

Are the SDGs steering the textual content of departmental policies?

Quantitative empirical evidence from mainstreaming the 2030 Agenda in the European Union and its Member States

Spinazzola, Matteo; Biermann, Frank; Hickmann, Thomas.

matteo.spinazzola@gmail.com



20 July 2021 - Evidence for Action

Aligning the Climate and SDG Agenda



Presentation Outline

Introduction

Theory, Materials & Methods

Results

Conclusions

Discussion

The 2030 Agenda and the SDGs

- A **global sustainability framework**
- 17 goals and 169 targets, far from reach
- Launched in **2015** by the UN General Assembly (UN DESA, 2020)

2030 Agenda implementation

- Leadership of foreign and environmental ministries **excludes** other **key departments** (Breuer, Leininger, & Tosun, 2019; OECD, n.d.).
- **SDGs cherry-picking** for policy legitimation rather than policy transformation (Forestier & Kim, 2020; Voituriez et al., 2018)
- Novel **quantitative** assessment **tools** available (LaFleur, 2019)

Gaps in the literature

- SDG **steering** policies, policy-making, and recovery initiatives?
- Need for **scalable methods**

Research hypotheses

1. Since they committed to implementing the 2030 Agenda in their jurisdictions, **all settings mainstreamed the SDGs**
2. After mainstreaming the Agenda, **the pervasiveness and saliency of sustainable development increased**
3. After mainstreaming the Agenda, **the alignment of policies to the SDGs increased**

Research objective

By **assessing** the **mainstreaming** of the 2030 Agenda **and the historical changes** in the **content** of departmental documents, this study **evaluated** the Agenda's **steering** of departmental policies in the European Union, Belgium, France, Ireland, Luxembourg, and the United Kingdom.

Performance evaluation

As a **strategic plan**, the **performance to the 2030 Agenda** can be assessed measuring its textual integration in policy documents (Faludi, 2000; UNDG, 2017)

Dataset

- **885 annual plans and reports (Annex B)**
- **nonspecific** documents
- **100 departments**
- From **2012 to 2019**

Keywords query

- **SDG keywords**, acronyms and titles (Annex A)
- Searching for **explicit references** to the 2030 Agenda and the SDGs
- **Measuring mainstreaming pervasiveness and saliency**
- Performed with R.

