OCEAN Project

D3.1: Comparative Analysis of NOCs carbon footprint results

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Oeko-Institut e.V.
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Co-funded by
the European Union

SCOPE OF THE DOCUMENT

D3.1 provides a **Comparative Analysis of NOCs' Carbon Footprints**, compiled by the Öko-Institut. Data collected on partner NOCs' carbon footprints (from areas such as travel, energy use, and event production) informs D3.1, which uses 2022 as the baseline year.

It forms the foundation for the Pool of Actions, a toolkit of carbon reduction measures developed with input from Öko-Institut, IOC, and NOCs to support National Olympic Committees (NOCs) in drafting tailor-made carbon reduction strategies. This analysis, along with tools like the measurement web tool (D3.3) and tailored reduction strategies (D4.2) offer NOCs actionable insights and resources to advance toward carbon neutrality.

PROJECT OBJECTIVES

The **main objective of the project** is to empower National Olympic Committees to acquire relevant knowledge to measure their carbon footprint and define tailored carbon reduction strategies in order to reduce their carbon emissions and strengthen good governance in the field of climate action.

Accordingly, OCEAN has the hereunder **specific objectives:**

- To manage all project activities and consortiums interactions to guarantee a constructive and high-quality implementation of the project activities.
- To monitor all project activities to pursue the project purposes in the most time/cost effective manner.
- To develop and implement a training course for NOCs representative to become Climate Action Officers within their organisation.
- To create a network of Climate Action Officers across European NOCs.
- To develop a carbon emissions measurement tool tailorable to the needs of each partner NOC.
- To measure the carbon footprint of each partner NOC in order to define their baseline.
- To develop and validate a “Pool of Actions” to reduce carbon emission of NOCs.
- To develop tailored carbon reduction strategies per each partner NOC.
- To communicate the project achievements and deliverables to other NOCs and relevant stakeholders.
- To embrace approaches to guarantee the sustainability and impact of the project.

METHODS

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Overview on the procedure of carbon footprinting

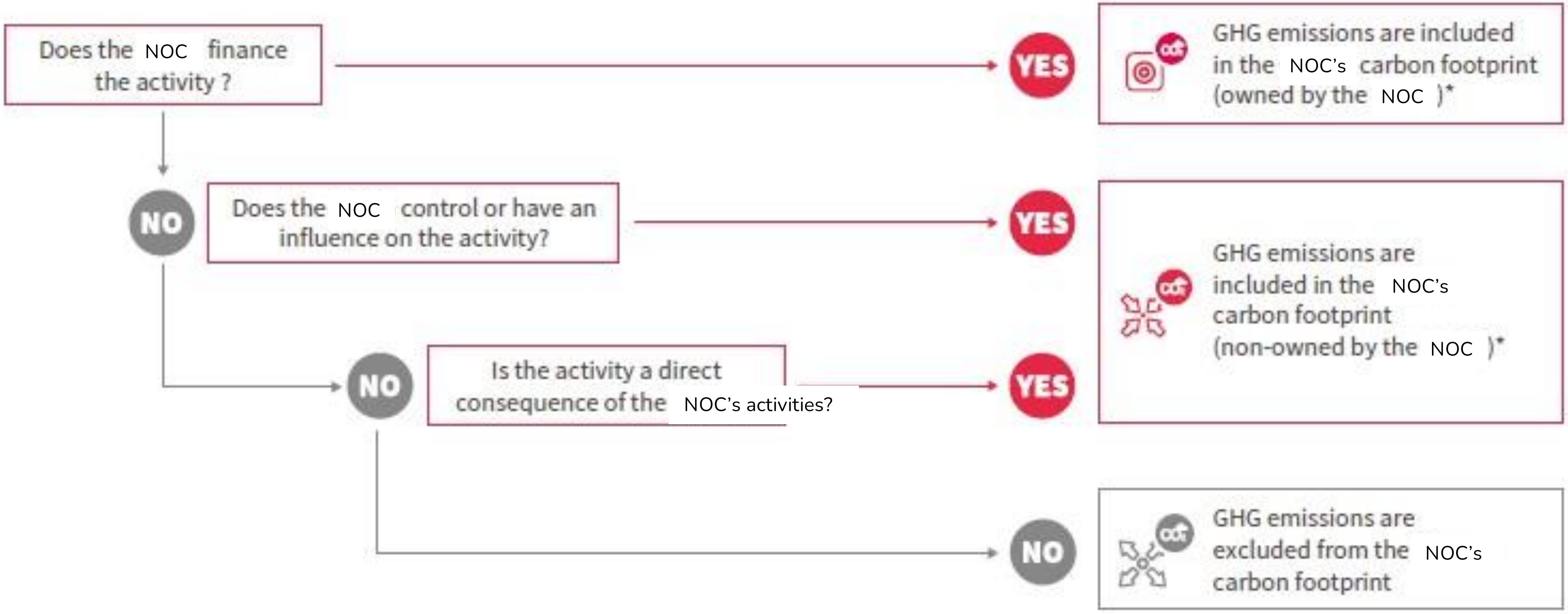
	Acting organisation
• Starting point: NOCs' decision to strive for emission reductions based on a profound carbon footprint	OCEAN
• Compilation of the carbon footprint: • Definition of the scope	Öko-Institut e.V. OCEAN
• Data collection	OCEAN
• Calculation and interpretation	Öko-Institut e.V.
• Results: carbon footprint and potential measures	Öko-Institut e.V.
• NOCs check and partly implement measures	OCEAN
• NOCs autonomously compile carbon footprint results for future years	OCEAN

Scope definition: NOCs Carbon Footprint Measurement

- General rule: The NOC **collects** data on all activities, following the IOC decision tree (slide 5). Activities are divided in the following categories: Energy & Buildings; Refrigerants; Construction; Canteens; Water & Waste; Materials usage; Commuting; Vehicle fleet; Travel (flights, railway, others); Overnight stays; Events (organisation and participation).
- Exemption:

- **All** the collected data will be part of the NOC's general carbon footprint, apart from **one exemption.:** the travel and accommodation in the Olympic Village of athletes and their entourage for the Olympic Games.
- These emissions are included in the carbon footprint measurement of the Organising Committee of the Olympic Games (OCOG), This will be shown only in an annex to the NOC's general carbon footprint. Nevertheless, the NOCs should strive for a reduction of the carbon footprint in these areas as well.
- The data collected for all other sports events (e.g. European Games, European Youth Olympic Festival, Youth Olympic Games) will be included in the NOCs general footprint results.

Scope definition:
Decision tree in the IOC Carbon Footprint Methodology (adapted to OCEAN project)



*If the answer is YES but the emissions cannot be estimated with any reasonable degree of accuracy, these may be excluded from the carbon footprint calculation. However, their omission must be clearly explained and justified in the carbon footprint report.

Scope definition: included activities and aspects

Permanent buildings: NOC's headquarters

Transports
- Commuting of employees and officials
- Operation of vehicle fleet for business trips, etc.
- Travels of invited officials and guests
- Logistics

Heat and power
- Electricity
- Heat
- Cooling
- Refrigerants

Food and beverages
- Canteens
- In-house events

Material usage
- Print products, e.g. brochures, paper
- Sanitary paper
- Signages/dressing
- Give aways / gifts
- Electronic equipment
- Textiles / clothes / sportswear
- Olympic pins
- Data centre (incl. webinars, etc.)
- Water consumption
- Waste treatment

Construction and refurbish-ment
- Construction of buildings
- Modifications / refurbishments

Overnight stays
- Invited guests for in-house events

Relevant groups

- *Employees*
- *Officials*
- *Guests*

Scope definition: included activities and aspects

Permanent buildings: others under your operational control, including leased assets (NOC is lessee)

Transports	Heat and power	Food and beverages	Material usage	Construction and refurbish-ment	Overnight stays

Scope identical to headquarters

Examples:
- Educational center
- Warehouse
- Stadium incl. museum
- Training facilities
- Additional rented facilities (NOC is lessee)

Relevant groups

- *Employees*
- *Officials*
- *Guests*
- *Visitors (general public)*

Scope definition: included activities and aspects

Permanent buildings: leased assets not under your operational control (NOC is lessor)

Transports	Heat and power	Food and beverages	Material usage	Construction and refurbish-ment	Overnight stays

Scope 1 and 2 emissions of lessees that occur during operation of leased assets

- Electricity
- Heat
- Cooling
- Refrigerants

Relevant groups

- *Employees*

Scope definition: included activities and aspects

Permanent buildings: leased assets not under your operational control (NOC is lessor)

Transports	Heat and power	Food and beverages	Material usage	Construction and refurbish-ment	Overnight stays

Scope 1 and 2 emissions of lessees that occur during operation of leased assets

- Electricity
- Heat
- Cooling
- Refrigerants

Relevant groups

- *Employees*

<u>Example:</u>

NOC Switzerland owns a building that is rented by company H.

Company H operates a hotel in the building.

Scope 1 and 2 emissions of Company H that occur during the operation of the hotel are included in the carbon footprint of the NOC Switzerland. These emissions mainly include consumption of electricity, heating, cooling and possible refrigerant leakage.

We ask NOC Switzerland to compile relevant data on the consumption of Company H.

Scope definition: included activities and aspects

Events (co-)organised by NOCs

Transports
- Business trips of employees
- Travels of visitors, guests, athletes, etc.

Heat and power
- Electricity & heat
- incl. diesel generators

Food and beverages
- Catering for all person groups

Material usage
- Sanitary paper
- Signage / dressing
- Give aways and gifts
- Textiles / clothes
- Medals
- Further procurement

Temporary structures
- Carpets and other floor coverings
- Single use furnishings

Overnight stays
- Business trips of employees
- Visitors, guests, athletes, etc.

Relevant groups
- *Employees*
- *Guests*
- *Visitors (general public)*
- *Officials*
- *Athletes*
- *Media*
- *Volunteers*

Scope definition: included activities and aspects

Events in which NOCs participate

Transports
- Travels of employees, officials, athletes

Heat and power

Food and beverages

Material usage

Temporary structures

Overnight stays
- Employees
- Officials
- Athletes

Special amendments applying to the Olympic Games (Summer and Winter) only:

- Travels of athletes and entourage excluded (reported in an Annex)
- Logistics of (special) goods, e.g. boats, horses, etc.

- Electricity & heat incl. diesel generators for NOC's House

- Catering for NOC's House and events

NOC's House:
- Signage / dressing
- Give aways
- Textiles / clothes / sportswear
- Further procurement

NOC's House:
- Modifications / refurbishments
- Carpets and other floor coverings
- Single use furnishings

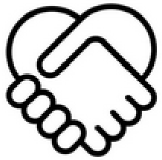
- Overnight stays of athletes and entourage in the Olympic village excluded (reported in an Annex)

Relevant groups

- *Employees*
- *Officials*
- *Athletes*

Scope definition: included activities and aspects

Operationally controlled organisations



Transports	Heat and power	Food and beverages	Material usage	Construction and refurbish-ment	Overnight stays

- Headquarters and other permanent buildings
- Events
- Further operationally controlled organisations

Applied emission factors

Country-specific

- Electricity (average and residual)
- Water
- Waste
- Diesel burnt in cars/motorbikes
- Trains
- Travels in cars
- Overnight stays

- Airport-specific: flights

European average

- Natural gas, oil, coal, wood, district heating
- Sewage
- Paper, IT devices, other investment good
- Materials for individual purchases
- Food and beverages
- Gasoline burnt in cars/motorbikes
- Local public transport, Ferries, coaches
- Logistics

Sources: DEFRA, Eurostat, EEA, IOC (Quantis), etc. (see the list in D3.3)

Location-based versus market-based

Scope 2 emissions shall be reported according to a location-based method **and** a market-based method.

"A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data)."

"A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice)."

	Location-based	Market-based
Renewable electricity	National grid average	0 [1]
Non-renewable electricity	National grid average	National residual mix

Residual mix: emission factor representing the average emissions from all unclaimed energy ("grid mix without renewables").

Source: GHG Protocol Scope 2 Guidance
https://ghgprotocol.org/sites/default/files/2022-12/Scope2_ExecSum_Final.pdf

[1]: Scope 3 emissions of electricity consumption are not necessarily 0.

CARBON FOOTPRINT RESULTS

Reference year: 2022

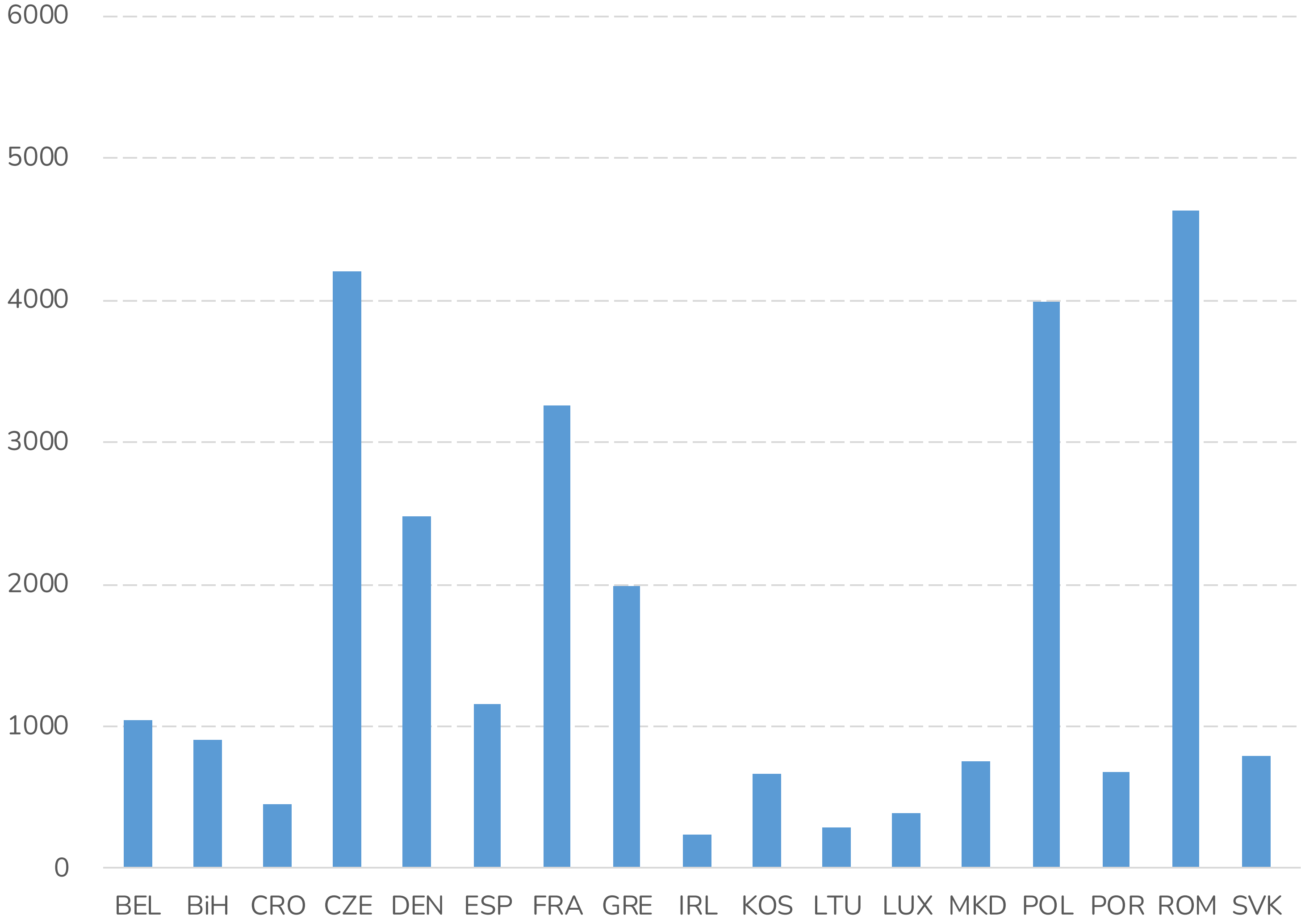
Öko-Institut e.V.
Institut für angewandte Ökologie
Institute for Applied Ecology

