

SARDINIA 2025

20th INTERNATIONAL SYMPOSIUM ON WASTE MANAGEMENT,
RESOURCE RECOVERY AND SUSTAINABLE LANDFILLING
13-17 OCTOBER 2025 / FORTE VILLAGE / S.M. DI PULA (IT)

Workshop: *Efficiency of WM policies in Universities*

15th October 2025



How we analyzed waste management at MUNI

**M U N I
E C O N**

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Internal WM analysis at MUNI

- The goal of the analysis was to create a detailed report about WM practices for the whole university at the individual premises level
- Analysis based on 2016–2020 data
- Field visits of individual premises during summer 2021
- Final report available in 2022

Requirements for the analysis

- Support from to top management level (rectorate, chancellor)
 - Necessary to persuade top management about the relevance
 - Inform all premises management about the ongoing analysis from the position of top management
 - Specify content and time plan
 - Allocate resources for the realization of the analysis
- Person well aware about WM practices with contacts and access to data
 - Acquire statistical data on waste generation at premises level, individual fraction, related finances
 - Get contacts to the operations managers (responsible for WM) at individual premises
- Plan and realize visits of individual premises for additional qualitative data
- Responsible person should have a long-term interest in WM, quality matters
 - Avoid superficial approach to the analysis, choose conscientious person, try to exceed original task

Premises visits

- Each premise is unique
 - Chose which to include and which not
- Individual approach is necessary
 - Similarities can be identified eventually and utilize previous visits
- Basic outline what to look for
 - Ask about any further details, specifics, practices, make notes, photos, additional calls, emails, etc.
 - Let the other side talk
 - How and where the waste is generated