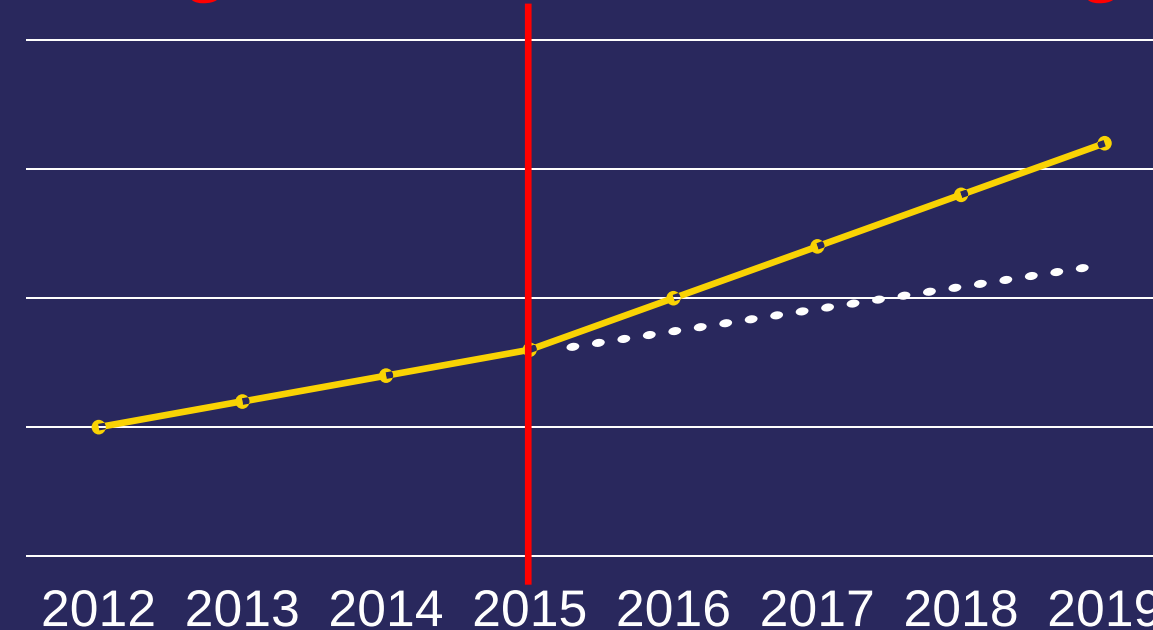
Pattern-based coding

- **Bag of words model (BoW)**
- Identifying **sentences similar** to the training set
- Training set of 70 institutional documents and websites
- **Measuring text alignment with the SDGs**
- Performed with NVivo.

Statistical analysis

- **Results** were **normalized** to document size
- Average values were calculated
- **Statistical significance** was tested with ANOVA and Friedman's tests

2030 Agenda and SDGs mainstreaming



Steering effect of 2030 Agenda mainstreaming

Sustainability and SDG mentions

Counterfactual



Results – Assessing mainstreaming (cross sectional analysis)

Mentions to 2030 Agenda or SDGs

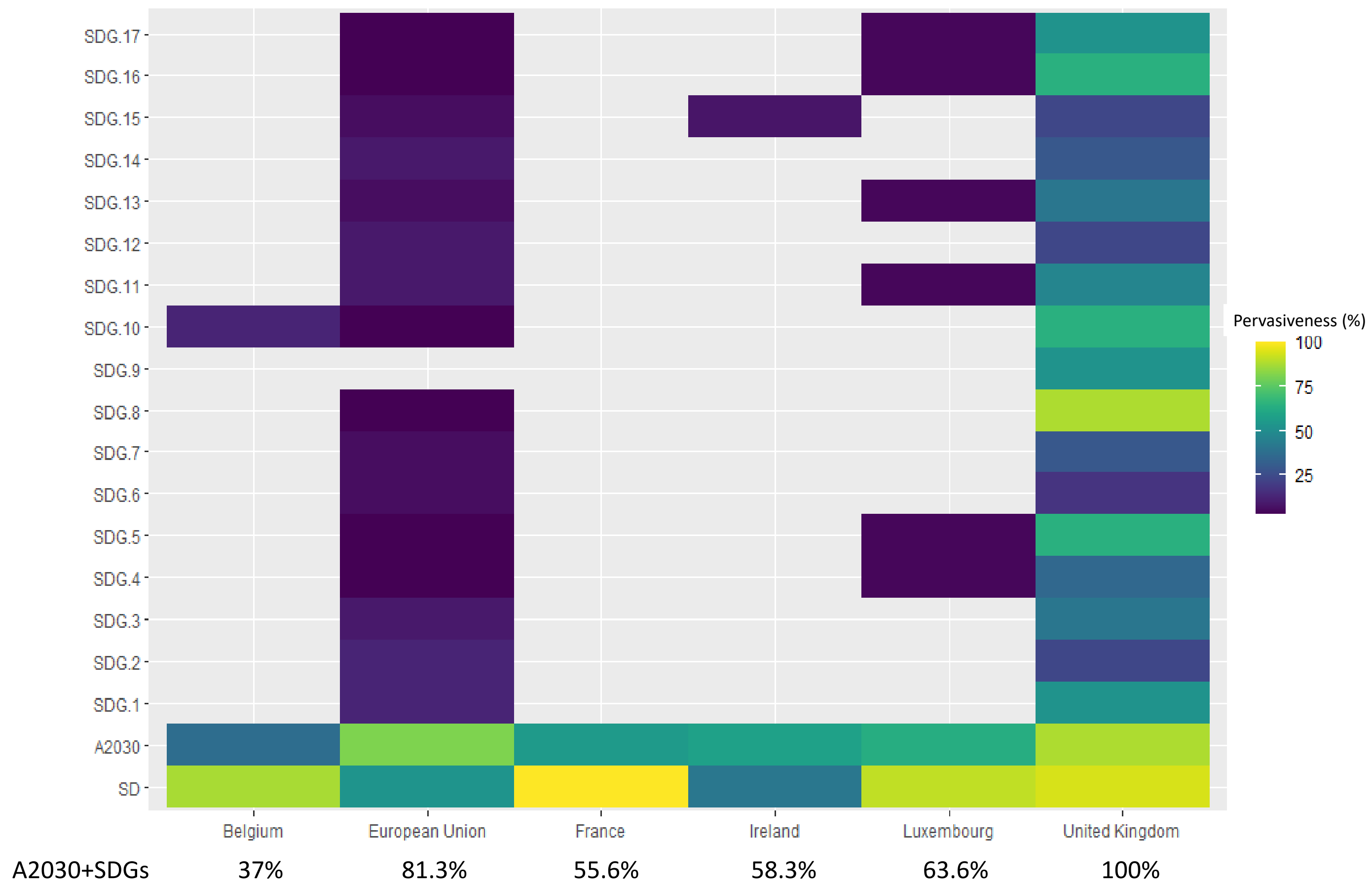
- Vary significantly
- Dominated by generic references to the 2030 Agenda