OCEAN
Olympic Committees of Europe Approaching Carbon Neutrality

Co-funded by the European Union

Overall results

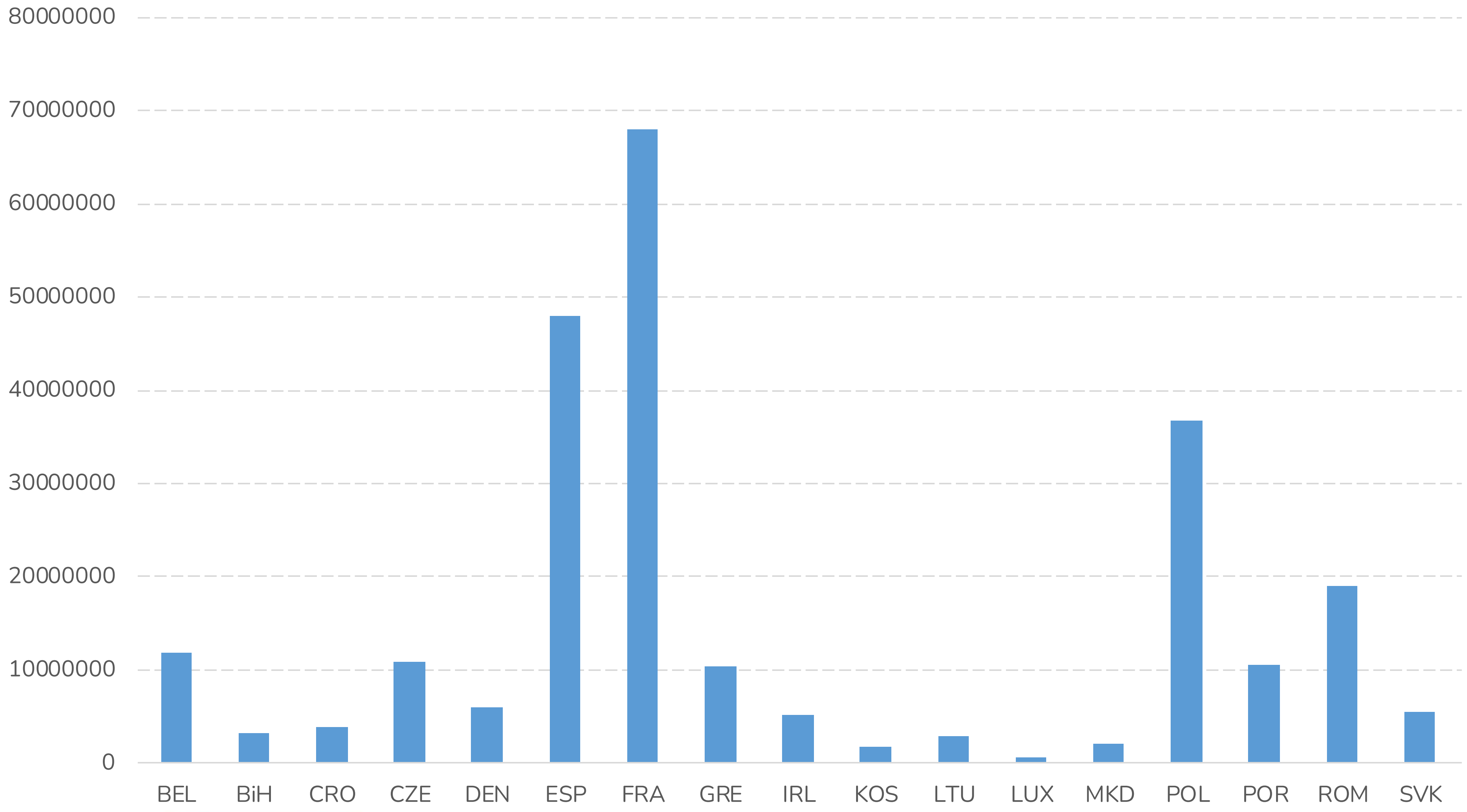
t CO_2 equiv. / year | Location-based approach



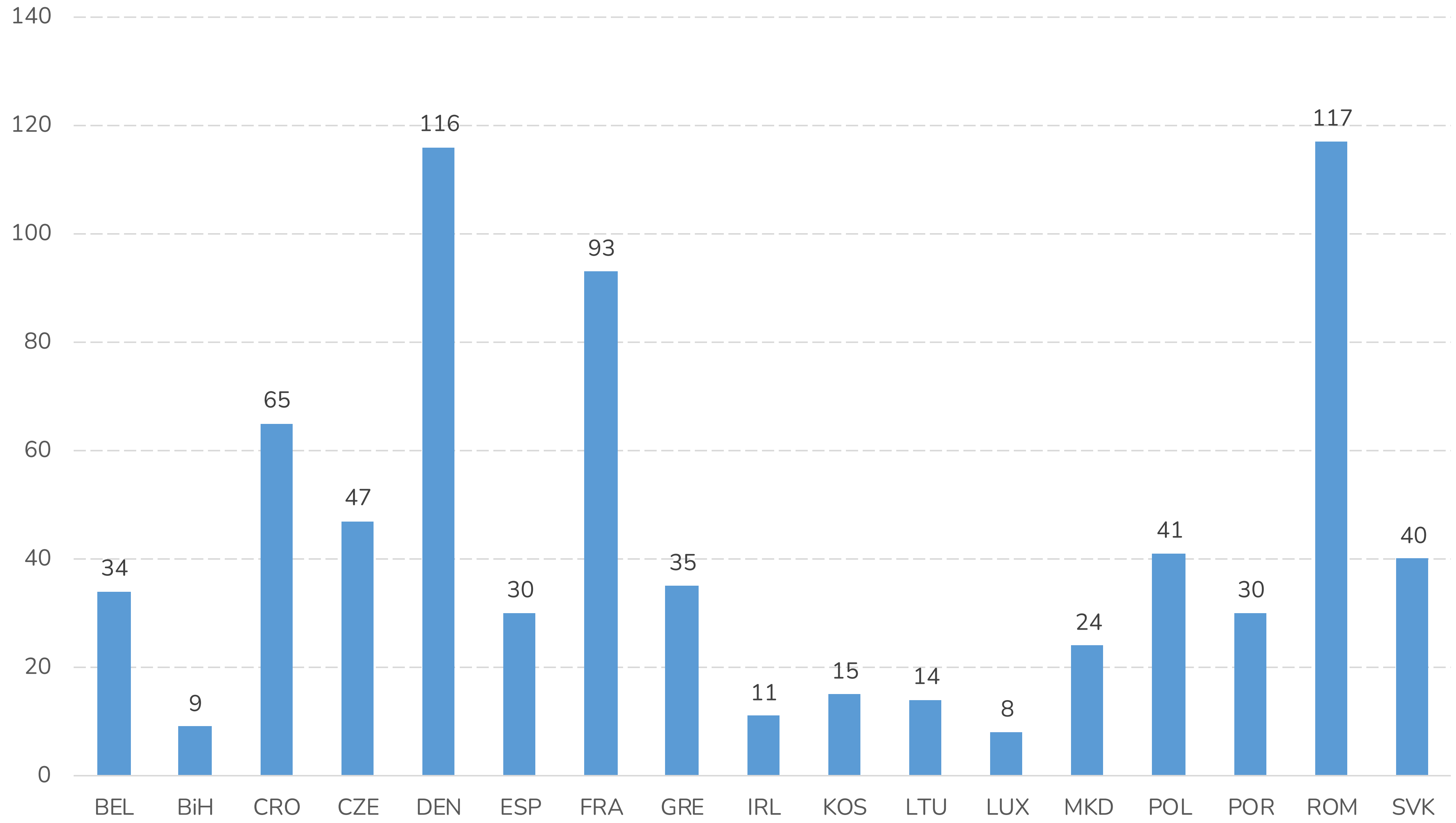
- Order of magnitude ~ 500 to 5 000 tons of CO_2 equivalents per NOC during the reference year 2022 → limited direct relevance
- Example: GREs result of 2 000 tons of CO_2 equivalents is equal to the annual emissions of approximately 250 European citizens
- Factor of almost 20 between lowest and highest emission results

BEL: Belgium
BIH: Bosnia and Herzegovina
CRO: Croatia
CZE: Czechia
DEN: Denmark
ESP: Spain
FRA: France
GRE: Greece
IRL: Ireland
KOS: Kosovo
LTU: Lithuania
LUX: Luxembourg
MKD: North Macedonia
POL: Poland
POR: Portugal
ROM: Romania
SVK: Slovakia

Number of inhabitants of the represented country

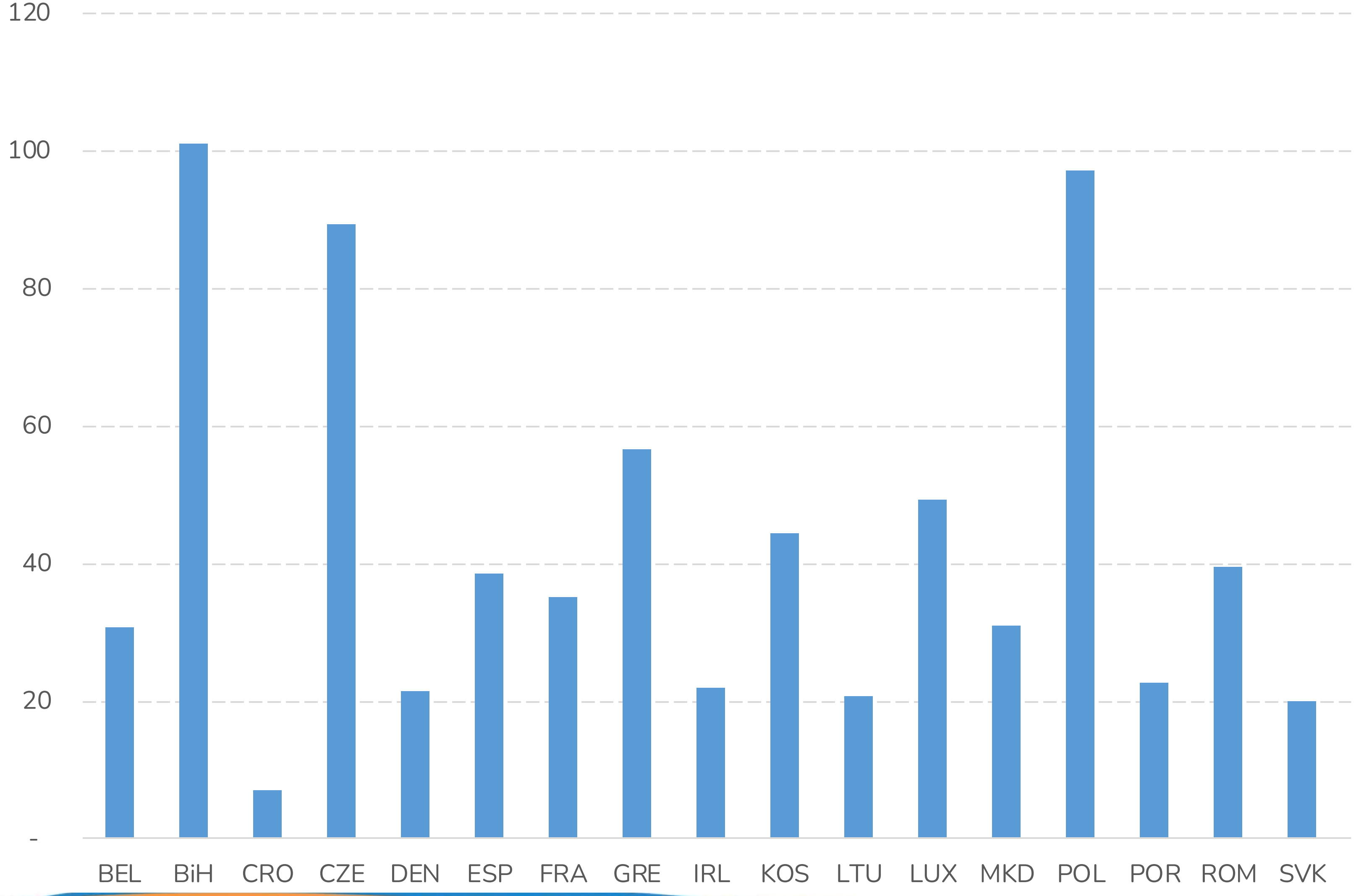


Number of employees (full time equivalents, FTE)



Overall results

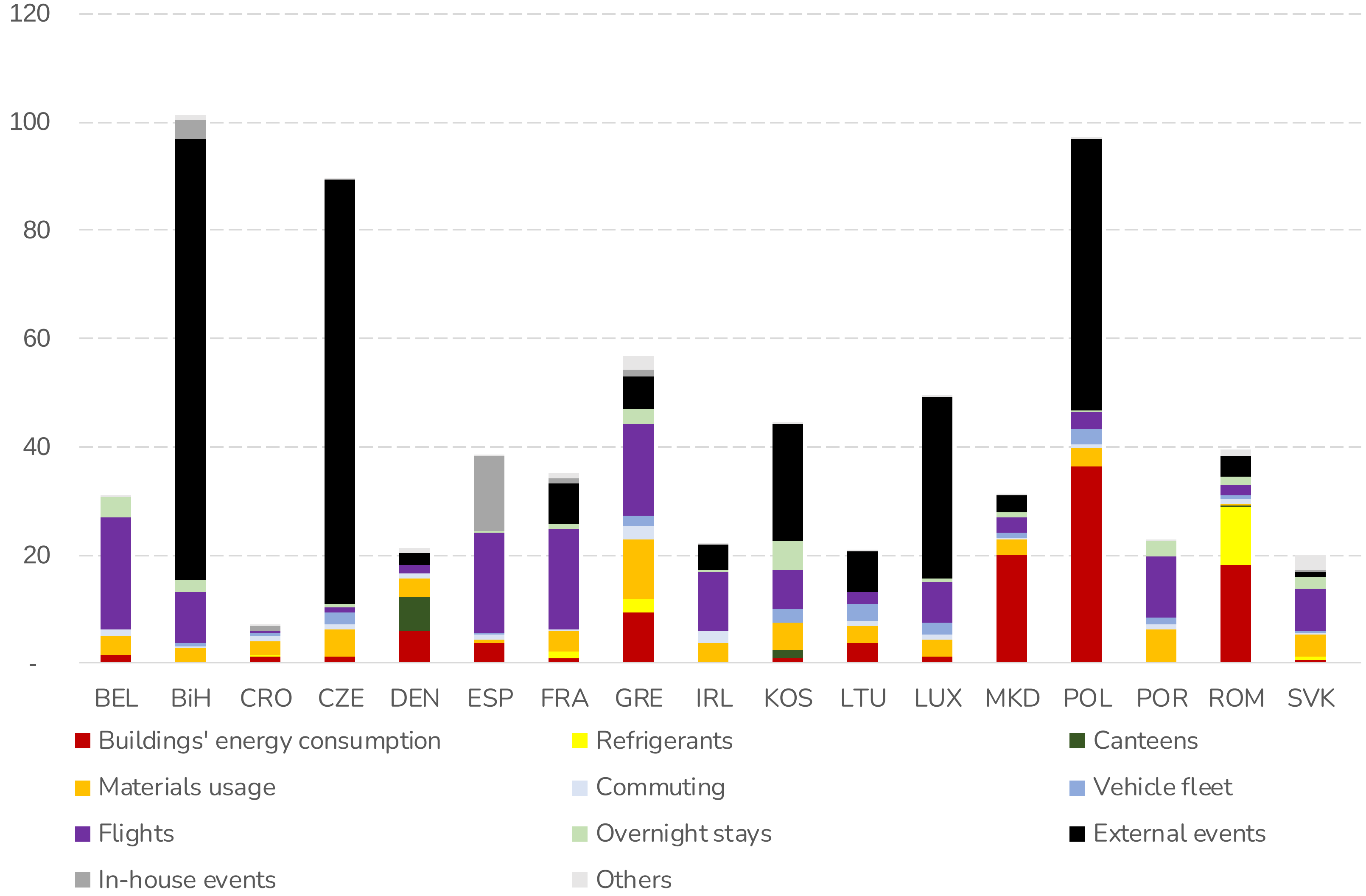
t CO_2 equiv. / FTE / year | Location-based approach



- Still a large range
- Organisation's size, i.e. number of employees (full time equivalents, FTE), in many cases used as reference value

Overall results

t CO_2 equiv. / FTE / year | Location-based approach



- External events dominant for BIH, CZE, KOS, LUX, POL
- Flights dominant for BEL, ESP, FRA, IRL, POR, SVK
- Diverse hot spots → there is no one-fits-all solution / strategy