	A	B	C	D	E	F	G	H
	IČO	Název provozovny	Ulice předmětu	IČP Identifikační číslo provozovny	IČZUJ	Obec předmětu	Vedoucí	
1								
2	00216224	MUNI Archiv	Žerotínovo nám. 449/3	145800	550971	Brno-střed	Ing. Vlastislav Okáník	
3	00216224	MUNI CZS	Komenského nám. 220/2	149700	550972	Brno-střed	Ing. Vlastislav Okáník	
4	00216224	MUNI Ekonomicko - správní fakulta	Lipová 507/41a	1002950899	550973	Brno-střed	Aleš Flajšinger	
5	00216224	MUNI Fakulta informatiky	Botanická 554/68a	1002950791	551007	Brno-Královo Pole	Ing. Zdeněk Hudec	
6	00216224	MUNI Fakulta sociálních studií	Joštova 218/10	230000	550973	Brno-střed	PaedDr. Jan Jeřábek	
7	00216224	MUNI Fakulta sportovních studií	Heinrichova 894/24	530000	550973	Brno-střed	Mgr. Tomáš Sedláček	
8	00216223	MUNI Fakulta sportovních studií	Mánesova 2808/12d	1002950970	550973	Brno-střed	Mgr. Tomáš Sedláček	
9	00216224	MUNI Fakulta sportovních studií	Údolní 221/3	520000	550973	Brno-střed	Mgr. Tomáš Sedláček	
10	00216224	MUNI Fakulta sportovních studií	Veslařská 181/183	1002950911	551171	Brno-Jundrov	Mgr. Tomáš Sedláček	
11	00216224	MUNI Farmaceutická fakulta	Palackého tř. 1946/1	21622401	550973	Brno-střed	Tomáš Vondrášek	
12	00216224	MUNI Filozofická fakulta	Gorkého 57/7,	1002950902	550973	Brno-střed	Pavel Janský	
13	00216224	MUNI Filozofická fakulta	Janáčkově nám. 654/2a	214000	550973	Brno	Pavel Janský	
14	00216224	MUNI Filozofická fakulta - přes obec	Kyjovice	541000	594318	Kyjovice	Pavel Janský	
15	00216224	MUNI Filozofická fakulta - přes obec	Panská Lhota	521000	586943	Brtnice	Pavel Janský	
16	00216224	MUNI Filozofická fakulta - přes obec	Pohansko	531000	584291	Břeclav	Pavel Janský	
17	00216224	MUNI Filozofická fakulta	Veveří 468/26	212000	550973	Brno-střed	Pavel Janský	
18	00216224	MUNI Filozofická fakulta	Arne Nováka 1/1	1002950708	550973	Brno-střed	Pavel Janský	
19	00216224	MUNI Kino Scala	Moravské náměstí 127/3	999000	550973	Brno-střed	Mgr. Petr Dítě	
20	00216224	MUNI Lékařská fakulta - stl. l.č. rostlin	Údolní 527/74	110000	551007	Brno-Krávi hora	Leoš Spáčil	
21	00216224	MUNI Lékařská fakulta komplet	UKB, Kom2 atd	dle místa	dle místa dle místa		Leoš Spáčil	
22	00216224	MUNI Nakladatelství	Rybškova	940000	550973	Brno-střed	PhDr. Alena Mizerová	
23	00216224	MUNI Pedagogická fakulta	Poříčí 538/31	1002950732	550973	Brno-střed	Mgr. Jitka Bónová	
24	00216224	MUNI Pedagogická fakulta	Poříčí 623/7	1002950805	550973	Brno-střed	Mgr. Jitka Bónová	
25	00216224	MUNI Pedagogická fakulta	Vínohrad 506/100	420000	550973	Brno-střed	Mgr. Jitka Bónová	
26	00216224	MUNI Právnická fakulta	Veveří 158/70	1002950694	550973	Brno-střed	Ing. Petr Klein	
27	00216224	MUNI Přírodovědecká fakulta	Kotlářská 267/2	1002950830	550973	Brno-střed	Pavel Říha	
28	00216224	MUNI Přírodovědecká fakulta	Tvrdého 258/12	1002950929	550973	Brno-střed	Pavel Říha	
29	00216224	MUNI Rektorát	Komenského nám. 220/2	1002950775	550973	Brno-střed	Ing. Vlastislav Okáník	
30	00216224	MUNI Rektorát	Nádražní 465/58	1002950872	583952	Šlapanice	Ing. Vlastislav Okáník	
31	00216224	MUNI Rektorát	Žerotínovo nám. 617/9	1002950821	550973	Brno	Ing. Vlastislav Okáník	
32	00216224	MUNI Správa kolejí a menz	bratři Žůrků	1002950864	551074	Brno-jih	Ing. František Dočkal	
33	00216224	MUNI Správa kolejí a menz	Čejkova	1002950953	551058	Brno-Zidenice	Ing. František Dočkal	
34	00216224	MUNI Správa kolejí a menz	Grohova 108/11	1002950945	550973	Brno-střed	Ing. František Dočkal	
35	00216224	MUNI Správa kolejí a menz	Kamenice 3 + 5 + SIMU	1002951046	551082	Brno-Bohunice	Ing. František Dočkal	
36	00216224	MUNI Správa kolejí a menz	Klácelova	1002951003	550973	Brno-střed	Ing. František Dočkal	
37	00216224	MUNI Správa kolejí a menz	Kotlářská	1002950813	550973	Brno-střed	Ing. František Dočkal	
38	00216224	MUNI Správa kolejí a menz	Kounicova	1002950856	551007	Brno-Královo Pole	Ing. František Dočkal	
39	00216224	MUNI Správa kolejí a menz - prodáno	Čermná	1002950881	551074	Brno-jih	Ing. František Dočkal	
40	00216224	MUNI Správa kolejí a menz	Moravské náměstí 9	999100	550973	Brno-střed	Ing. František Dočkal	
41	00216224	MUNI Správa kolejí a menz	náměstí Míru	1002950996	550973	Brno-střed	Ing. František Dočkal	
42	00216224	MUNI Správa kolejí a menz	Sladkého	1002951011	551074	Brno-jih	Ing. František Dočkal	
43	00216224	MUNI Správa kolejí a menz	Tvrdého 5	1002950961	550973	Brno-střed	Ing. František Dočkal	
44	00216224	MUNI Správa kolejí a menz	Veveří 29	1002950988	550973	Brno-střed	Ing. František Dočkal	
45	00216224	MUNI Správa kolejí a menz	Vinařská	1002950724	550973	Brno-střed	Ing. František Dočkal	
46	00216224	MUNI Správa kolejí a menz	Netroufalky	1008616605	551082	Brno-Bohunice	Ing. František Dočkal	
47	00216224	MUNI Správa kolejí a menz	Mánesova					
48	00216224	MUNI Středoevropský technologický institut	Kamenice 753/5, budova E35	12147176888	551082	Brno-Bohunice	Ing. et Ing. Miroslav Haman	
49	00216224	MUNI Univerzitní centrum	Náměstí Zachariáše z Hradce 2,	999200	588024	Teč	Mgr. Jaroslav Makovec	
50	00216224	MUNI Univerzitní kampus Bohunice	Kamenice 753/5 + 3 + SIMU	1002951038	551082	Brno-Bohunice	Ing. Lukáš Kreidl	
51	00216225	MUNI Ústav výpočetní techniky	Šumavská 416/15	14920150	550973	Brno-střed	Ing. David Jati	
52	Další pracoviště, výzkumné stanice, seismologické stanice, apod. dle dohody s RMU IČP bude tvořeno číselným označením příslušného pracoviště 14xxxxxx.							

