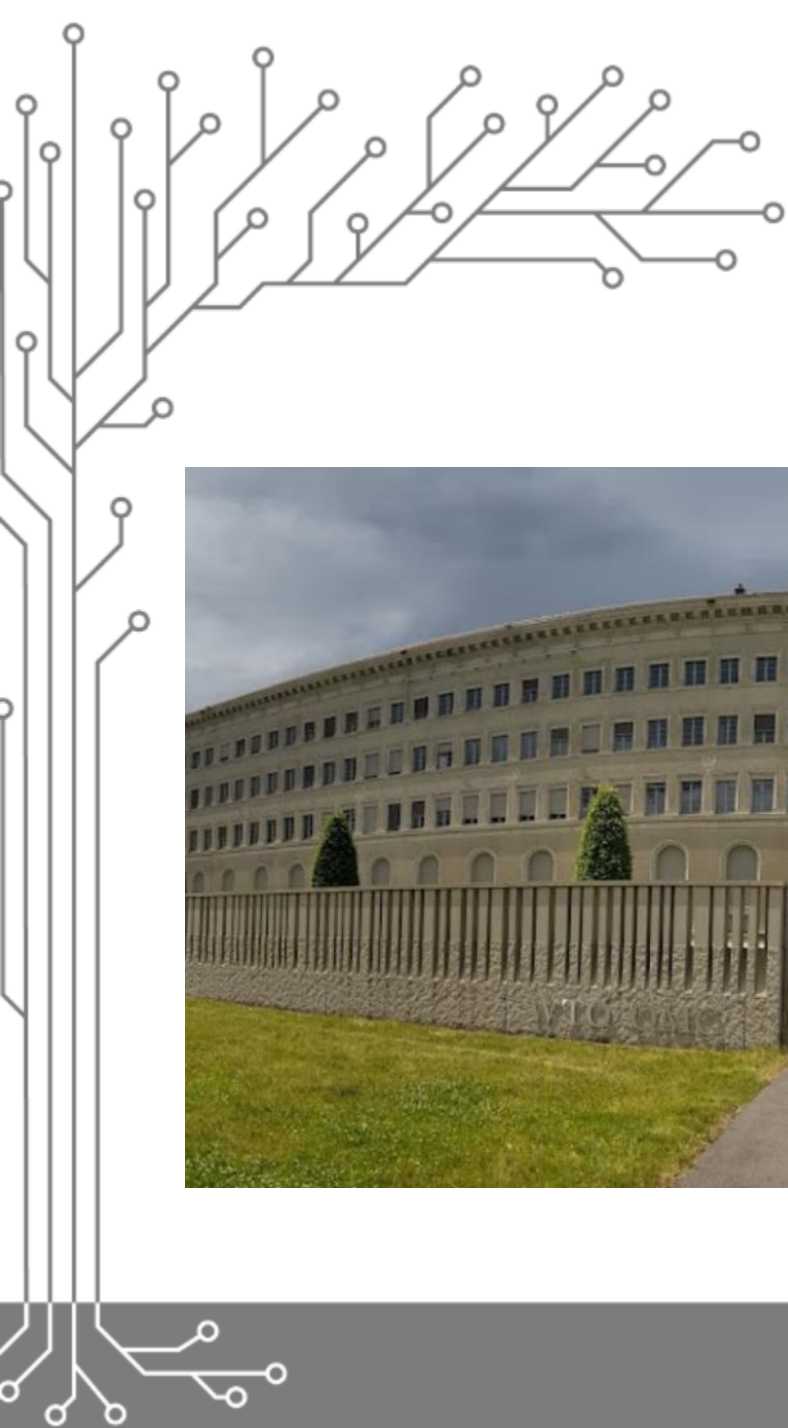


+/- Cena



- Cena





NOTIFICATION

The following notification is being circulated in accordance with Article 10.6

1. Notifying Member: CHINA If applicable, name of local government involved (Article 3.2 and 7.2):
2. Agency responsible: Ministry of Environmental Protection of the People's Republic of China Name and address (including telephone and fax numbers, email and website addresses, if available) of agency or authority designated to handle comments regarding the notification shall be indicated if different from above:
3. Notified under Article 2.9.2 [], 2.10.1 [X], 5.6.2 [], 5.7.1 [], other:
4. Products covered (HS or CCCN where applicable, otherwise national tariff heading. ICS numbers may be provided in addition, where applicable): HS: Plastic waste from living sources: 3915100000; 3915200000; 3915300000; 3915901000; 3915909000; Vanadium slag: 2619000021; 2619000029; 2620999011; 2620999019; Unsorted waste paper: 4707900090; Waste textile materials: 5103109090; 5103209090; 5103300090; 5104009090; 5202100000; 5202910000; 5202990000; 5505100000; 5505200000; 6310100010; 6310900010. Slag, dross (other than granulated slag), scalings and other waste from the manufacture of iron or steel. (HS 2619), Ash and residues (other than from the manufacture of iron or steel), containing arsenic, metals or their compounds. (HS 2620), Waste, parings and scrap, of plastics. (HS 3915), Waste of wool or of fine or coarse animal hair, including yarn waste but excluding garnetted stock. (HS 5103), Garnetted stock of wool or of fine or coarse animal hair. (HS 5104), Cotton waste (including yarn waste and garnetted stock). (HS 5202), Waste (including noils, yarn waste and garnetted stock) of man-made fibres. (HS 5505), Used or new rags, scrap twine, cordage, rope and cables and worn out articles of twine, cordage, rope or cables, of textile materials. (HS 6310), - Other, including unsorted waste and scrap (HS 470790).





Zákaz dovozu plastů

- HS: Plastic waste from living sources:
- 3915100000 (polyethylene);
- 3915200000 (polystyrene);
- 3915300000 (poly vinyl chloride);
- 3915901000 (PET);
- 3915909000 (other plastics);