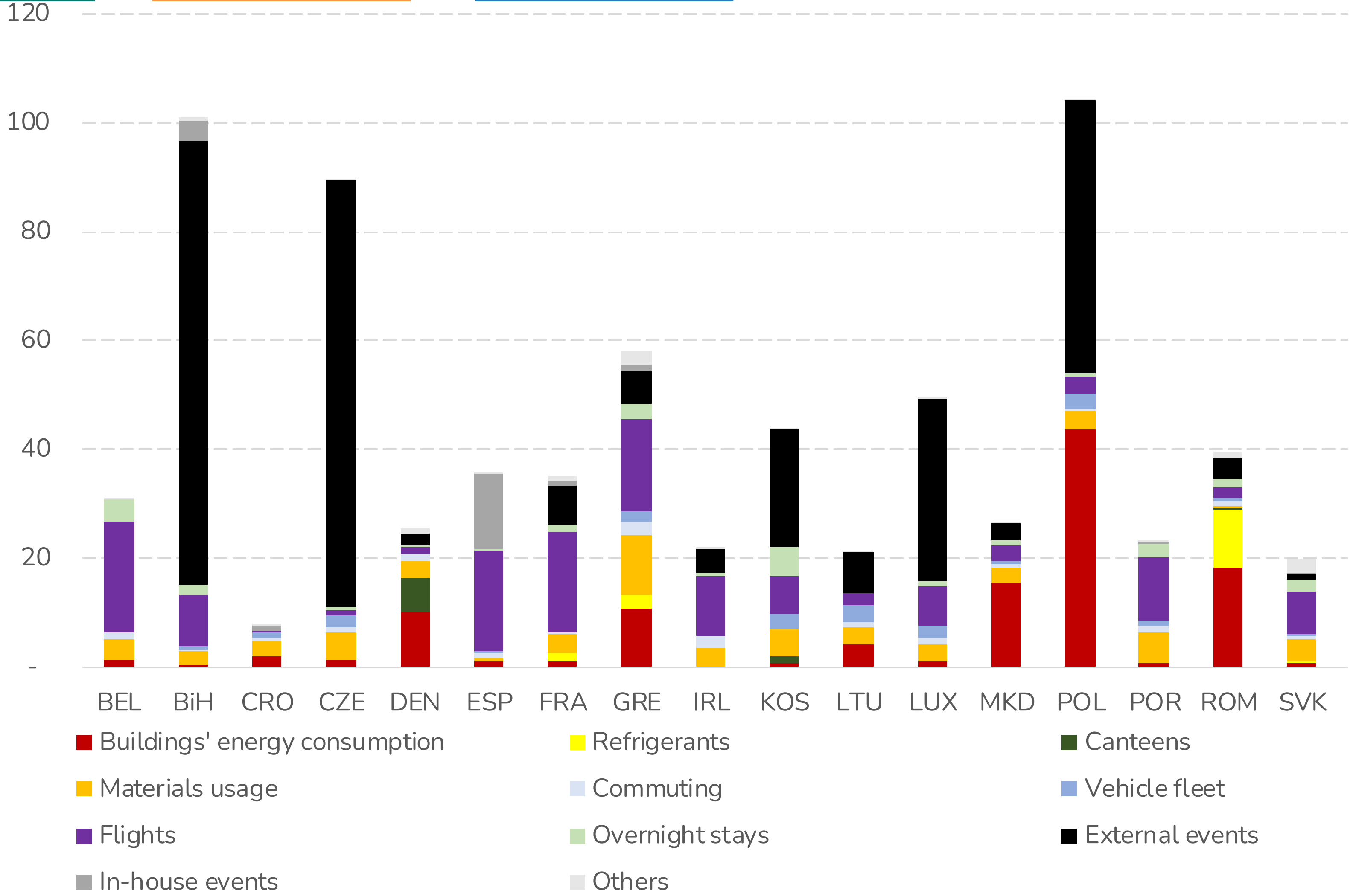
Overall results

t CO_2 equiv. / FTE / year | Location-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
Buildings' energy consumption	1	0	1	1	6	4	1	9	-	1	4	1	20	36	0	18	1
Refrigerants	-	-	0	-	-	-	1	2	-	-	-	-	-	-	-	11	0
Canteens	-	-	-	-	6	0	-	-	-	2	-	-	-	-	-	0	-
Materials usage	4	2	3	5	3	0	4	11	3	5	3	3	3	3	6	1	4
Commuting	1	0	1	1	1	1	0	2	2	0	1	1	0	0	1	1	0
Vehicle fleet	0	1	1	2	-	0	0	2	-	3	3	2	1	3	1	0	0
Flights	20	9	0	1	1	19	18	17	11	7	2	7	3	3	11	2	8
Overnight stays	4	2	0	0	0	0	1	3	1	5	0	1	1	0	3	2	2
External events	-	82	-	78	2	-	7	6	5	22	7	34	3	50	-	4	1
In-house events	0	4	1	0	-	14	1	1	-	-	-	-	0	-	0	0	0
Others	0	1	0	0	1	0	1	3	0	0	0	0	0	0	0	1	3
Total	31	101	7	89	21	39	35	57	22	44	21	49	31	97	23	40	20

Overall results

t CO_2 equiv. / FTE / year | Market-based approach



There are two accounting approaches (of equal rank): the location-based and the market-based approach.

Results are generally shown with both accounting approaches (noted in the headline).

If all results are calculated based on a market-based approach:

- Notably lower emissions for: ESP
- Notably higher emissions for: DEN, GRE, MKD, POL

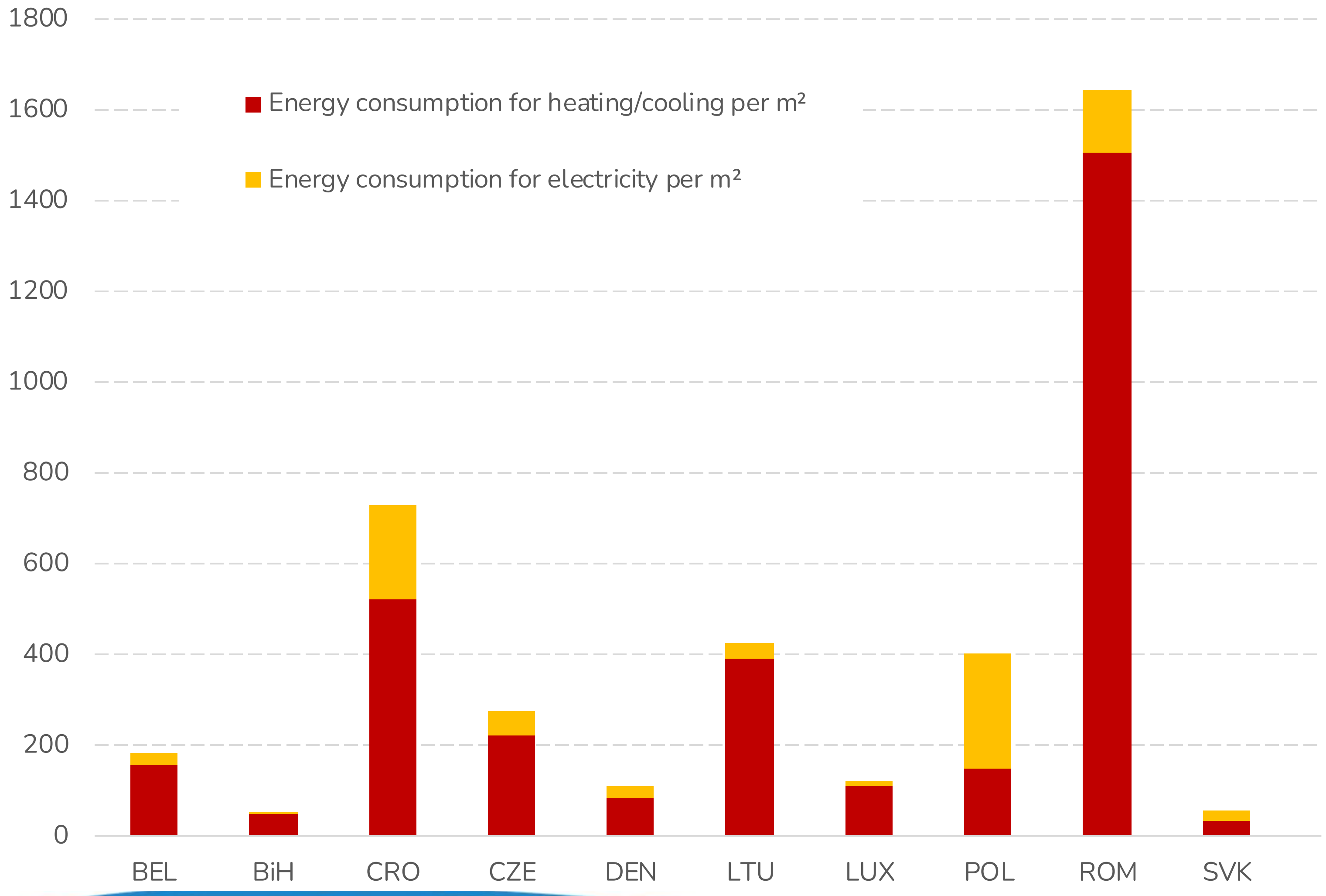
Overall results

t CO_2 equiv. / FTE / year | Market-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
Buildings' energy consumption	1	0	2	1	10	1	1	11	-	1	4	1	15	44	1	18	1
Refrigerants	-	-	0	-	-	-	1	2	-	-	-	-	-	-	-	11	0
Canteens	-	-	-	-	6	0	-	-	-	2	-	-	-	-	-	0	-
Materials usage	4	2	3	5	3	0	4	11	4	5	3	3	3	4	6	1	4
Commuting	1	0	1	1	1	1	0	2	2	0	1	1	0	0	1	1	0
Vehicle fleet	0	1	1	2	-	0	0	2	-	3	3	2	1	3	1	0	0
Flights	20	9	0	1	1	19	18	17	11	7	2	7	3	3	11	2	8
Overnight stays	4	2	0	0	0	0	1	3	1	5	0	1	1	0	3	2	2
External events	-	82	-	78	2	-	7	6	5	22	7	34	3	50	-	4	1
In-house events	0	4	1	0	-	14	1	1	-	-	-	-	0	-	0	0	0
Others	0	1	0	0	1	0	1	3	0	0	0	0	0	0	0	1	3
Total	31	101	8	90	26	36	35	58	22	44	21	49	27	104	23	40	20

Headquarters: energy efficiency

kWh / m² / year

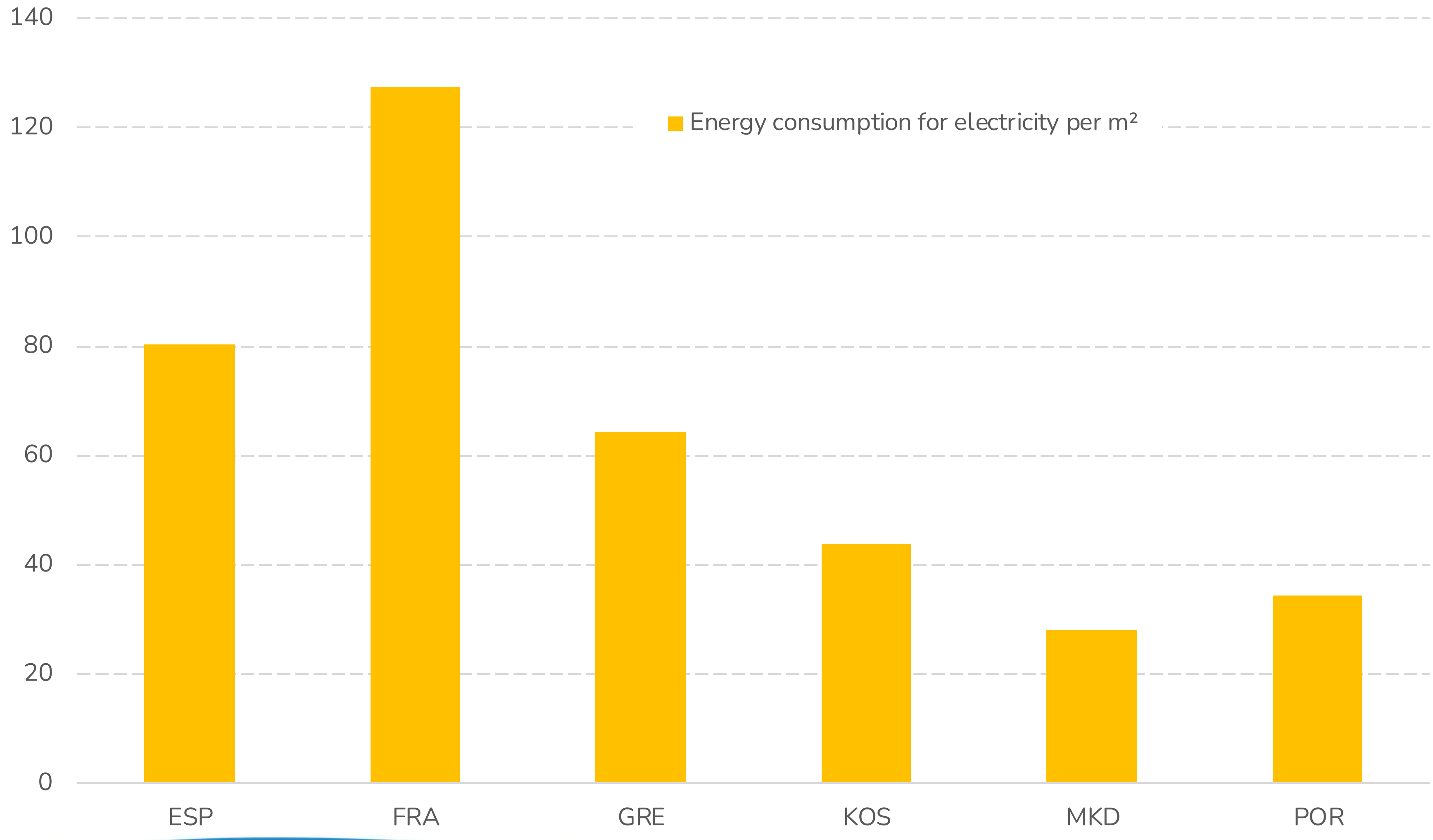


Subset of NOCs heating with natural gas, district heating, wood pellets

- ROM, CRO, LTU, CZE, BEL, POL: Energy efficiency measures (insulation, heat bridges, windows/entrances, heating system)
- POL, CRO, ROM: High electricity demand
- POL: Higher share of electricity than of heating/cooling
- BIH: Electricity consumption not visible

Headquarters: energy efficiency

kWh / m² / year

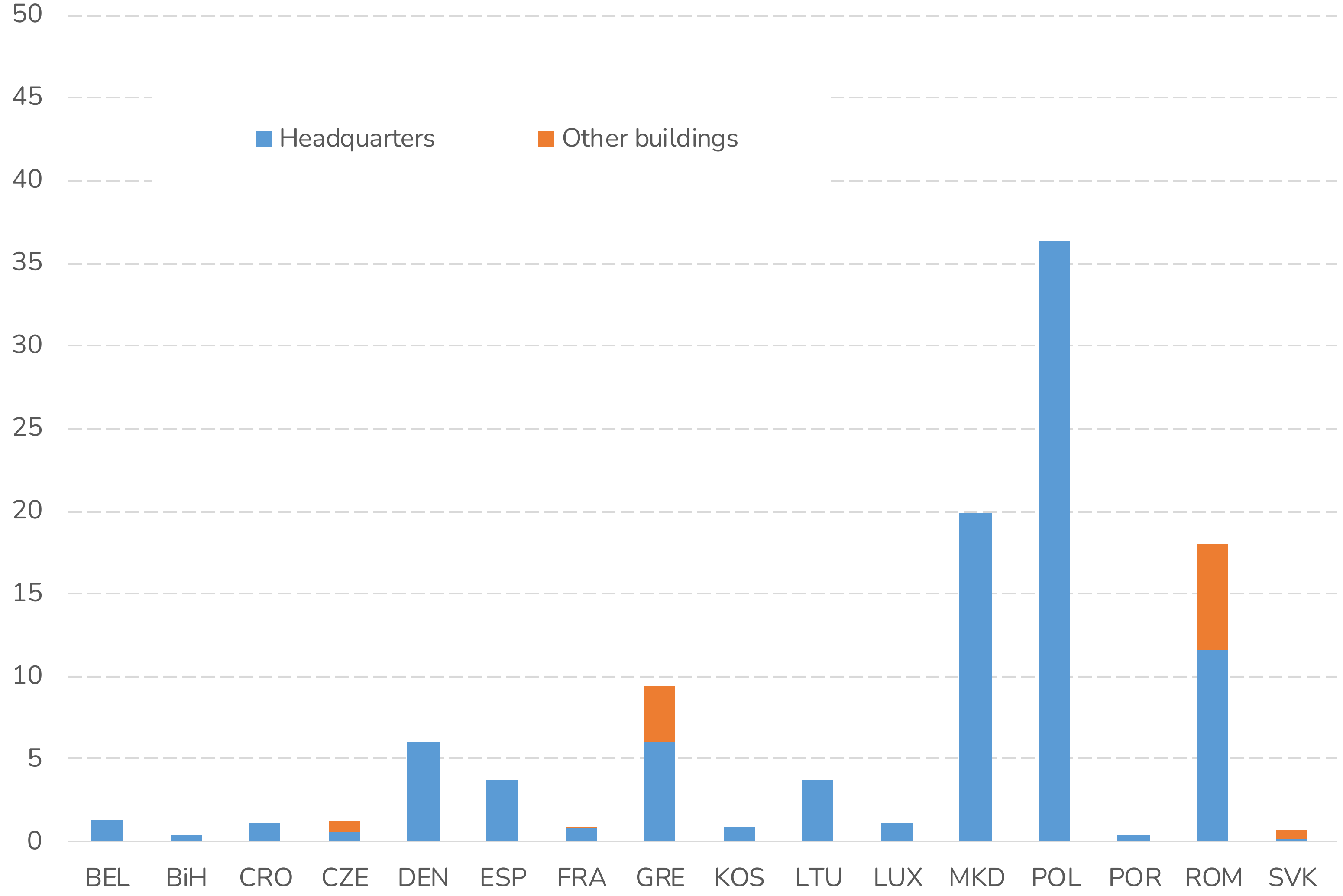


Subset of NOCs heating with electricity

- MKD, POR, KOS: Great energy efficiency (→ has everything been accounted for? Does the inserted m² size include non-heated rooms?)
- GRE, ESP: Good energy efficiency
- FRA: Further improvements of energy efficiency