Structure of the analysis (suggestion)

- Introduction
- General description of WM at MUNI
- Analysis of aggregated data divided into main waste categories
- Economic aspects of WM at MUNI
- Analyses of individual premises (+aggregation for groups)
 - Organization of WM and practices incl. education; waste streams; economy; conclusion and recommendations

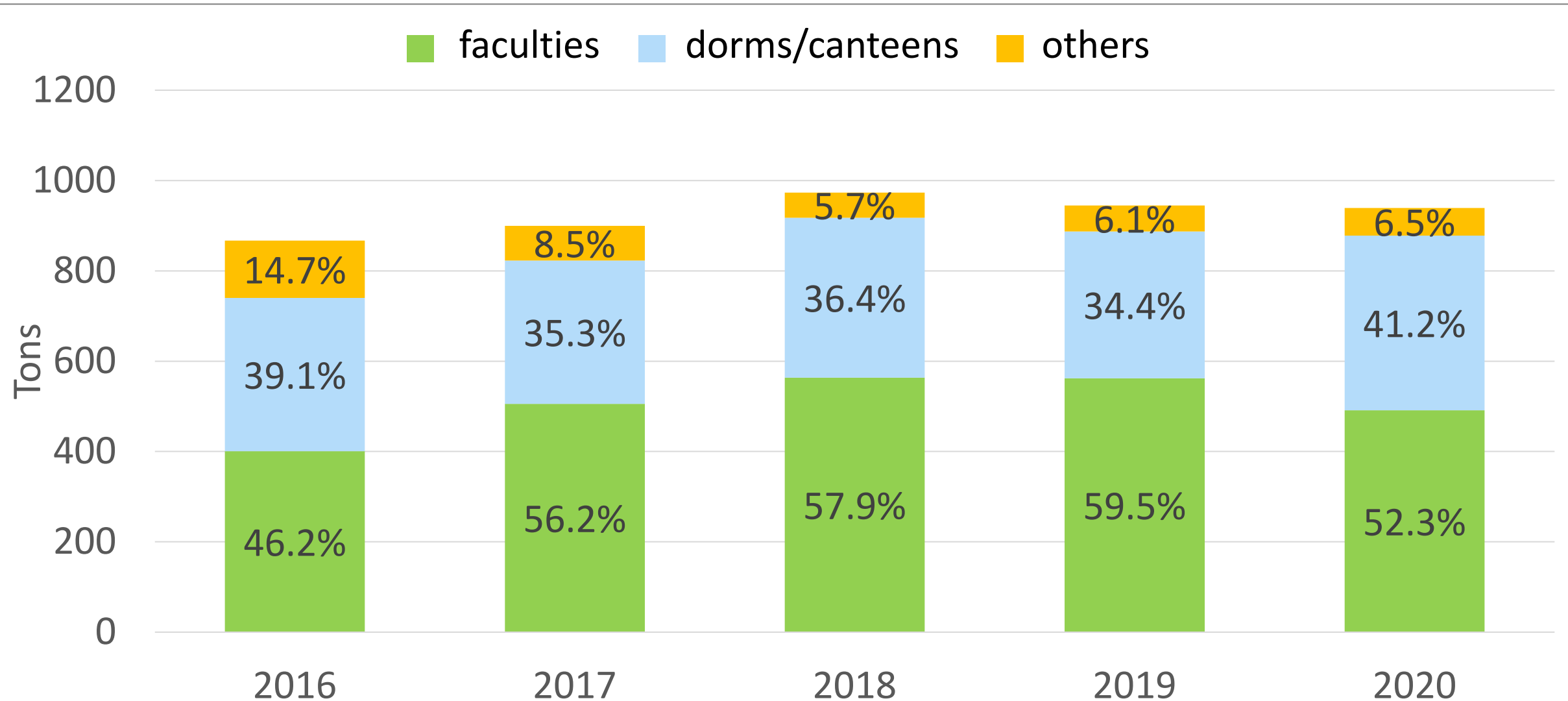
How to classify comparable premises?

- Varies for individual institution, not always necessary
- At MUNI we used 3 main categories:
 - Faculties
 - Canteens and dormitories
 - Other premises
- Alternatives subcategories:
 - Faculties of social-humanities; natural sciences; campus (combined premise)
 - Canteens; dormitories (incl. accommodation premises for lecturers), combined premises
 - Other premises incl. administration (rectorate), sport premises, gardens, etc. (cinema...)