Důvody



Po započtení externalit není systém ekonomický

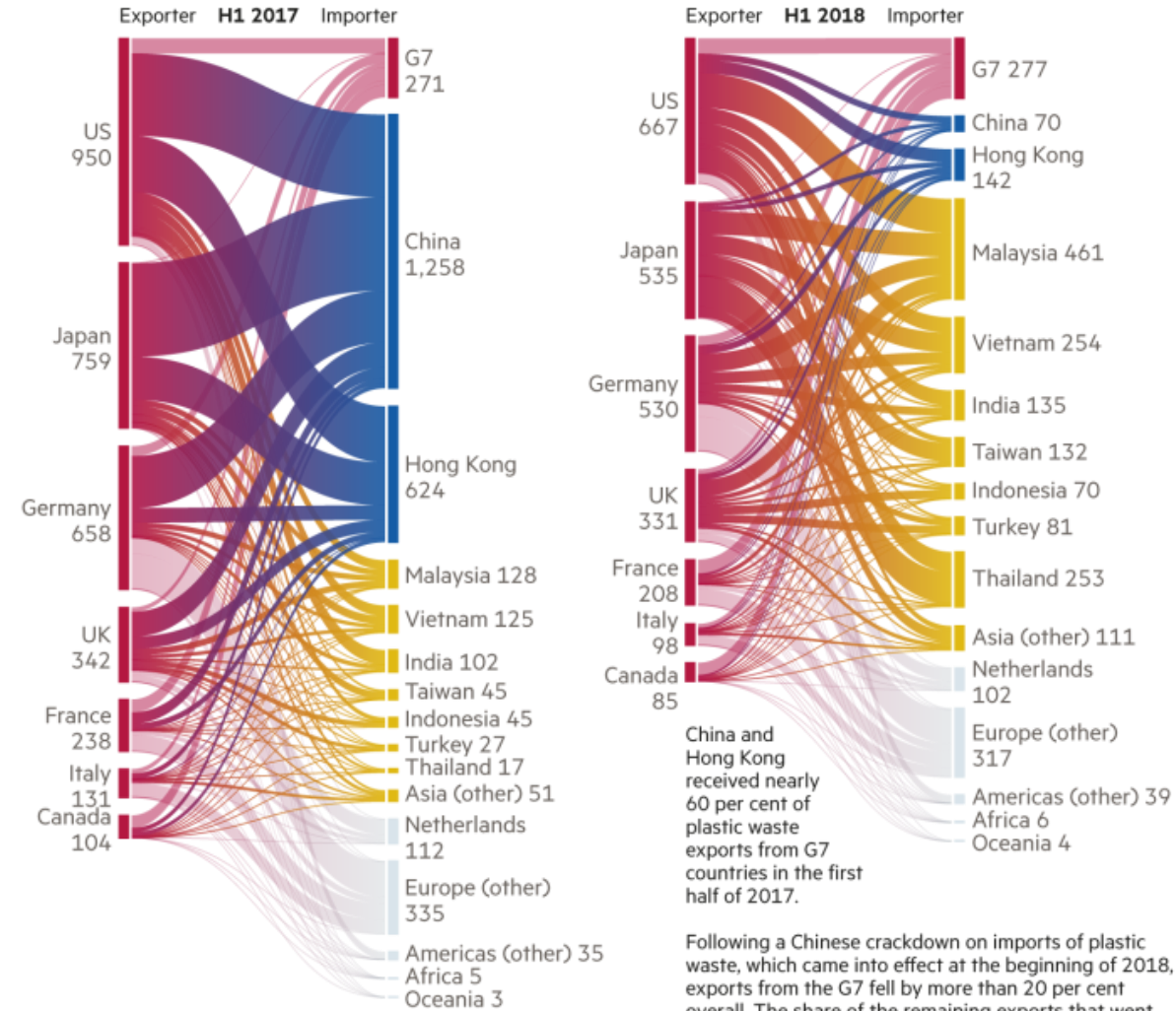




Waste being processed at HKS, Amsterdam © Kadir van Lohuizen/NOOR

How the global river of plastic waste changed course in just 12 months

Exports of plastic waste, parings and scrap from G7 countries ('000 tonnes)