Buildings: energy consumption

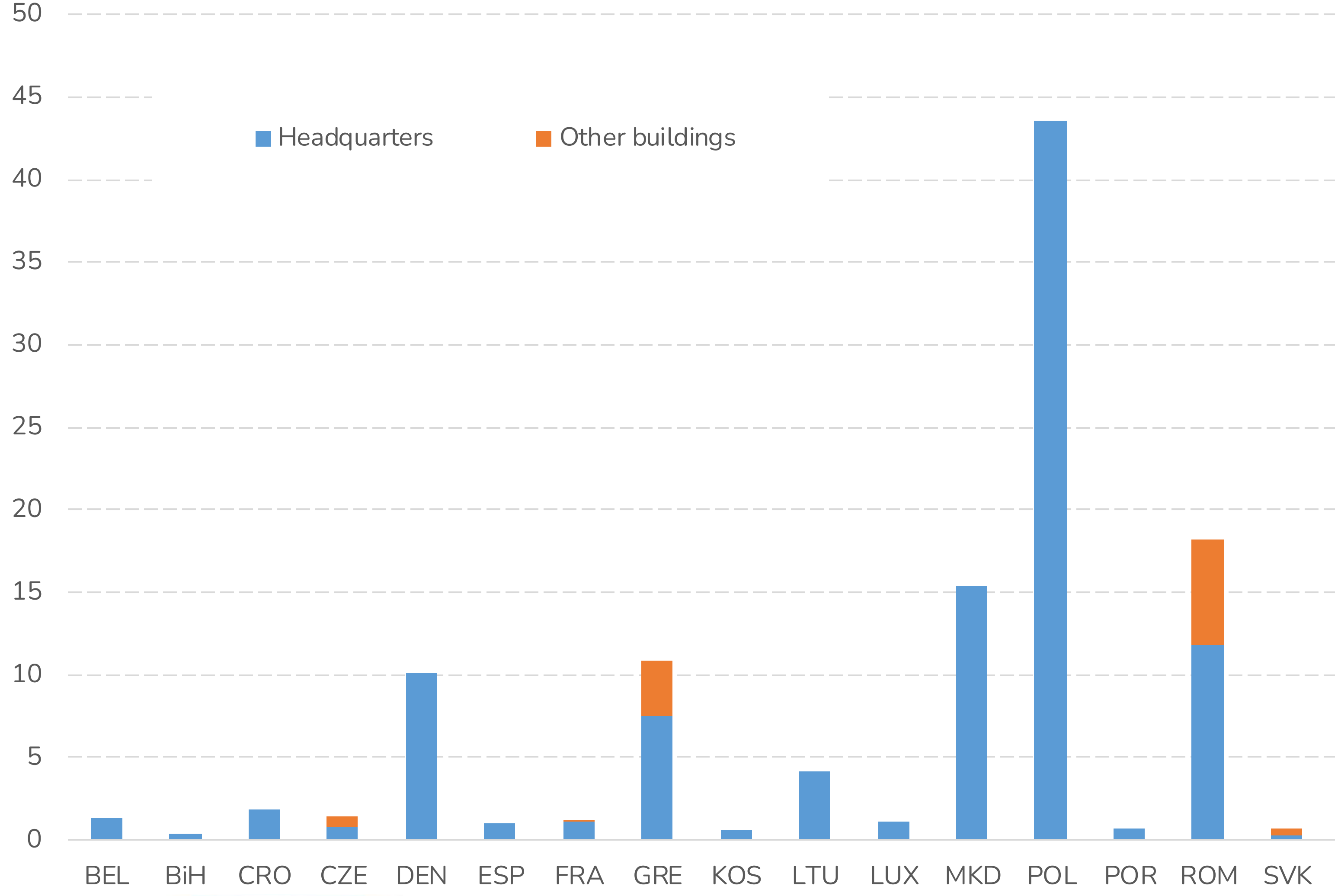
t CO_2 equiv. / FTE / year | Location-based approach



- POL, MKD, ROM, GRE, DEN, LTU: hot spot of GHG emissions
- ROM, GRE: relevant emissions arising from other buildings

Buildings: energy consumption

t CO_2 equiv. / FTE / year | Market-based approach

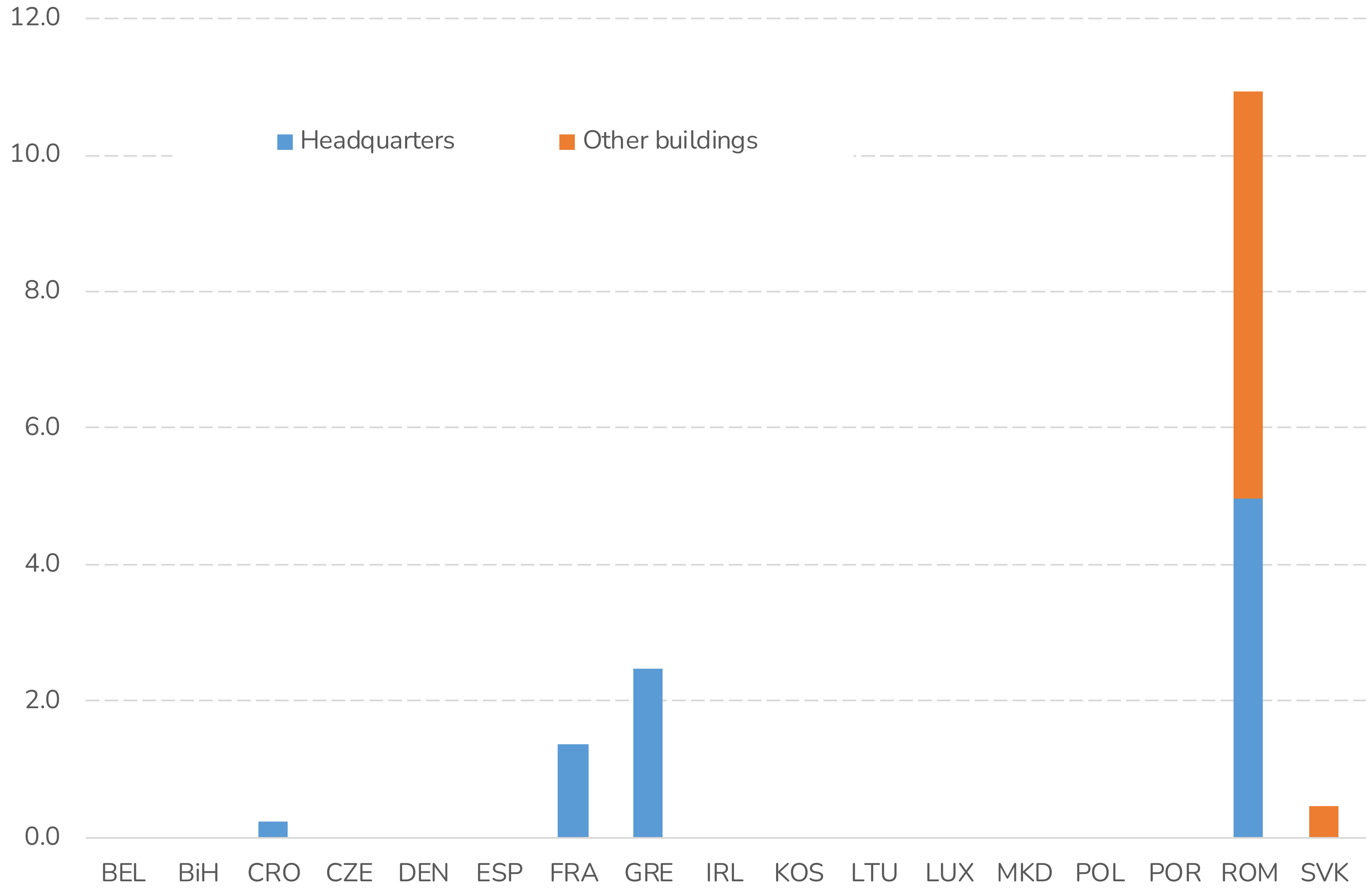


Market-based approach:

- Notably lower emissions for: ESP
- Notably higher emissions for: DEN, GRE, MKD, POL
- Switch to an electricity contract with renewable energies (including certificates)

Refrigerants

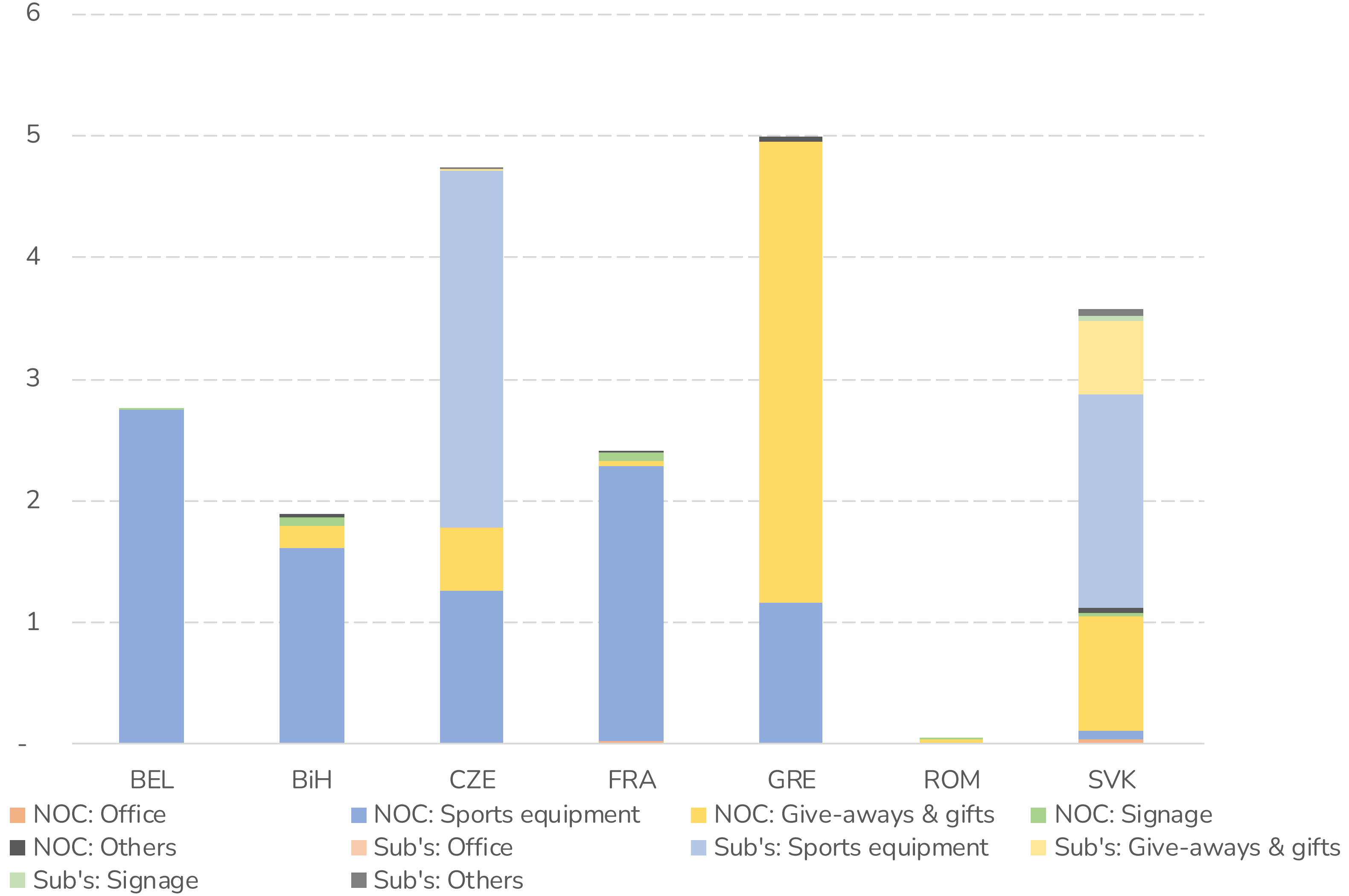
t CO_2 equiv. / FTE / year



- In some cases relevant emissions due to high global warming potential of refrigerant substances and potential leakages

Materials usage

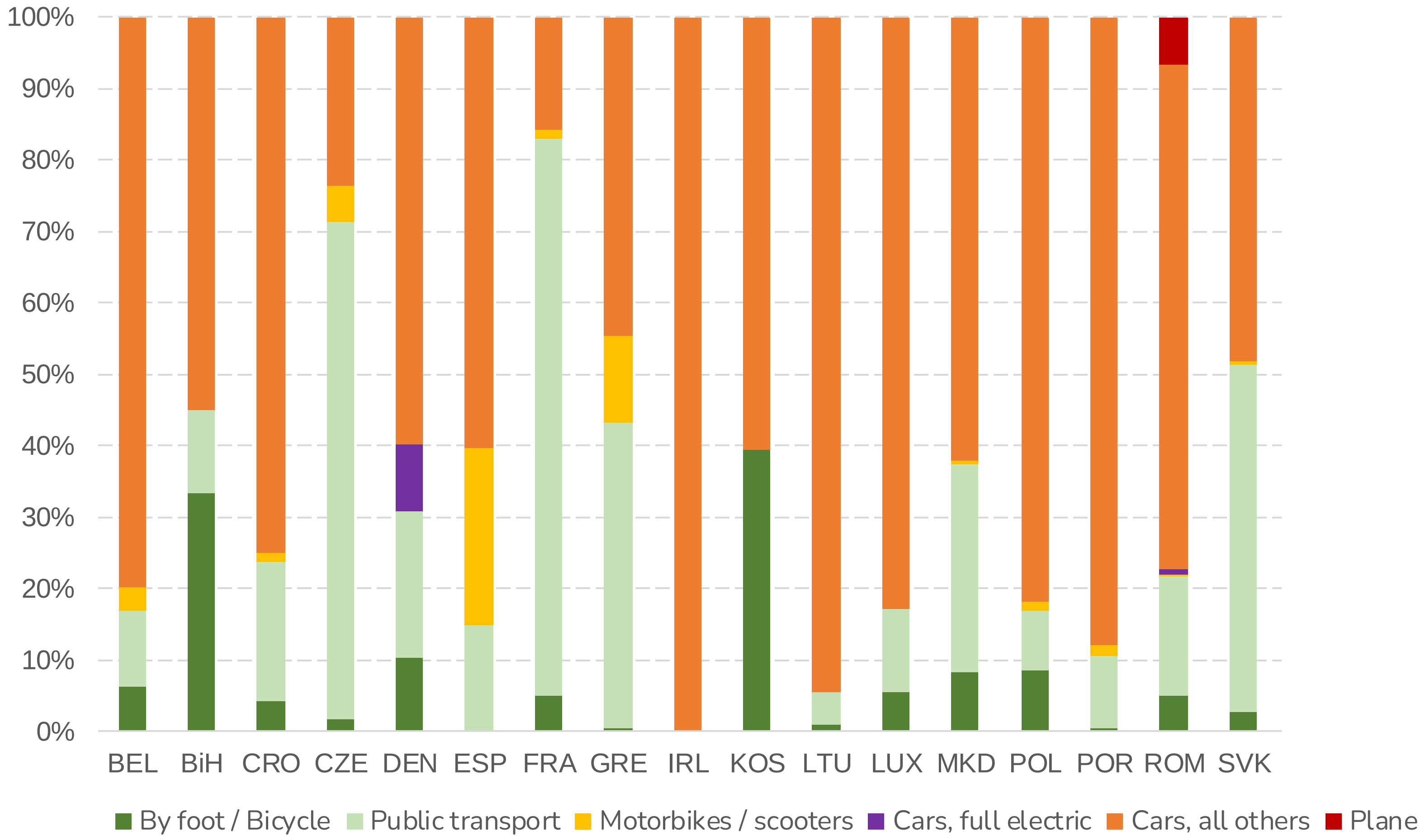
t CO_2 equiv. / FTE / year



Subset of NOCs with detailed information on procuring incl. assignment of product groups

- Sports equipment dominant in the majority of cases
- ROM: No sports equipment
- GRE, SVK: Notable emissions from give aways and gifts