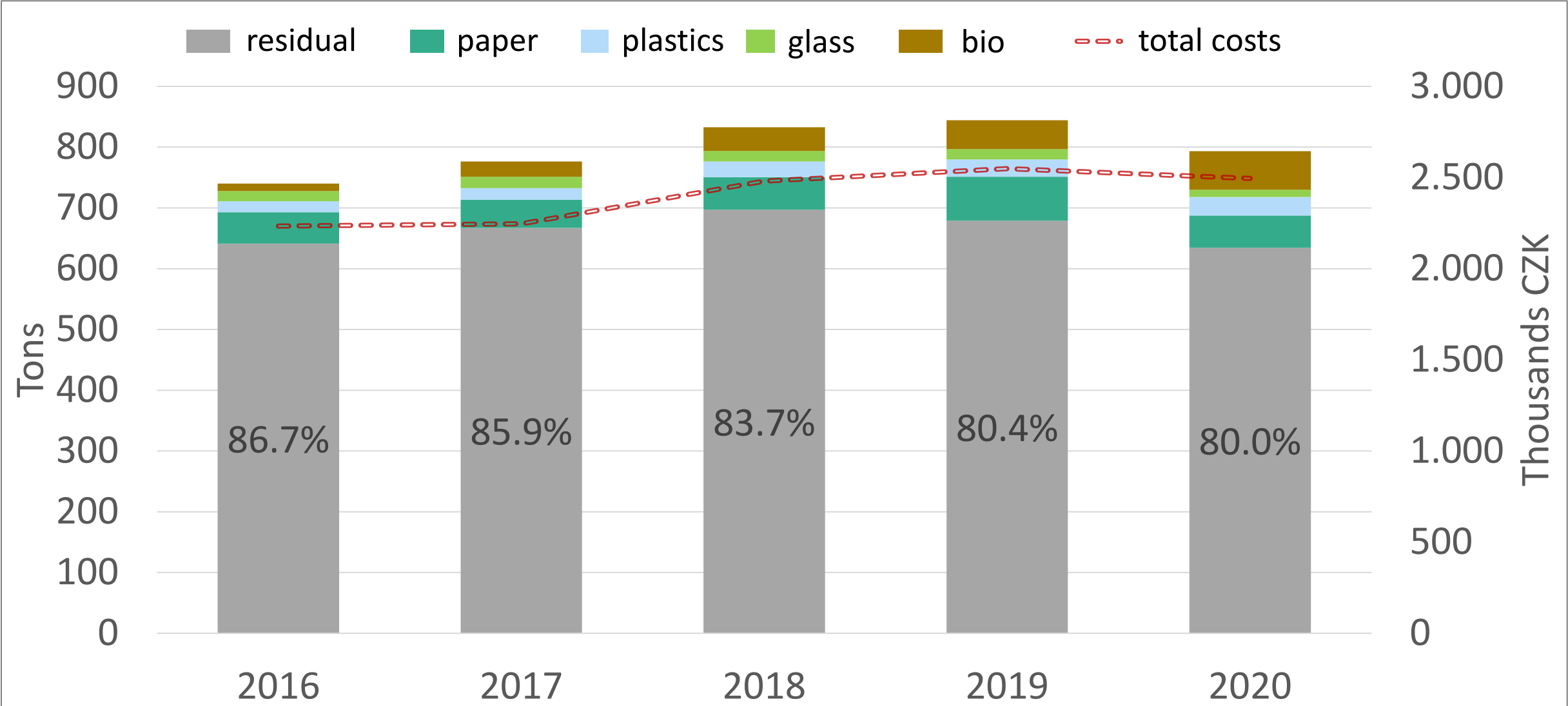
Waste management analysis at Masaryk University – MUNIwaste

(brief summary of findings)