SDG goals

- rarely mentioned in Belgium, France and Ireland
- systematically mentioned in the EU, Luxembourg and the UK

Mainstreaming by department

- Mostly line departments of foreign affairs and the environment (Annex C)
- In France line department not mentioning the Agenda
- In Luxembourg finance department mentioning



Results – Assessing the change of policy contents (longitudinal analyses)

Institutional Settings	Before 2015	After 2015	n. Departments	p. Value
Belgium				
SD, A2030&SDGs Pervasiveness (%)	75.0	100.0	8	NA
SD, 2030A&SDGs Saliency	6.1	10.1	7	p > 0.5
A2030&SDGs Alignment	51.1	62.9	8	p > 0.5
European Union				
SD, A2030&SDGs Pervasiveness (%)	75.0	84.4	32	NA
SD, 2030A&SDGs Saliency	3.8	2.6	23	p > 0.5
A2030&SDGs Alignment	98.8	97.7	31	p > 0.5
France				
SD, A2030&SDGs Pervasiveness (%)	100.0	100.0	9	NA
SD, 2030A&SDGs Saliency	63.3	76.1	8	p > 0.5
A2030&SDGs Alignment	98.8	99.4	9	p > 0.5
Ireland				
SD, A2030&SDGs Pervasiveness (%)	41.7	66.7	12	NA
SD, 2030A&SDGs Saliency	0.2	3.4	6	p > 0.5
A2030&SDGs Alignment	171.0	153.9	8	p > 0.5
Luxembourg				
SD, A2030&SDGs Pervasiveness (%)	95.5	90.9	22	NA
SD, 2030A&SDGs Saliency	6.5	9.7	17	p < 0.5
A2030&SDGs Alignment	50.0	55.7	21	p < 0.5
United Kingdom				
SD, A2030&SDGs Pervasiveness (%)	88.2	100.0	17	NA
SD, 2030A&SDGs Saliency	5.1	8.7	15	p < 0.5
A2030&SDGs Alignment	56.1	96.3	16	p < 0.5



Mentions of sustainable development or 2030 Agenda

- Generalized increase in pervasiveness
- Significant increase of saliency in Luxembourg and the United Kingdom

Alignment to the 2030 Agenda

- Significant increase only in Luxembourg and the United Kingdom



Significant increase



Significant decrease

Conclusions

Recap

This study aimed at evaluating if the 2030 Agenda was mainstreamed and might have steered the content of departmental policies. In total, 885 departmental documents published by 100 departments between 2012 and 2019 were analyzed through a keywords query and a pattern-based auto-coding tool.