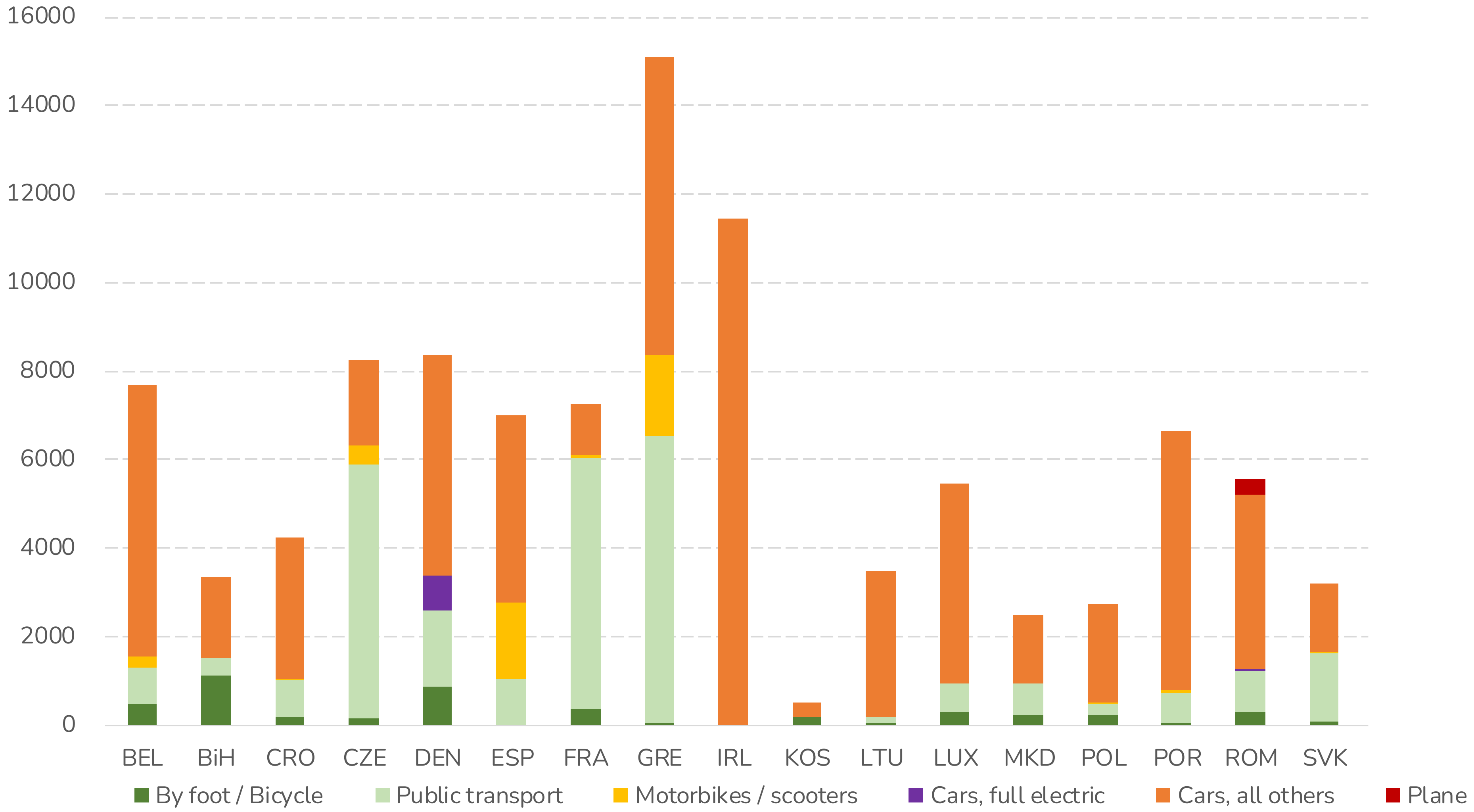
Commuting
Modal split



- Generally car-dominated modal split of Person-kilometres, particularly for BEL, CRO, IRL, LTU, LUX, POL, POR
  - Support car-pooling
  - Are your headquarters well accessible via public transport?
- KOS, BIH: High share of foot / bicycle
- FRA, CZE, GRE, SVK: High share of public transport
- DEN: Electric cars
- ESP: Motorbikes / scooters
- ROM: Plane

Commuting

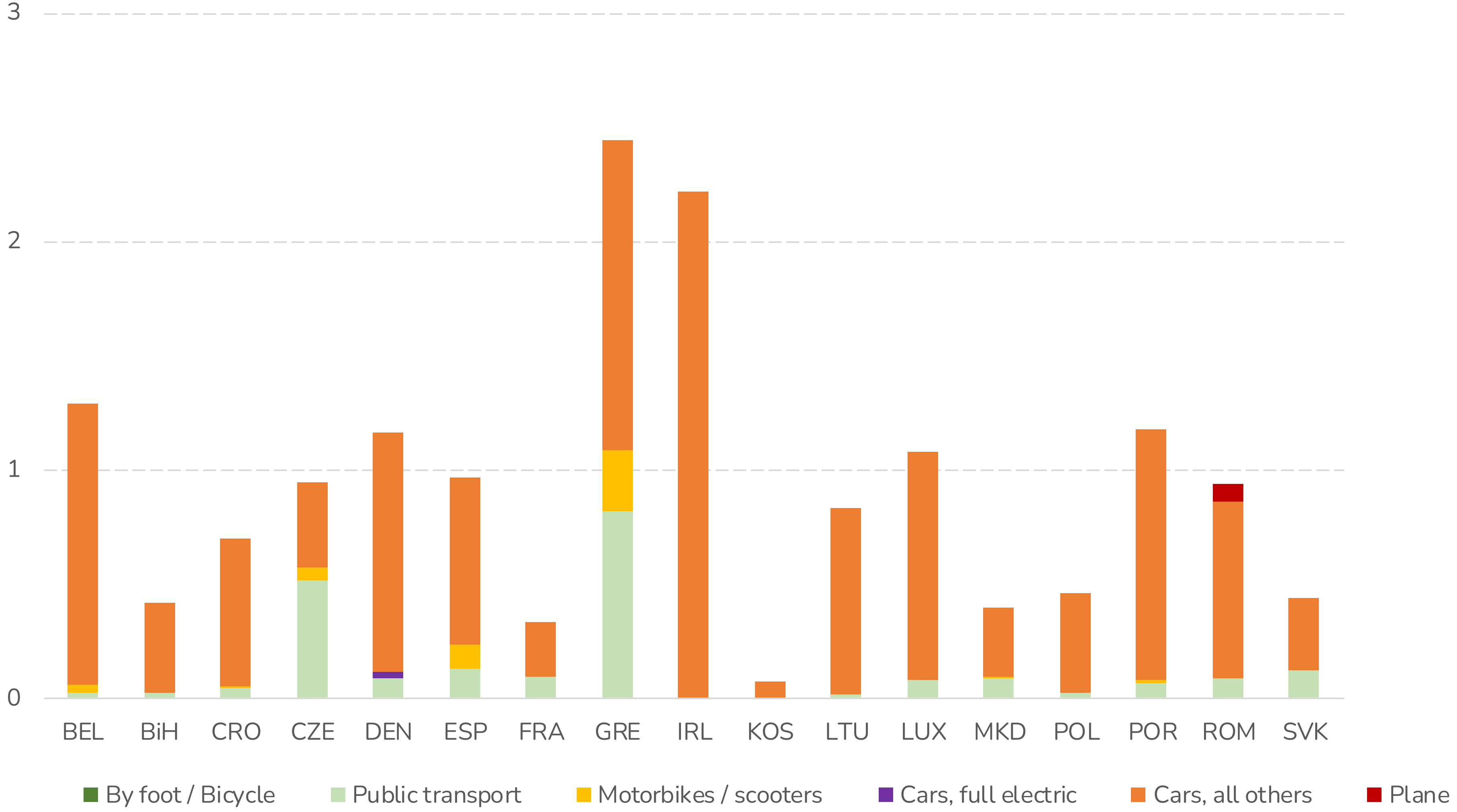
Person-kilometres per employee (full time equivalent)



- KOS, MKD, POL: short commuting distances
- GRE, IRL: long commuting distances

Commuting

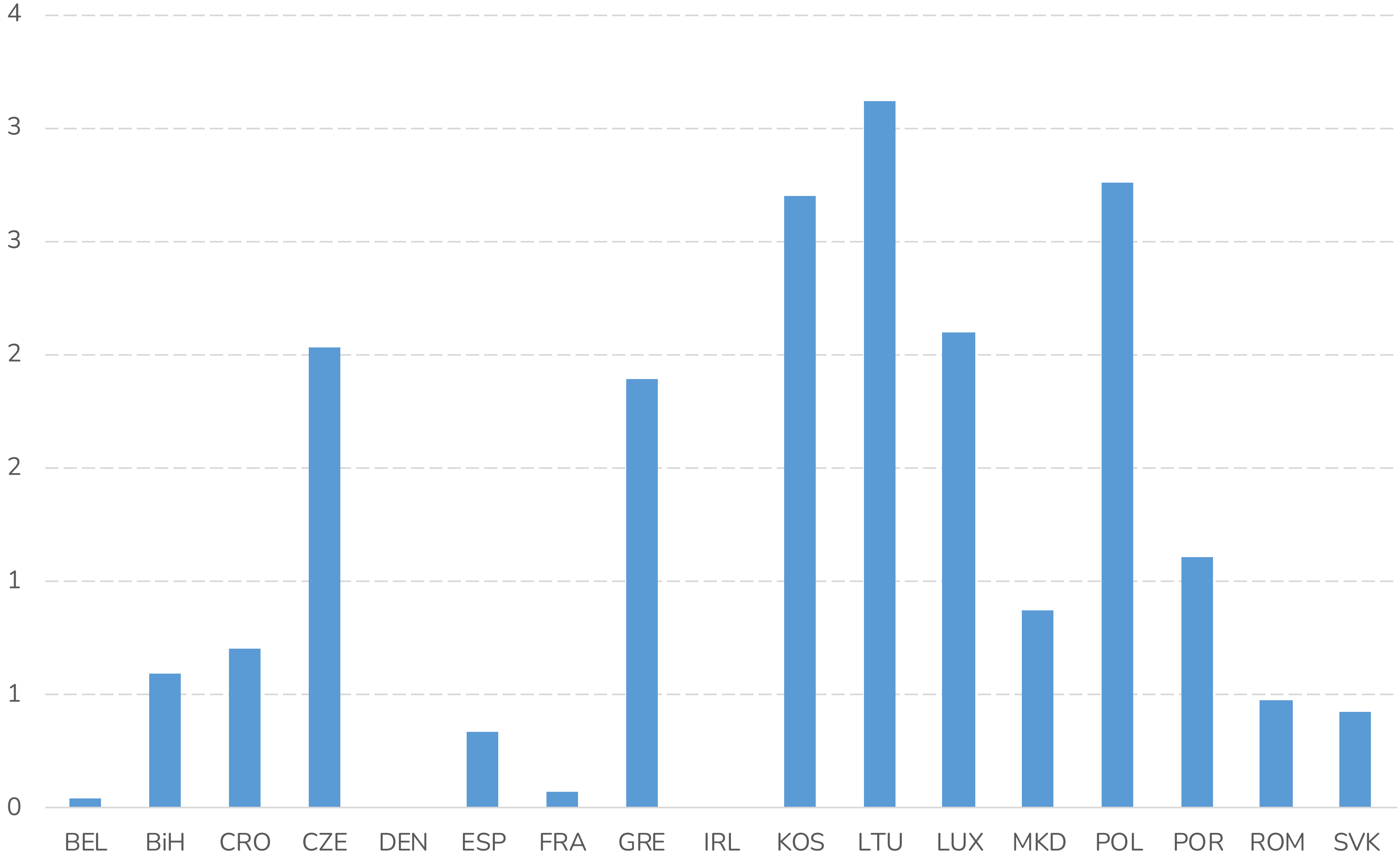
t CO_2 equiv. / FTE / year



- High share of public transport is rewarded with reduced greenhouse gas emissions

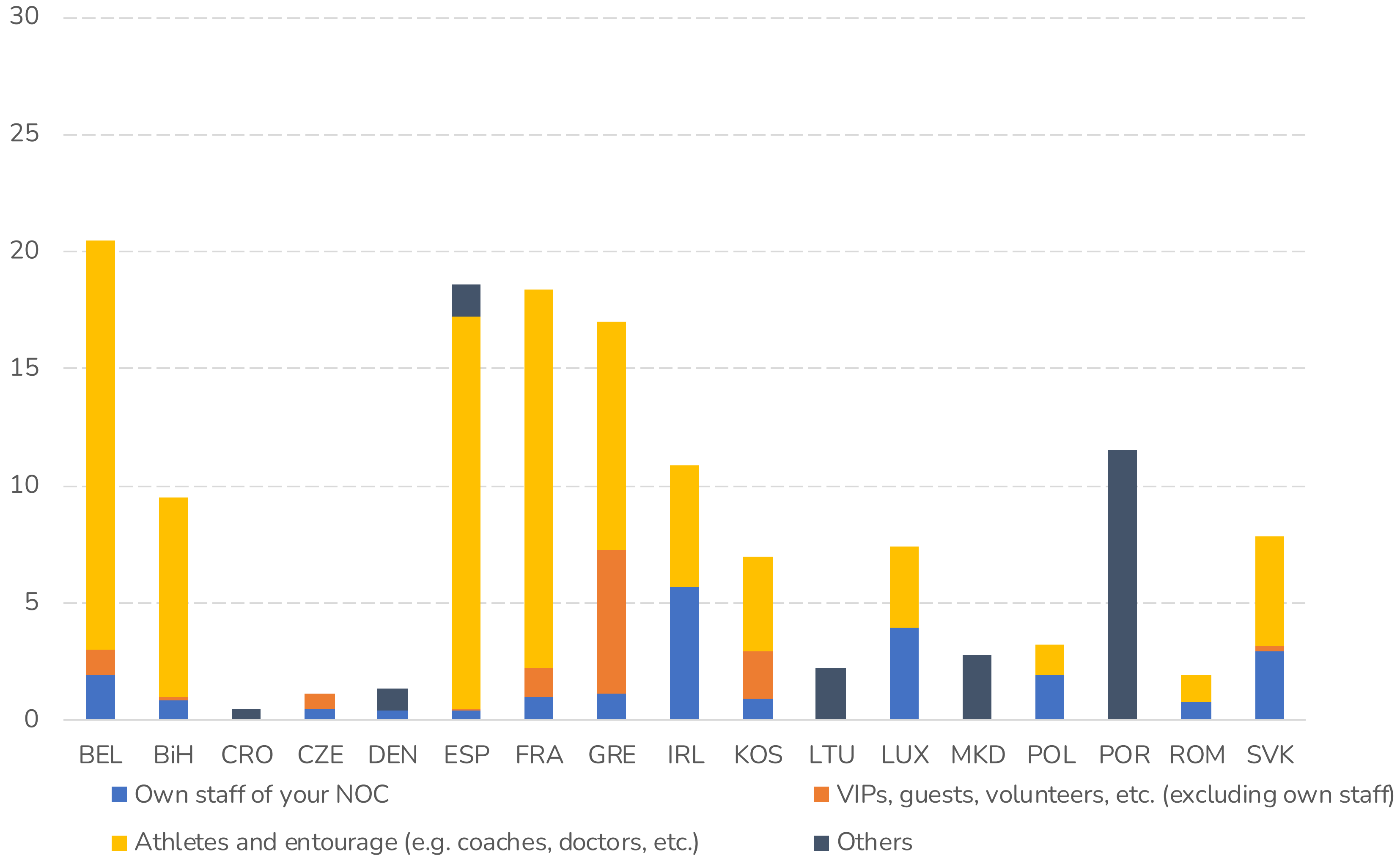
Vehicle fleet

t CO_2 equiv. / FTE / year



- Vehicle fleets used to a strongly varying degree

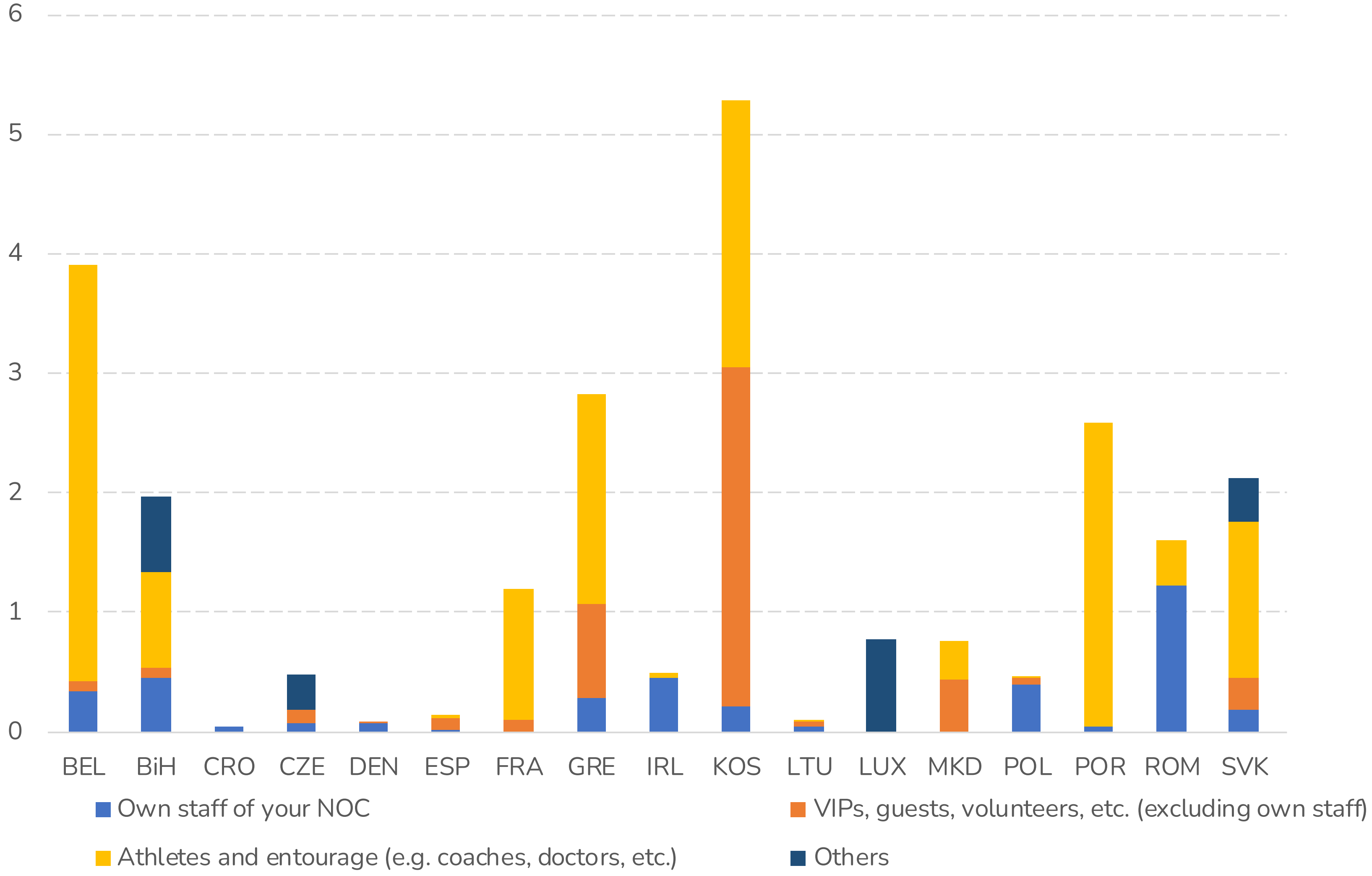
Flights
t CO_2 equiv. / FTE / year



- Flights of athletes and entourage usually dominant
  - CRO, DEN, MKD: small emissions
- Flights of NOC's staff:
  - Low for CZE, ESP, FRA, GRE, ROM
  - High for IRL, LUX, SVK
- VIPs, guests, volunteers: relevant for GRE
- MKD, LTU, DEN, CRO: no differentiation of person-groups