Total waste generation by premises

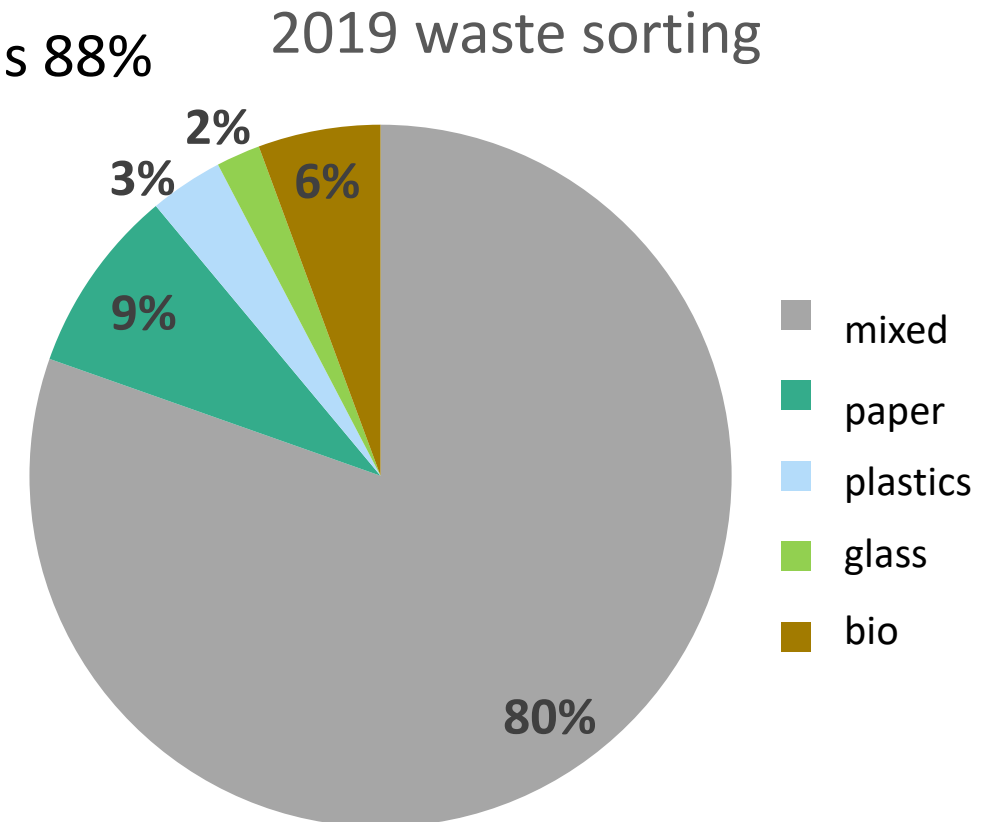


Waste sorting at MUNI 2016–2020



Waste sorting

- Mixed makes up 80–85% of waste
 - Faculties approx. 80%, dormitories and canteens 88%
 - The share is gradually decreasing every year
- Real sorting rate is a bit higher
 - Utilization of public container network
 - Employee initiatives
- Insufficient "standardization"
 - Differences between university units in collection frequency and range
 - Various awareness and "visibility"



Problems and ways to improve

- Costs based on bins count and capacity, not real amount
 - Reported waste amount based on number of bins, capacity (changes upon 2 weeks notice)
 - During lockdown greatly reduced operations X insignificant drop in reported waste+costs
- Unwillingness/ignorance of waste separation among the people
 - Implementation of information tools, make people aware, minimize extra costs
- Wastes generated at university X at households
 - Different composition, necessary to choose different approaches and solutions
- Introduction of participatory aspects, include students and staff
 - Bottom-up approach for finding effective solutions

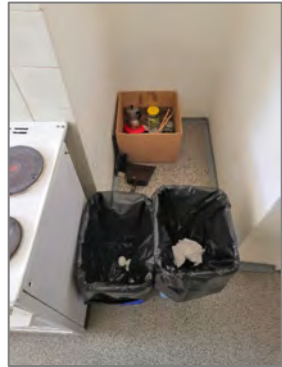
Selected recommendations to improve WM – faculties

- More frequent adjustments in collection schedule depending on different parts of academic year (teaching/non-teaching periods)
- Improve education of students, for instance through IS trainings
 - Information box linking to the training at IS homepage will not disappear until the training is completed
- Information materials for separation
 - Hallways, lifts, next to beverage and snacks machines, relax areas, wherever students spend time between classes
 - Place maps with separation bins distribution in given unit
 - Greater involvement of the student chamber in senates



Selected recommendations to improve WM – dormitories

- Cooperation with dormitory councils, tailored solutions
 - Participative approach, support for students' initiatives, such as:
 - added bins for paper after students' request
 - initiative to separate in kitchens – make it official
- Place instructions in frequent places (hallways, shared kitchens...) how to separate, specific information for given dormitory including typical examples and maps (“waste separation plan”)
 - Instructions also in English, if relevant, again with examples of common good/bad practices
 - In dormitories with individual kitchens and bathrooms place instruction at lifts, entrances...



Selected recommendations to improve WM – canteens

- Add information materials with proper and unwanted procedures specific for given canteen, all from the diner's perspective
 - Place instructions (including bin map) properly when one can easily see them, like counters for food and checkout with people in lines
- Add clear and specific instructions in the kitchen what, how and where to sort
 - See example from UNI's restaurant



Selected recommendations to improve WM – admin + support units

- Occasional revision of waste generation followed by adjustment in collection frequency and bin quantity, more schedule adjustments
- Improve staff knowledge, due to stable personnel, potential to include in regular trainings in IS and through unit managers
- Larger units can set up webpages with specific information for given unit about waste sorting – how, where, what (+[munimap](#))

MUNIWaste – further findings, recommendations (examples)