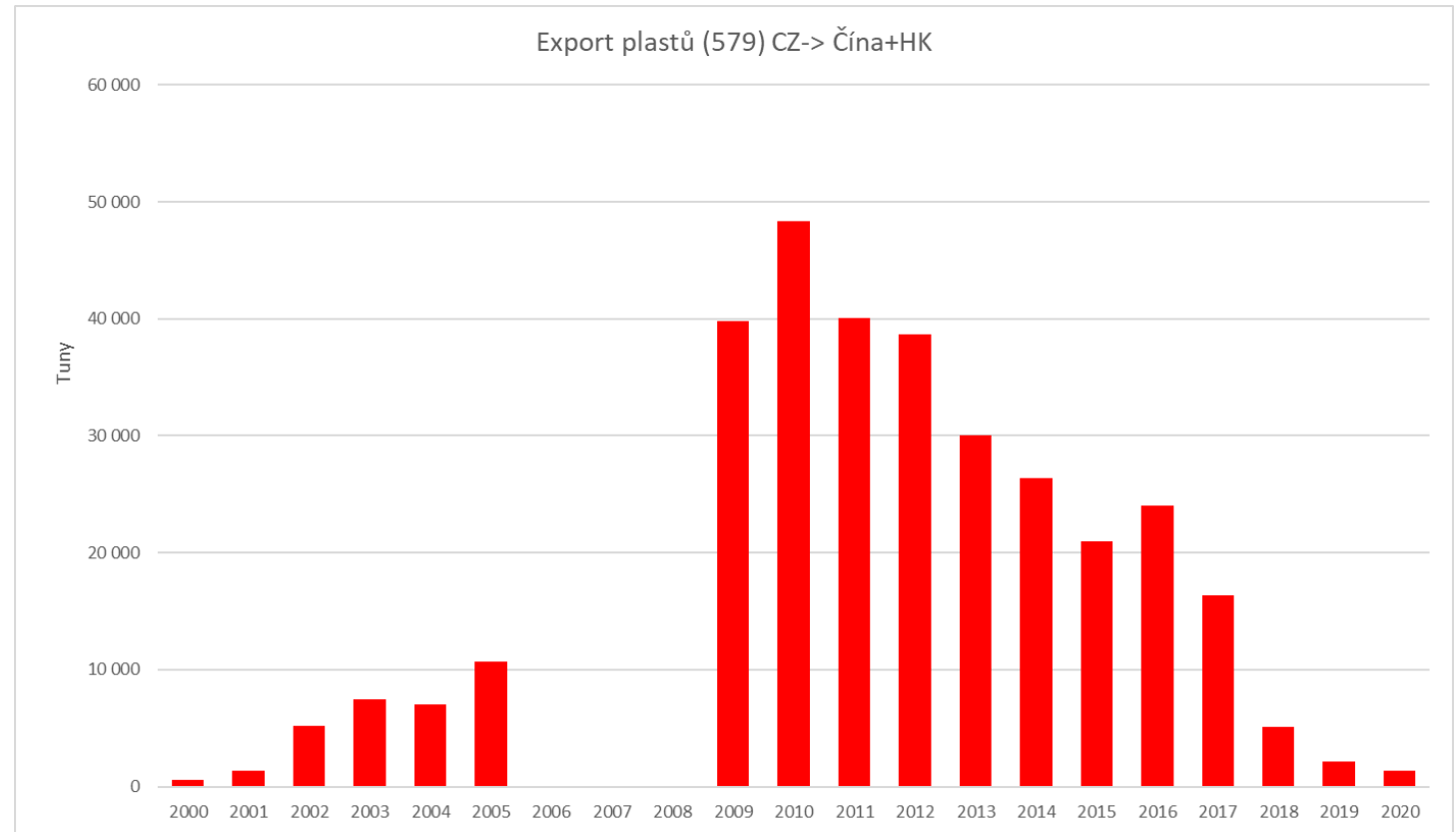


Following a Chinese crackdown on imports of plastic waste, which came into effect at the beginning of 2018, exports from the G7 fell by more than 20 per cent overall. The share of the remaining exports that went to China and Hong Kong fell below 10 per