Overnight stays

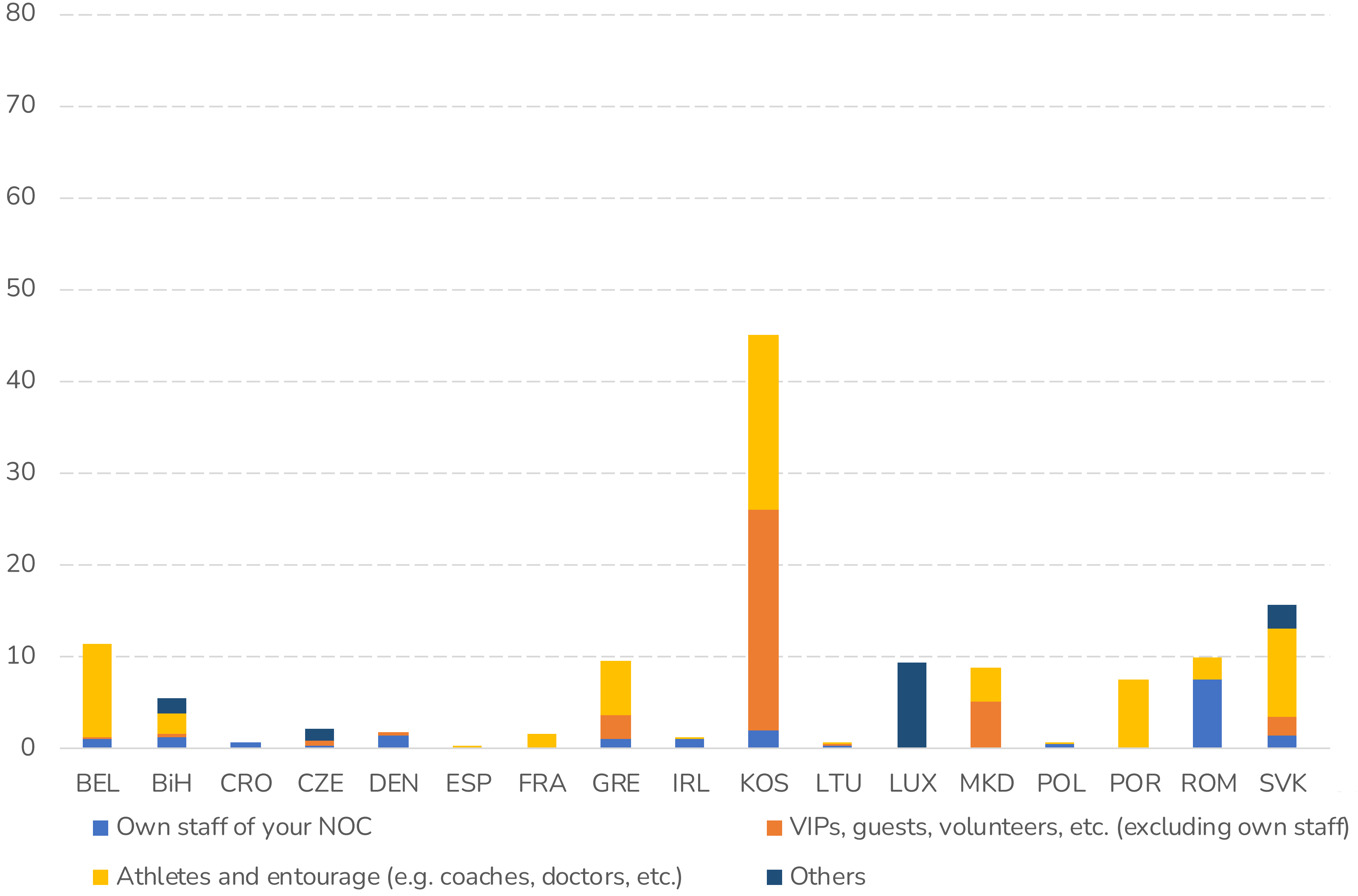
t CO_2 equiv. / FTE / year



- Own staff are compared per FTE:
- High for BEL, BIH, IRL, POL, ROM
- Low for CRO, DEN, ESP, FRA, LTU, MKD and POR

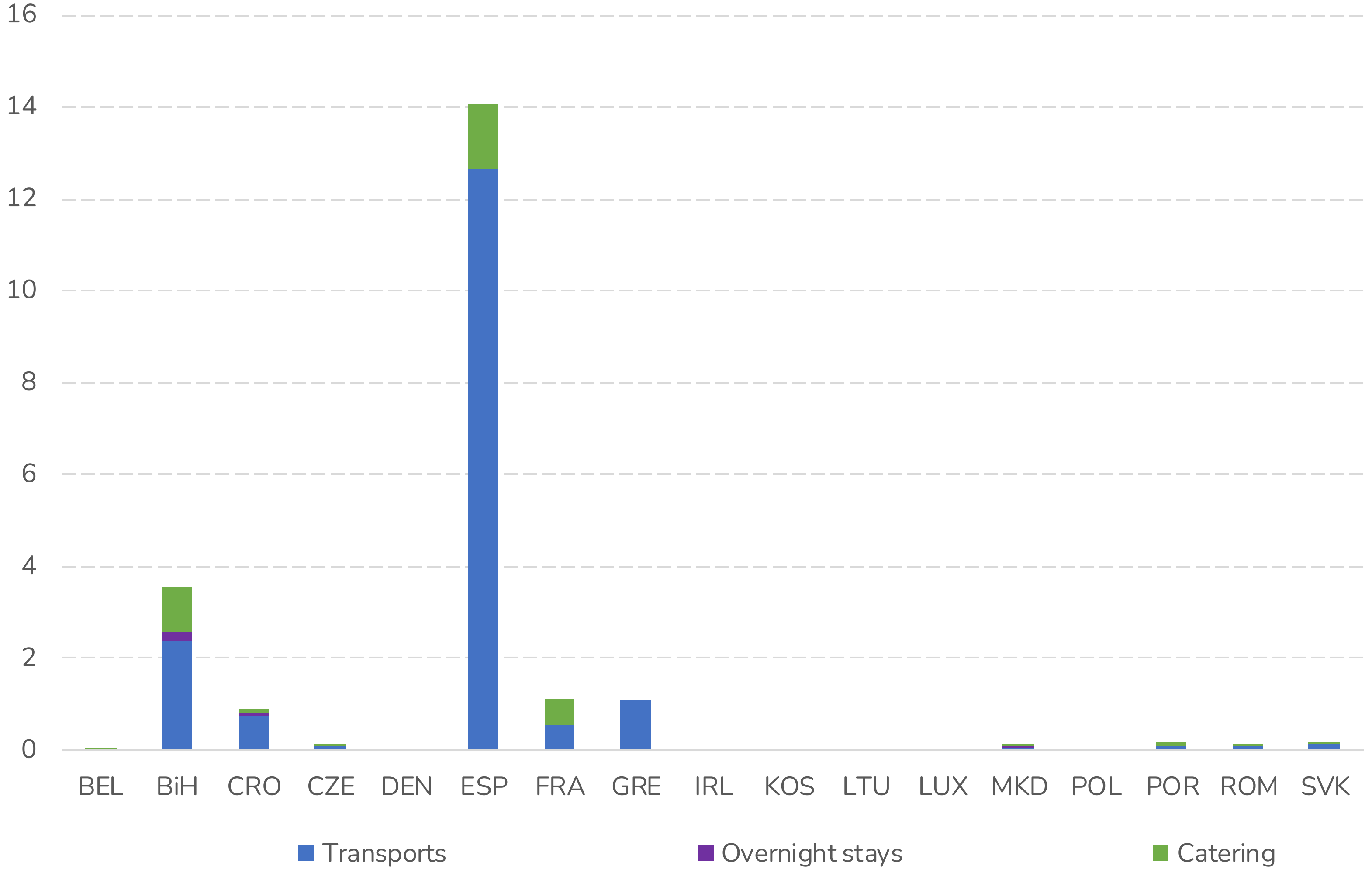
Overnight stays

t CO_2 equiv. / 1 Million inhabitants / year



- Athletes/entourage and VIPs/guests/etc. are compared per 1 Million inhabitants:
- CRO, DEN, ESP, LTU, POL: No overnight stays of athletes
- KOS, SVK, BEL: High emissions due to overnight stays of athletes/entourage
- KOS, MKD, GRE, SVK: notable emissions due to overnight stays of VIPs/guests/etc.
- Attention: Emissions per person-night in a 5 star hotel up to 4 times higher than in a 3 star hotel

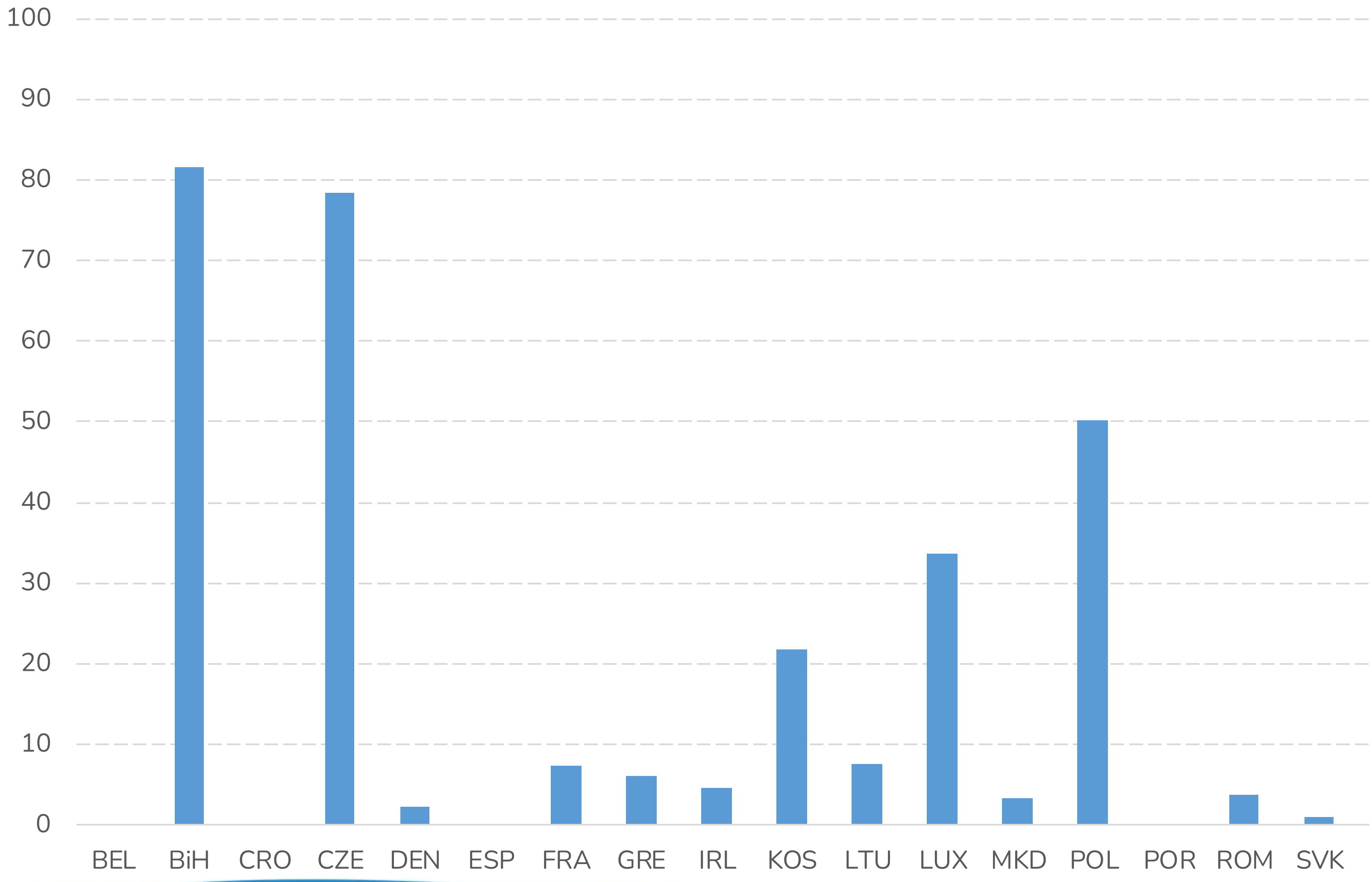
Events – in-house events
t CO_2 equiv. / FTE / year



- Transport-related emissions are dominant also regarding events
- Incentivise arrivals via train, support car pooling, raise awareness of your guests, etc.

Events – external events

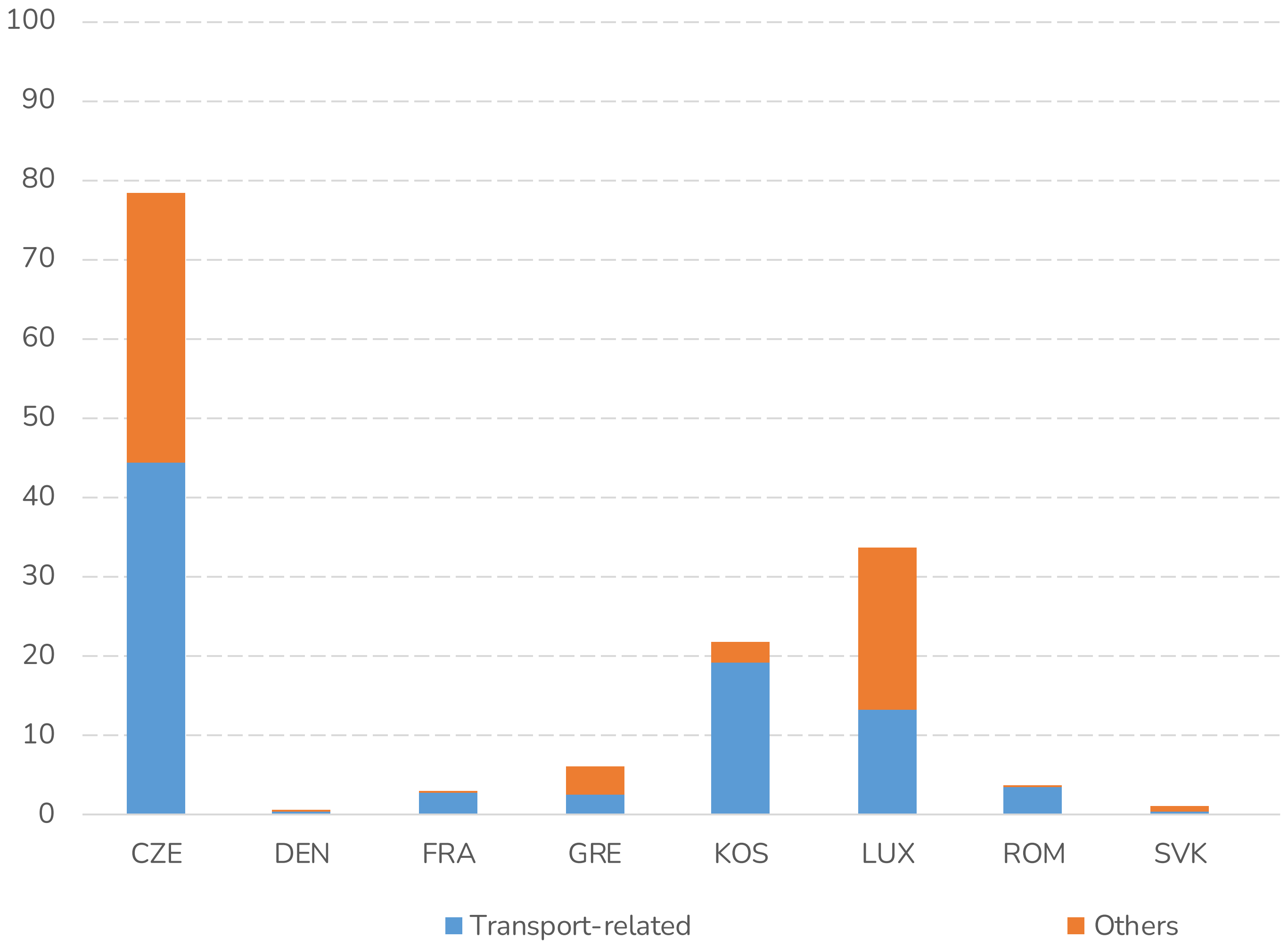
t CO_2 equiv. / FTE / year



- (Co-)hosting of external events can cause high emissions
- Wide range of activity level across NOCs