Understandable, unified, placement



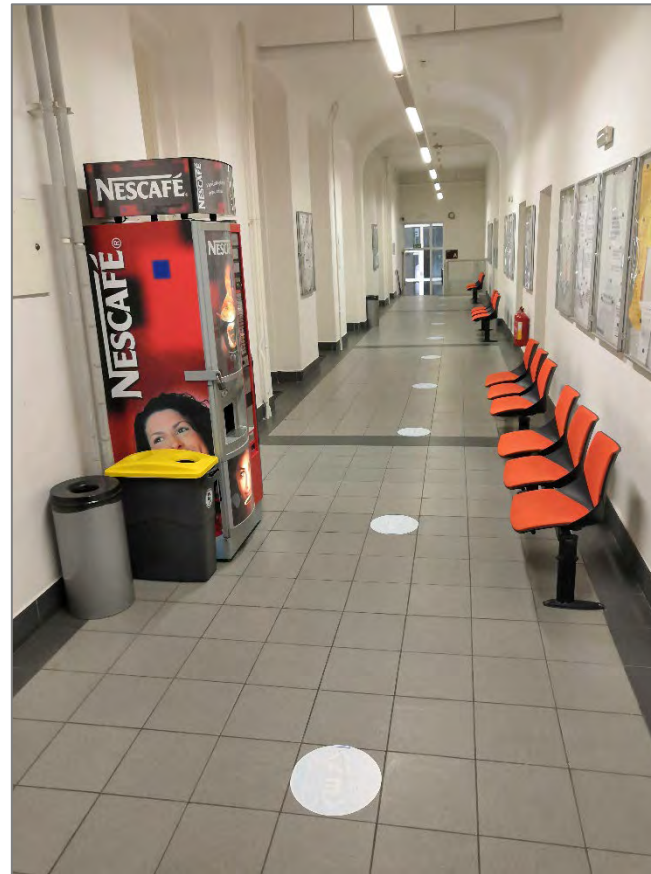
Understandable, unified, placement



Understandable, unified, placement



Understandable, unified, placement



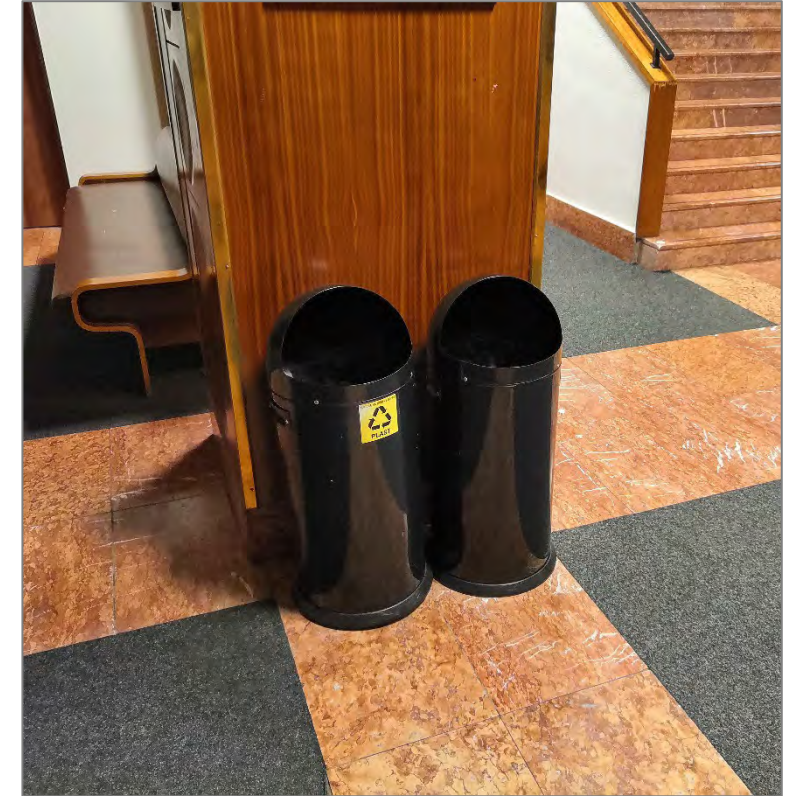