	Cross sectional analysis	Longitudinal analyses (change of policy contents)		
	Mainstreaming	Pervasiveness	Saliency	Alignment
European Union	●	●	●	●
Belgium	●	●	●	●
France	●	●	●	●
Ireland	●	●	●	●
Luxembourg	●	●	●	●
United Kingdom	●	●	●	●

Key findings

- **Insufficient mainstreaming in Belgium, France and Ireland**
- **Generalized increase of sustainability pervasiveness**
- **Significant changes in policy contents (saliency and alignment) in Luxembourg and the United Kingdom**
- **Association between adequate mainstreaming and change of policy contents → there might be a causal relationship, and mainstreaming the SDGs might actually steer the content of policies**



General Implications

- Mainstreaming the 2030 Agenda might steer policy contents
- Further research: more organizations, a longer timeframe, relevant for recovery initiatives
- Quantitative textual tools: reliable and scalable results, accurate proxy for change of policy contents



Implications for the Climate Agenda

- This approach could be **customized** for **climate-related performance**
- **Association** between **SDGs** and **climate agendas** could be assessed (e.g. correlation matrices, network analysis, etc)

Limitations

- Operationalizations are **context-independent**, but so are also the evaluation criteria
- Limited **data availability** was addressed by **aggregating results** and **retrieving documents** from **leading departments**

References

Faludi, A. (2000). The Performance of Spatial Planning. *Planning Practice & Research*, 15(4), 299–318.

Galsurkar, J., Singh, M., Wu, L., Vempaty, A., Sushkov, M., Iyer, D., Kapto, S., & Varshney, K. R. (2018). Assessing National Development Plans for Alignment with Sustainable Development Goals via Semantic Search. Thirty-Second AAAI Conference on Artificial Intelligence. <https://www.aaai.org/ocs/index.php/AAAI/AAAI18/paper/viewPaper/16851>

Forestier, O., & Kim, R. E. (2020). Cherry-picking the Sustainable Development Goals: Goal prioritization by national governments and implications for global governance. *Sustainable Development*, 28(5), 1269–1278.

LaFleur, M. (2019). Art Is Long, Life Is Short: An SDG Classification System for DESA Publications. <https://doi.org/10.2139/ssrn.3400135>

McArthur, J. W., & Rasmussen, K. (2018). Change of pace: Accelerations and advances during the Millennium Development Goal era. *World Development*, 105, 132–143.

OECD. (n.d.). OECD Survey on Planning and Co-ordinating the Implementation of the SDGs.

UNDG. (2017). Mainstreaming the 2030 Agenda for Sustainable Development - Reference Guide for UN Country Teams. Retrieved July 14, 2020, from <https://unsdg.un.org/resources/mainstreaming-2030-agenda-sustainable-development-reference-guide-un-country-teams>

UN DESA. (2020). The Sustainable Development Goals Report 2020.

Voituriez, T., Hege, E., Maci, G., & Hackenesch, C. (2018). Steering the EU towards a sustainability transformation. *European Think Tanks Group*. Brussels. http://www.academia.edu/download/56863286/ETTG_brief-APRIL_Steering_the_EU_towards_sustainable_transformation_1.pdf

Any
questions?