cent, with other Asian countries – particularly Malaysia – making up much of the shortfall.

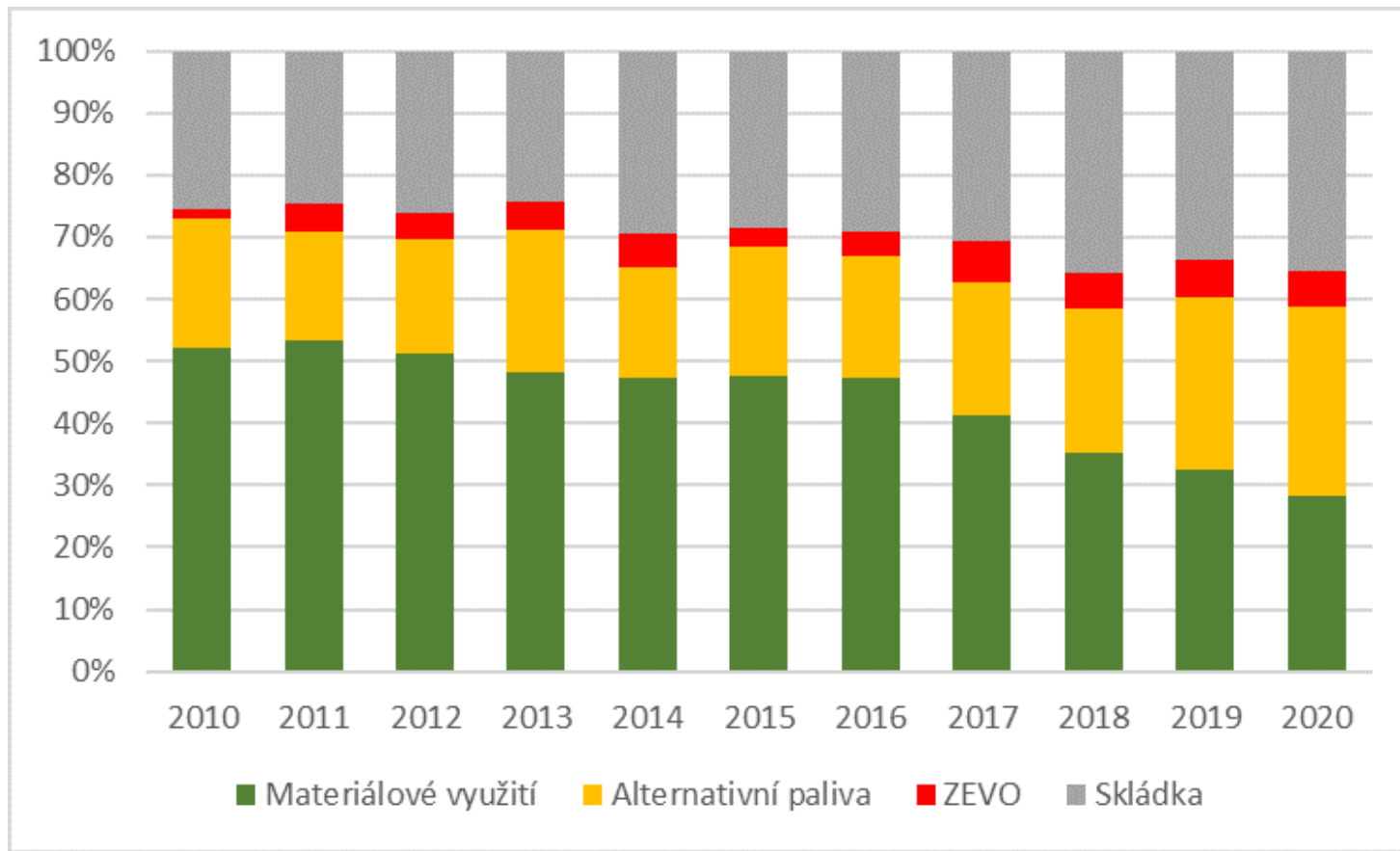
Region groupings from UN Statistics Division M49 standard
 Data accessed Sep 19-Oct 1, 2018
 Sources: US Census Bureau; Japan e-Stat; Eurostat; Statistics Canada
 © FT