Understandable, unified, placement



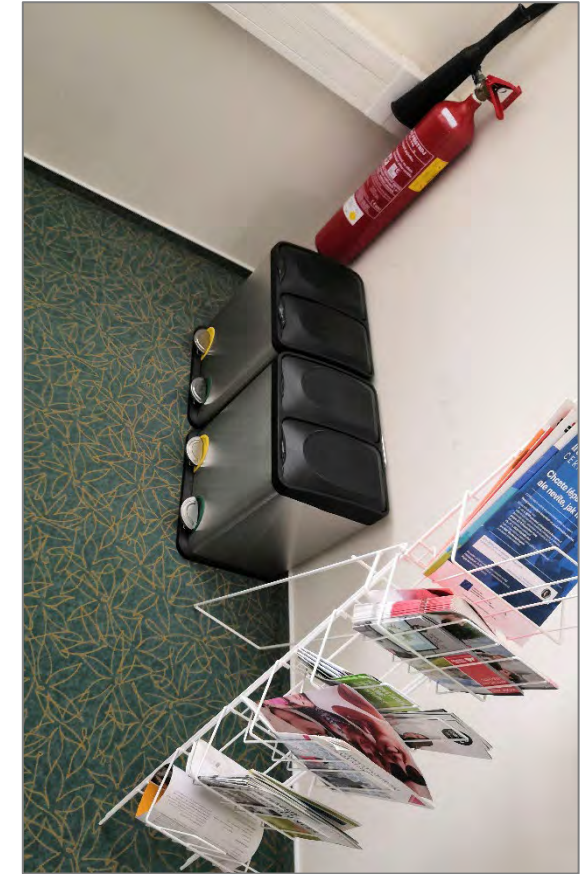
Understandable, unified, placement



Less recommended practices



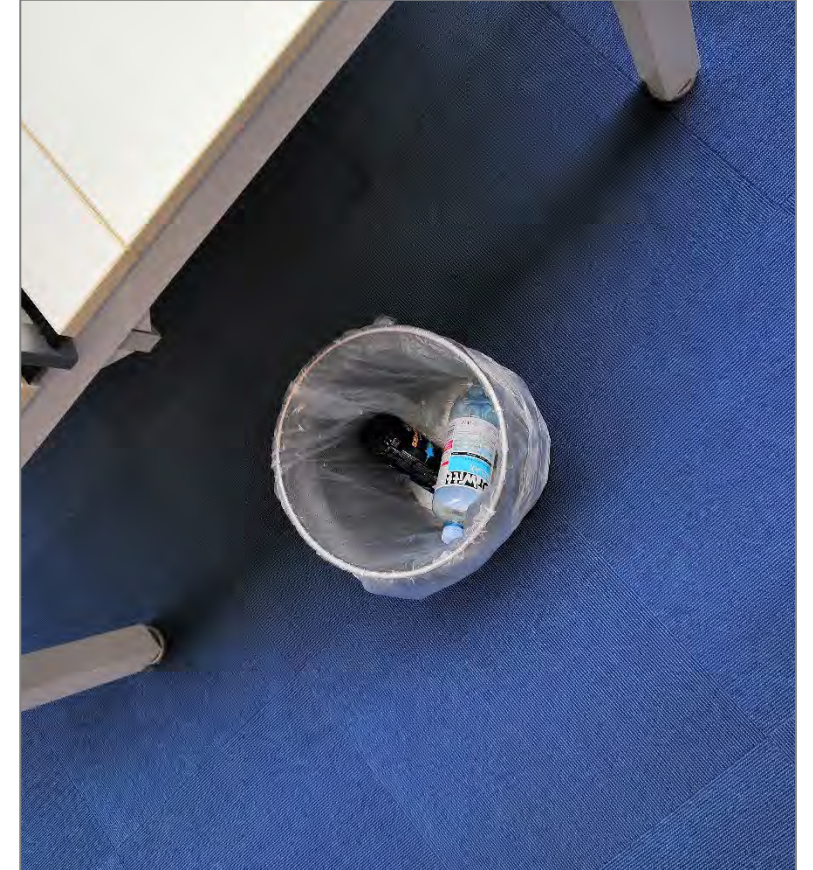
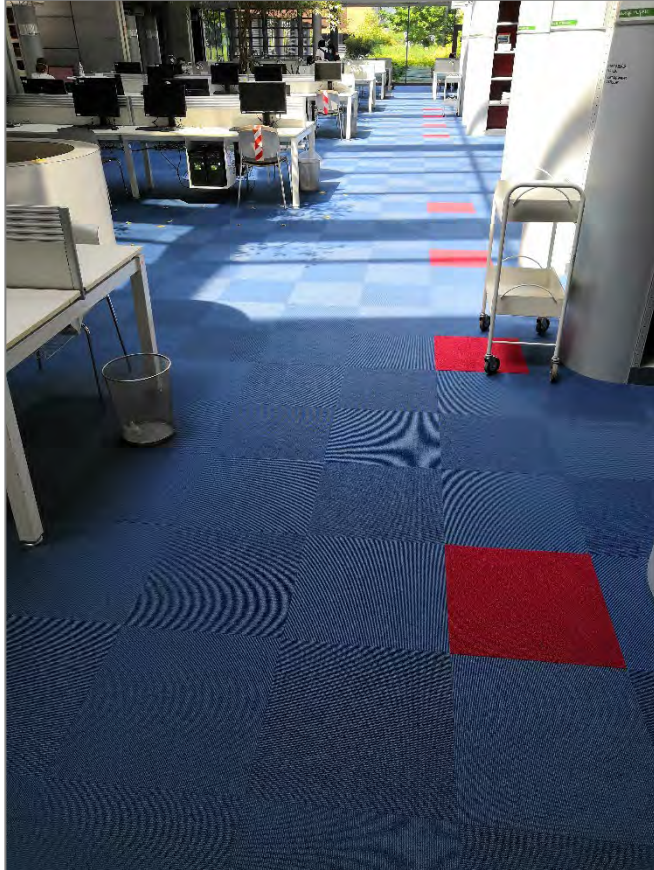
Less recommended practices