Events – external events

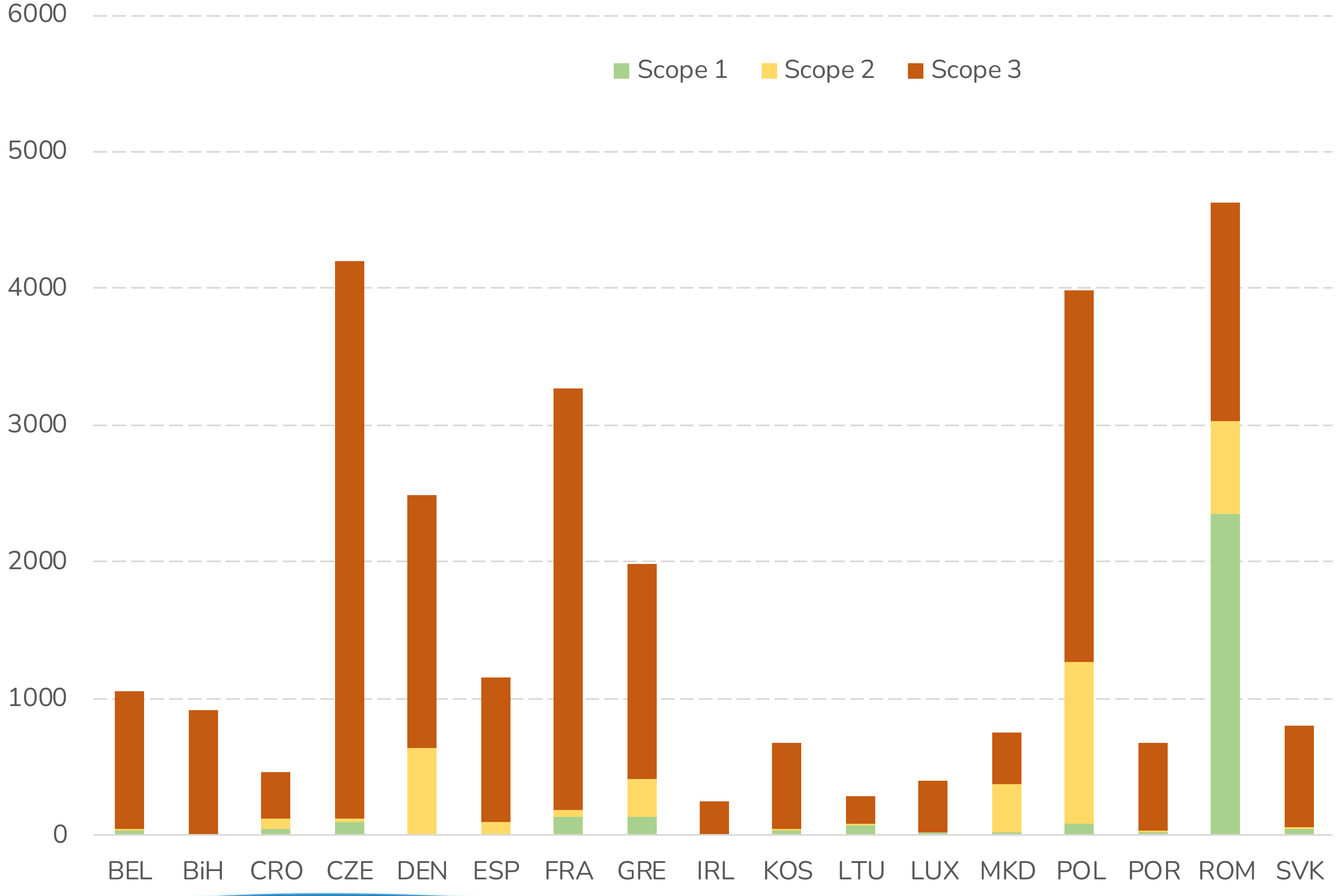
t CO_2 equiv. / FTE / year



- Usually dominant: transport-related emissions of public visitors
  - Choose event destination close to railway stations
  - raise awareness prior to and during event
  - limit car parking space
  - promote arrival via eco-friendly modes of transport on the event homepage
- Regarding local events other topics, particularly food and energy consumption, become more relevant
  - Consider heat losses
  - Incentivise plant-based food

Results differentiated by scope 1 / 2 / 3

t CO_2 equiv. / year | Location-based approach



- Scope 3 emissions dominant (as expected) → Do not take this as an excuse!
- ROM, POL, DEN, MKD, GRE: remarkable emissions from scope 1 / 2

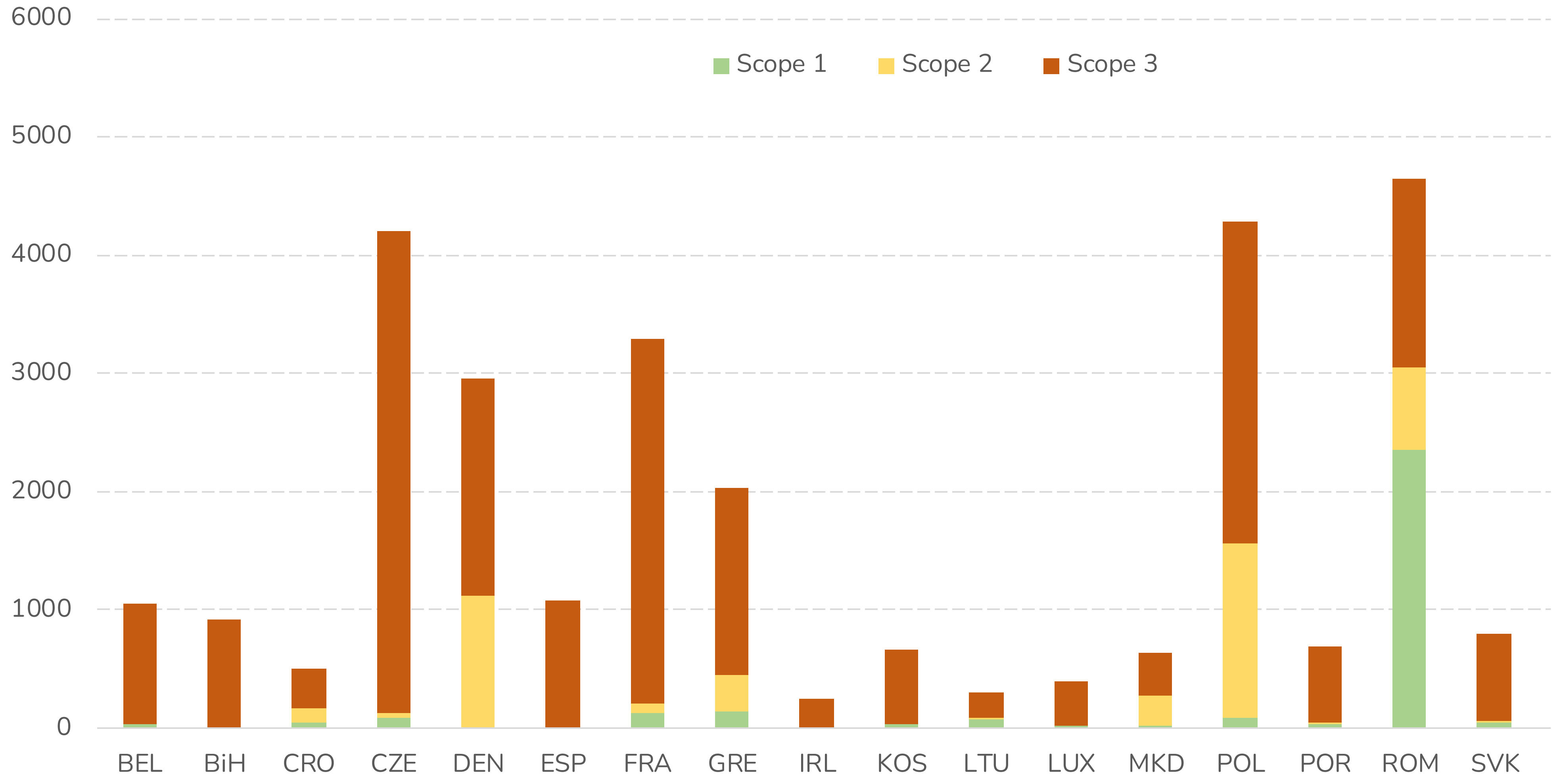
Results differentiated by scope 1 / 2 / 3

t CO_2 equiv. / year | Location-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
Scope 1	36	5	50	92	0	8	131	139	0	32	75	21	17	89	26	2 349	40
Scope 2	5	1	67	34	636	82	52	266	0	11	4	0	362	1 180	9	681	14
Scope 3	1 005	906	342	4 077	1 828	1 068	3 075	1 578	239	625	210	373	369	2 708	645	1 601	742
Total	1 046	912	459	4 202	2 464	1 157	3 258	1 984	239	667	289	394	747	3 977	680	4 631	796

Results differentiated by scope 1 / 2 / 3

t CO_2 equiv. / year | Market-based approach



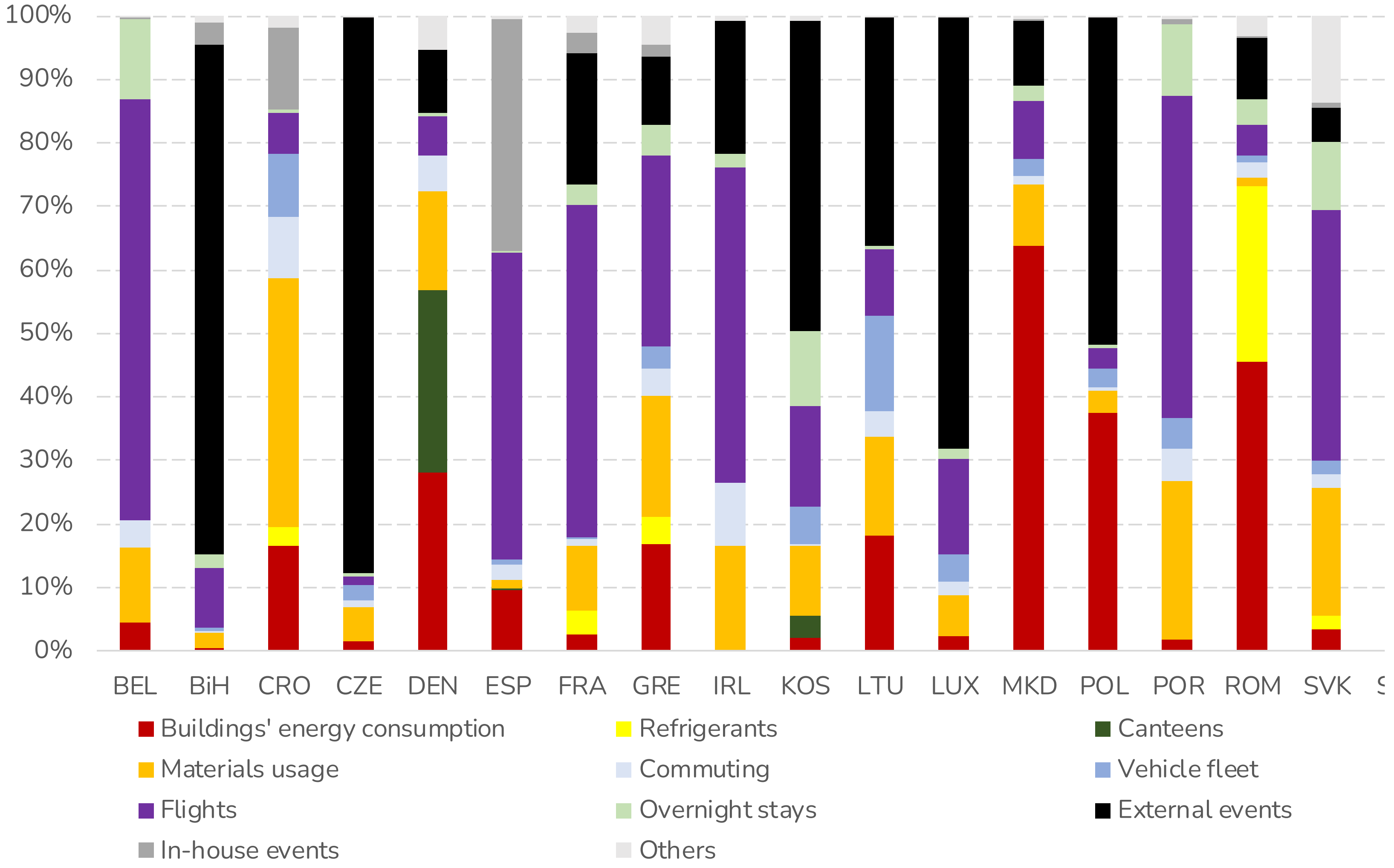
Results differentiated by scope 1 / 2 / 3

t CO_2 equiv. / year | Market-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
Scope 1	36	5	50	92	0	8	131	139	0	32	75	21	17	89	26	2349	40
Scope 2	3	0	111	40	1114	0	74	314	0	5	9	0	254	1473	16	696	16
Scope 3	1 009	906	342	4 078	1 850	1 068	3 083	1 580	242	629	212	374	371	2 719	645	1 602	743
Total	1 048	911	503	4 209	2 964	1 076	3 288	2 033	242	666	296	395	642	4 282	688	4 647	798

Overall results

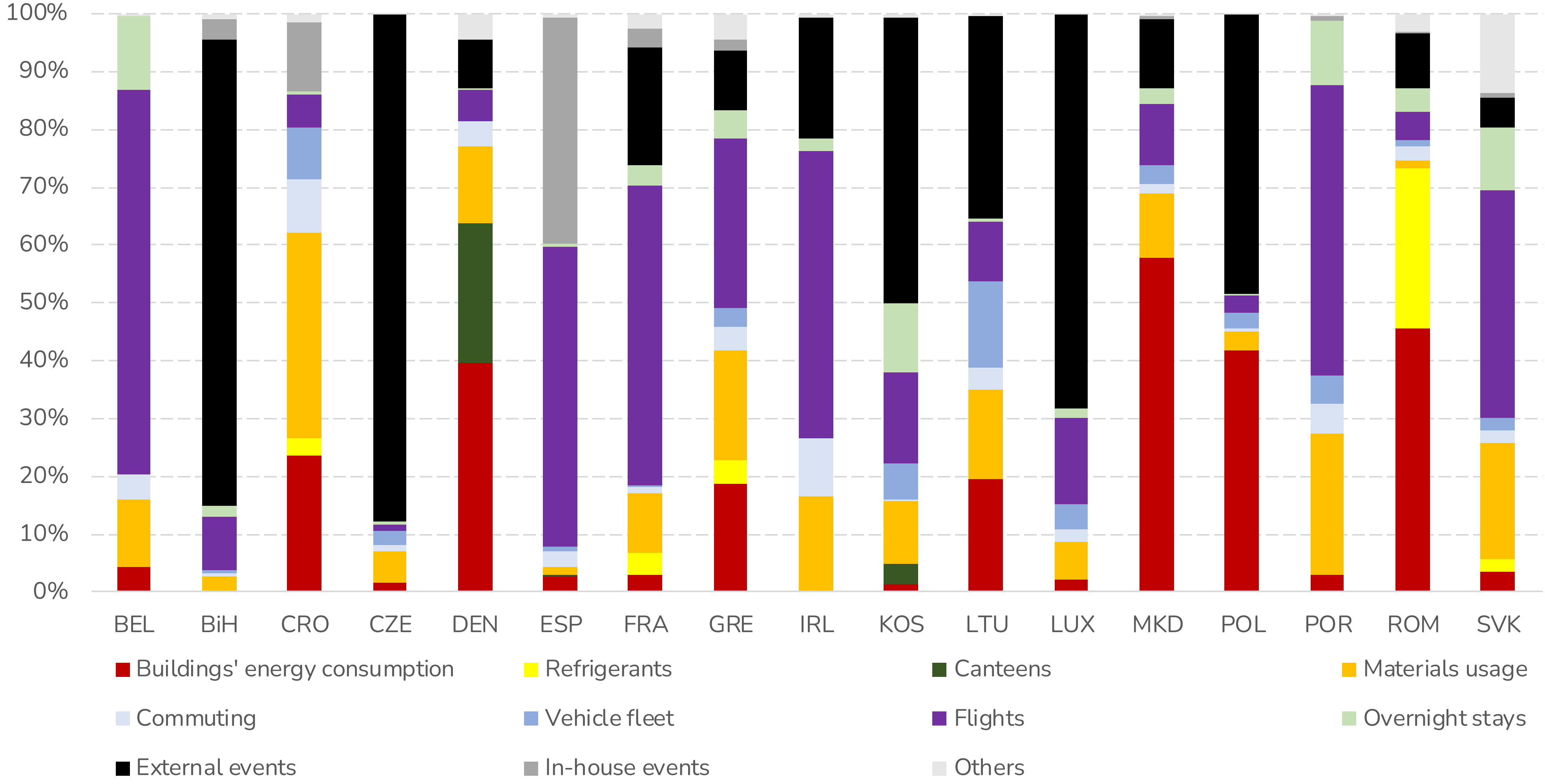
% of topic areas in the total | Location-based approach