Visual journalism: David Blood, Liz Faunce, Aendrew Rininsland

Export plastů



Materiálové využití plastů

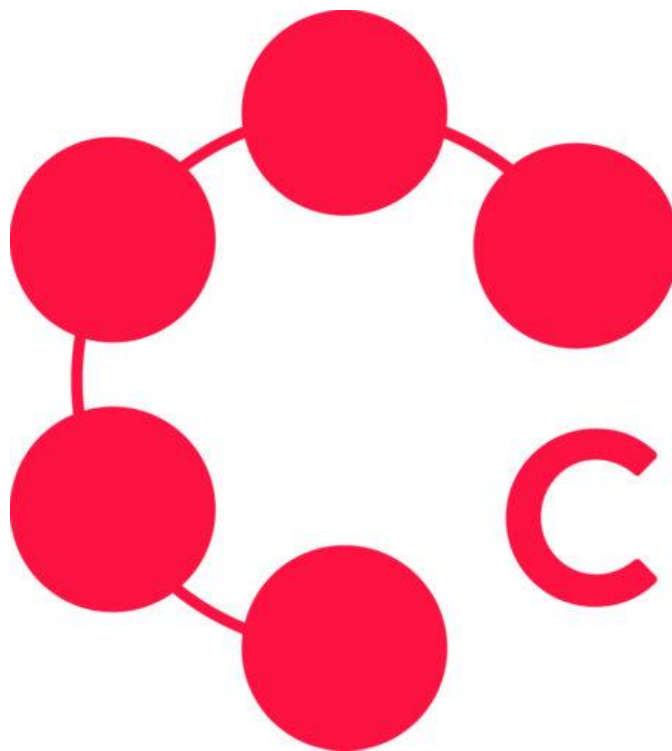
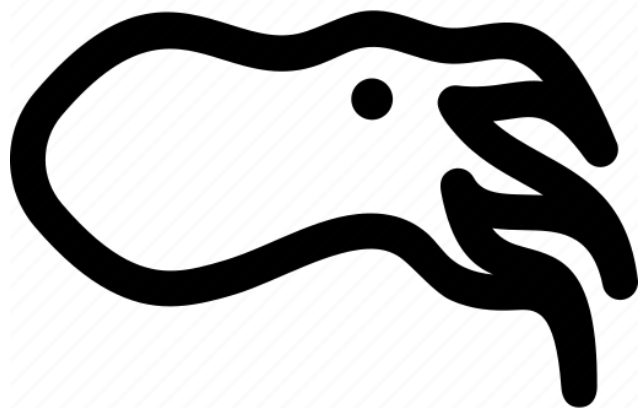


Recyklace



Dvě centra

SEPIA



CEVOOH



Děkuji za pozornost