Less recommended practices



Less recommended practices



Less recommended practices



Further issues – orderliness



Further issues – unwillingness to separate/ignorance



PET+ALU

Good practices – MUNIshop



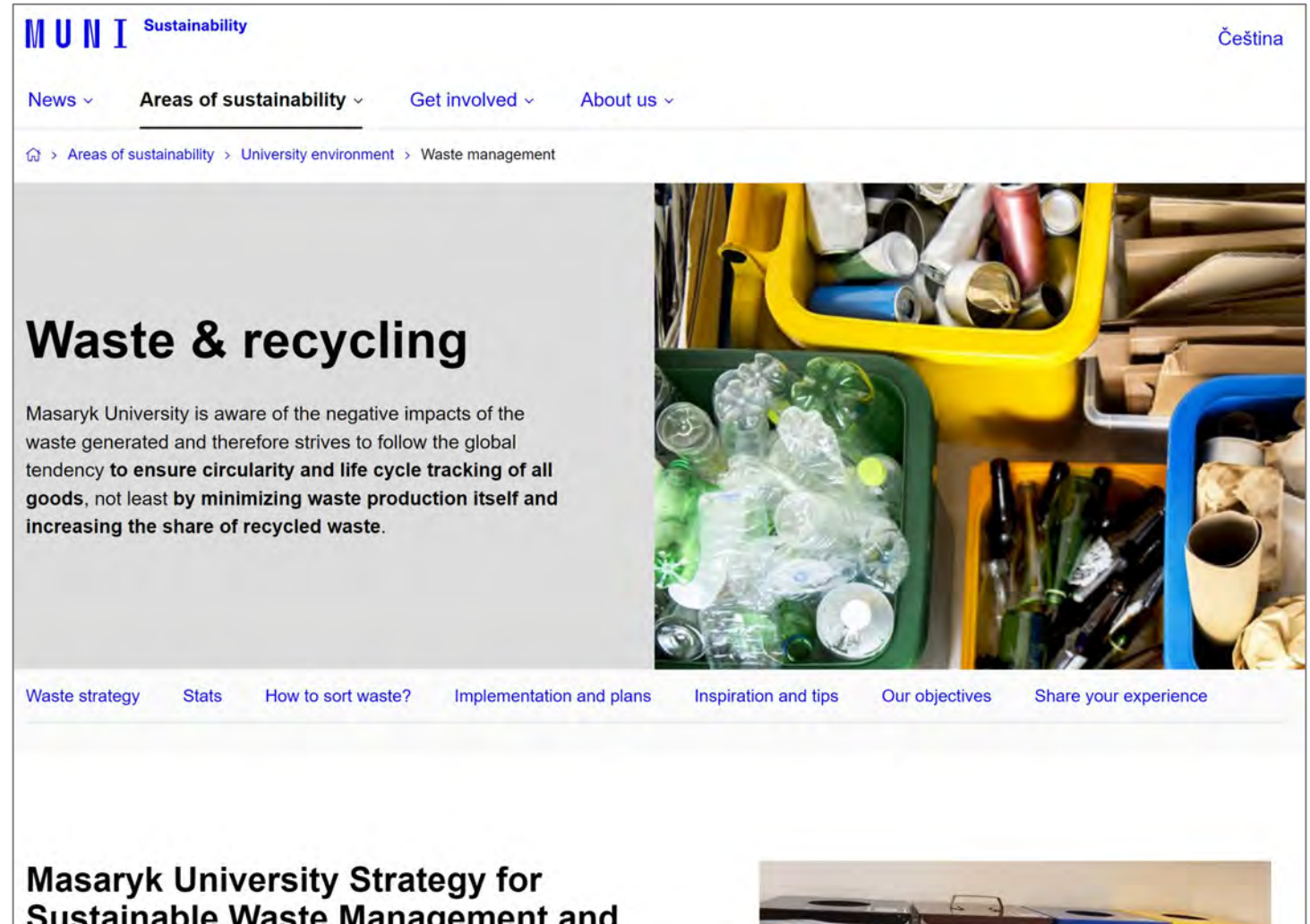
Good practices – composting, mulch



MUNIWaste – policy outcomes

Dedicated waste management page as a part of strategy for sustainability

- sustain.muni.cz
- Strategy, tips
- How to, plans
- Statistics, etc.



Thank you for your attention

Feel free to contact me at
struk@muni.cz

I am open to both practical and
academic collaboration w/



MUNI
ECON