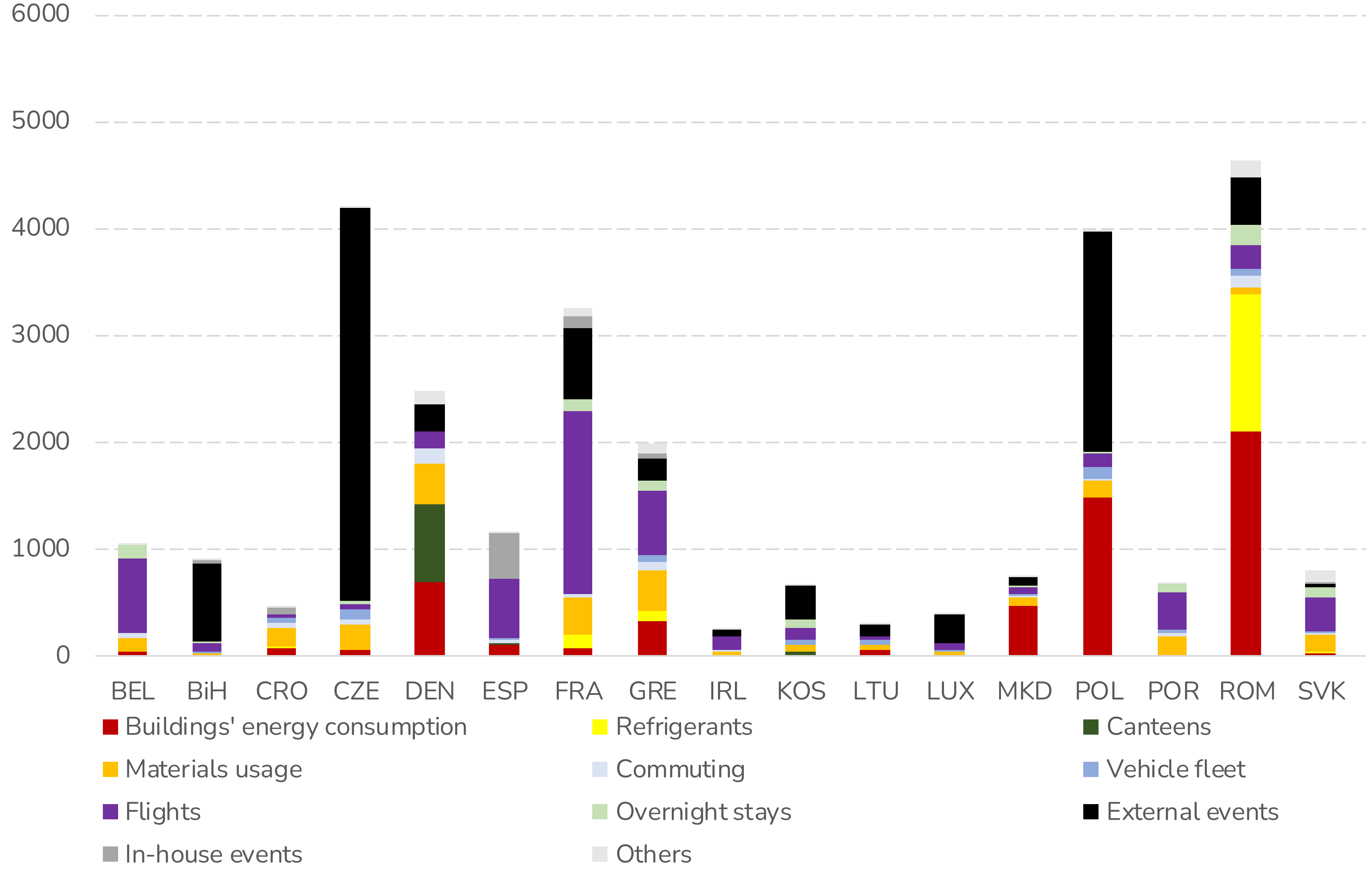
- DEN: Canteens
- LTU: Vehicle fleet
- Water consumption and waste, railway trips, other business trips in no case higher than 2 %

Overall results

% of topic areas in the total | Market-based approach



Overall results
t CO_2 equiv. / year



- In sum, all 18 NOCs bear (partial) responsibility for ~ 30 000 tons of CO_2 equivalents caused in 2022.

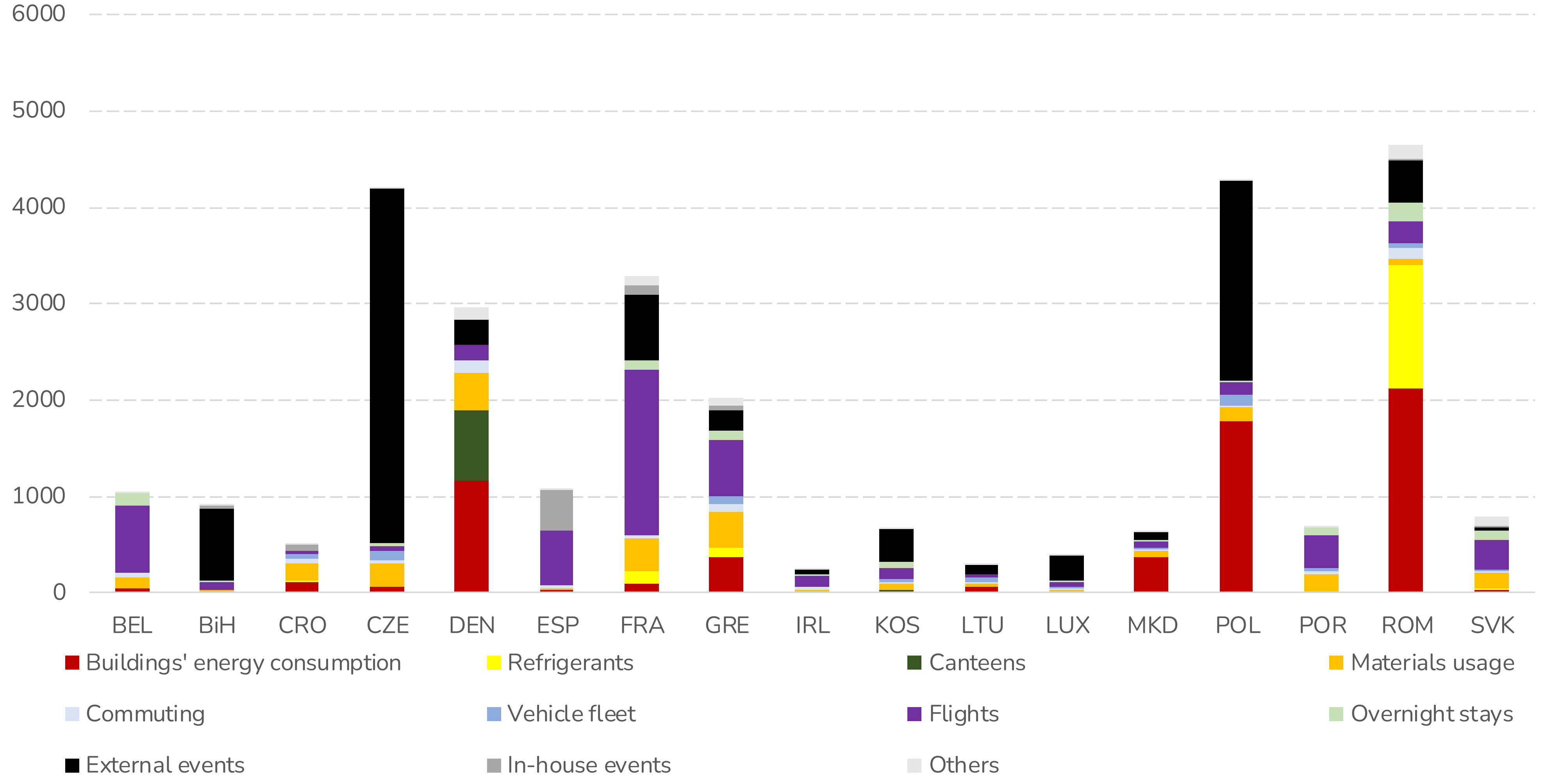
Overall results

t CO_2 equiv. / year | Location-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
Buildings' energy consumption	47	3	75	58	696	111	79	331	0	14	52	9	477	1 491	12	2 109	27
Refrigerants	0	0	14	0	0	0	126	86	0	0	0	0	0	0	0	1278	18
Canteens	0	0	0	0	720	3	0	0	0	23	0	0	0	0	0	2	0
Materials usage	121	22	180	234	365	14	330	382	37	73	44	25	72	136	170	65	159
Commuting	44	4	45	44	135	29	31	86	24	1	12	9	10	19	35	110	18
Vehicle fleet	1	5	46	95	0	10	6	66	0	40	44	17	21	113	33	56	17
Flights	696	85	29	54	157	558	1 710	596	120	105	31	59	67	131	345	222	315
Overnight stays	133	18	3	23	10	4	111	99	6	79	1	6	18	19	78	187	85
External events	0	734	0	3 686	247	0	672	211	51	326	104	268	77	2 061	0	443	42
In-house events	1	32	59	4	0	422	104	38	0	0	0	0	3	0	5	13	7
Others	3	8	8	3	134	6	88	89	1	5	1	1	3	7	2	145	109
Total	1 046	912	459	4 202	2 464	1 157	3 258	1 984	239	667	289	394	747	3 977	680	4 631	796

Overall results

t CO_2 equiv. / year | Market-based approach



Overall results

t CO_2 equiv. / year | Market-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
Buildings' energy consumption	44	3	119	64	1 174	29	101	378	0	9	58	9	370	1 785	20	2 124	28
Refrigerants	0	0	14	0	0	0	126	86	0	0	0	0	0	0	0	1 278	18
Canteens					720	3				23						2	
Materials usage	125	22	180	235	387	14	339	382	40	73	45	25	72	146	170	66	160
Commuting	44	4	45	44	135	29	31	86	24	1	12	9	10	19	35	110	18
Vehicle fleet	1	5	46	95	0	10	6	66	0	40	44	17	21	113	33	56	17
Flights	696	85	29	54	157	558	1 710	596	120	105	31	59	67	131	345	222	315
Overnight stays	133	18	3	23	10	4	111	99	6	79	1	6	18	19	78	187	85
External events	0	734	0	3 686	247	0	672	211	51	326	104	268	77	2 061	0	443	42
In-house events	1	32	59	4	0	422	104	38	0	0	0	0	3	0	5	13	7
Others	3	8	8	3	134	6	88	91	2	10	1	1	5	9	2	145	109
Total	1 048	911	503	4 209	2 964	1 076	3 288	2 033	242	666	296	395	642	4 282	688	4 647	798

Learnings and next steps

- Carbon footprint has yielded interesting insights, particularly regarding emission hotspots
- Reduction strategies know where to prioritize

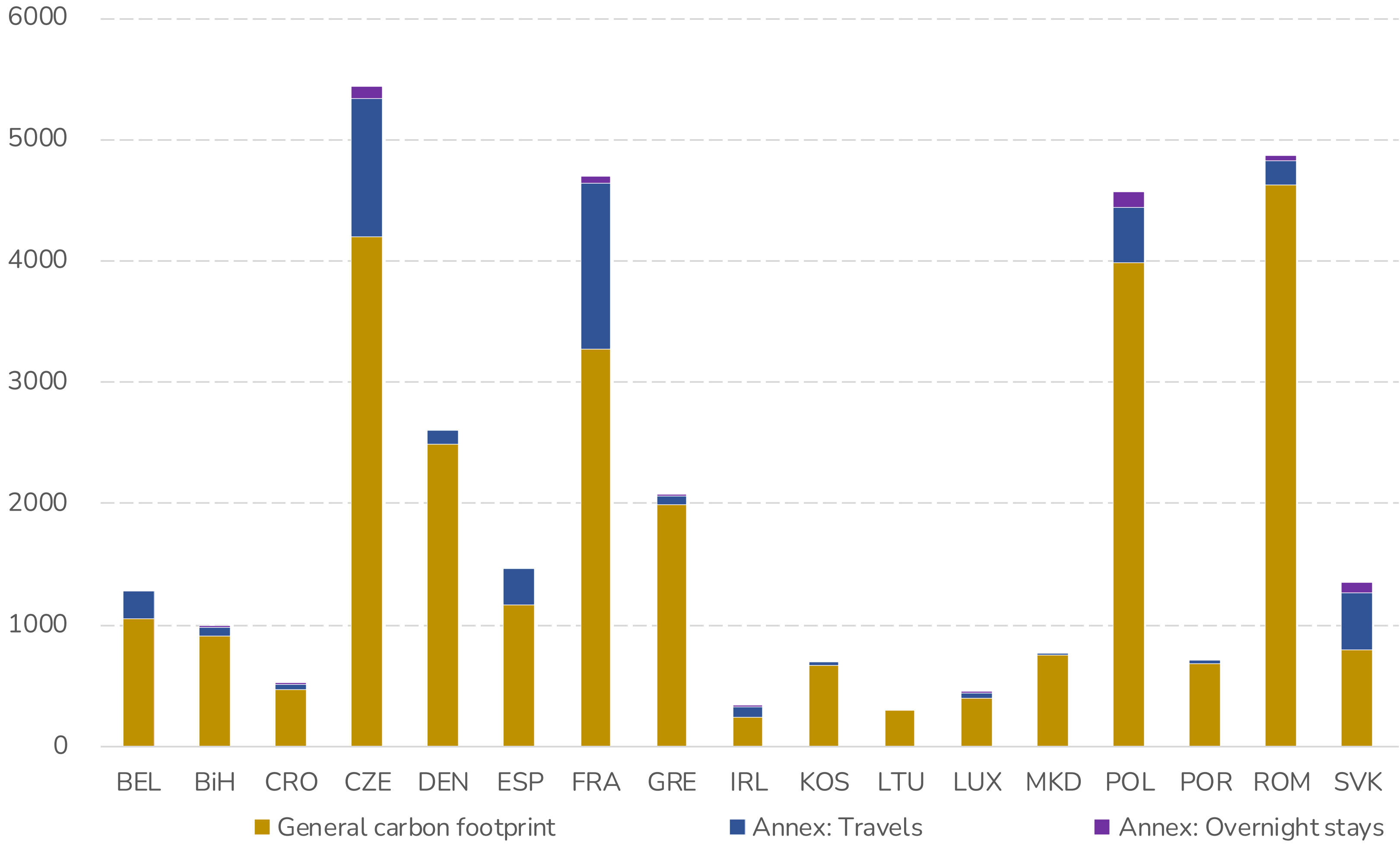
- National Olympic Committees can autonomously compile carbon footprints results for future years
- Changes over time can be monitored, assessed and measures can be adapted

ANNEX

Co-funded by
the European Union

Emissions due to travels and overnight stays of athletes and entourage at the Olympic Games

t CO_2 equiv. / year | Location-based approach



- Travels of athletes and their entourage to the Olympic Games (Summer and Winter) and overnight stays of athletes and their entourage inside the Village and other accredited accommodation

Emissions due to travels and overnight stays of athletes and entourage at the Olympic Games

t CO_2 equiv. / year | Location-based approach

	BEL	BiH	CRO	CZE	DEN	ESP	FRA	GRE	IRL	KOS	LTU	LUX	MKD	POL	POR	ROM	SVK
General carbon footprint	1 046	912	459	4 202	2 464	1 157	3 258	1 984	239	667	289	394	747	3 977	680	4 631	796
Annex: Travels	232	70	43	1 129	111	309	1 370	80	76	19	0	38	14	451	26	191	461
Annex: Overnight stays	0	5	0	103	0	0	58	10	2	0	0	2	0	127	0	49	86
Total	1 279	987	503	5 434	2 574	1 467	4 686	2 073	317	687	289	435	762	4 554	707	4 871	1 344

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OCEAN

Olympic Committees of Europe Approaching Carbon Neutrality

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