Thank you for your
attention

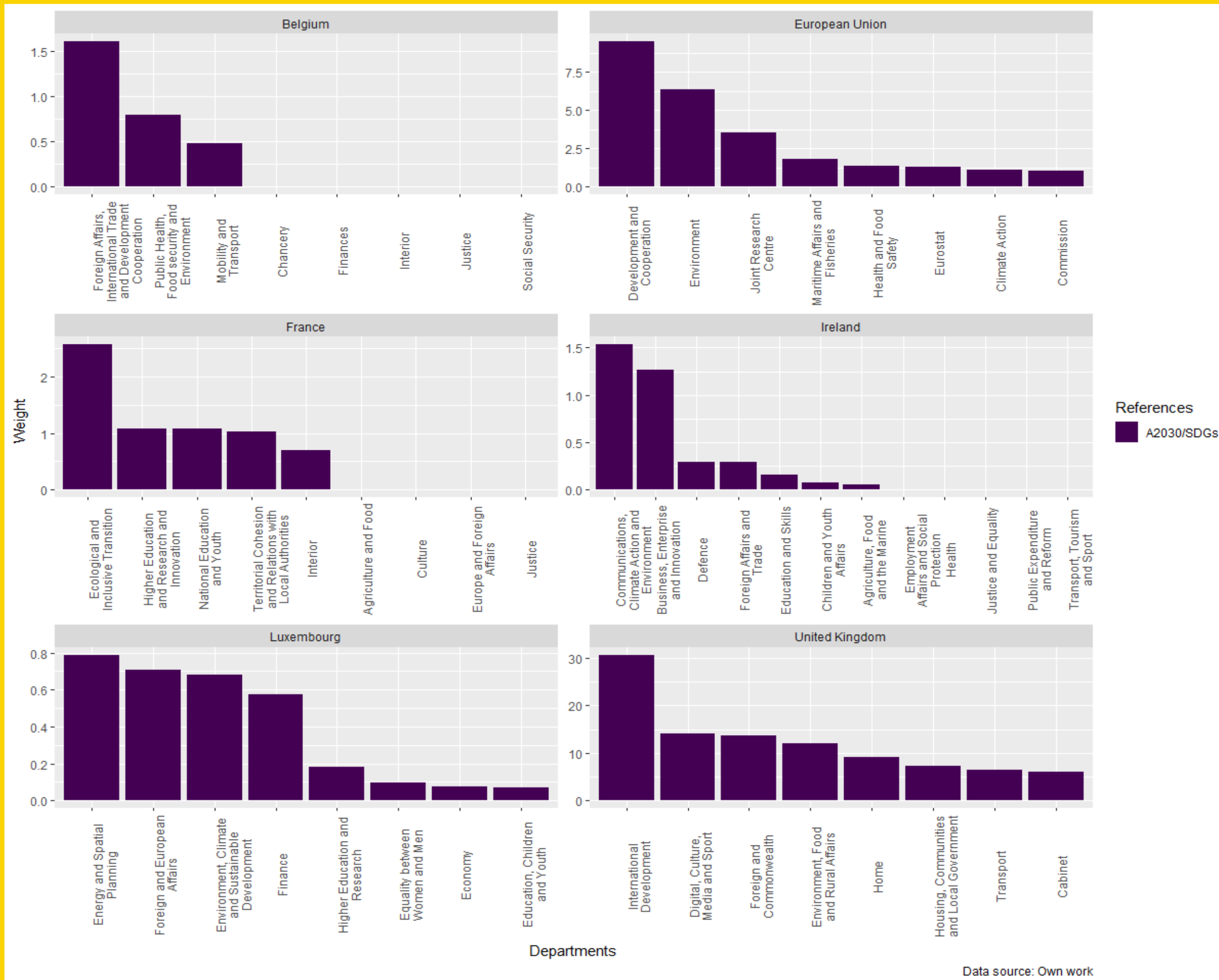
Annex A - List of keywords (sample)

Id	Keywords
Agenda.2030	2030 agenda agenda 2030 sustainable development goal [^0-9] sustainable development goals sdg [^0-9] sdgs horizon 2030 objectif de développement durable [^0-9] objectifs de développement durable odd [^0-9] odds
SDG.1	sdg 1[^0-9] odd 1[^0-9] sustainable development goal 1 goal 1 sustainable development objectif de développement durable 1 objectif 1 de développement durable goal 1 no poverty objectif 1 pas de pauvreté end poverty in all its forms everywhere eliminer la pauvreté sous toutes ses formes et partout dans le monde
SDG.2	sdg 2 odd 2 sustainable development goal 2 goal 2 sustainable development objectif de développement durable 2 objectif 2 de développement durable goal 2 zero hunger objectif 2 faim « zéro » end hunger achieve food security and improved nutrition and promote sustainable agriculture éliminer la faim assurer la sécurité alimentaire améliorer la nutrition et promouvoir l'agriculture durable
SDG.3	sdg 3 odd 3 sustainable development goal 3 goal 3 sustainable development objectif de développement durable 3 objectif 3 de développement durable goal 3 good health and well-being objectif 3 bonne santé et bien-être ensure healthy lives and promote well being for all at all ages permettre à tous de vivre en bonne santé et promouvoir le bien être de tous à tout âge
SDG.4	sdg 4 odd 4 sustainable development goal 4 goal 4 sustainable development objectif de développement durable 4 objectif 4 de développement durable goal 4 quality education objectif 4 éducation de qualité ensure inclusive and equitable quality education and promote lifelong learning opportunities for all assurer l'accès de tous à une éducation de qualité sur un pied d'égalité et promouvoir les possibilités d'apprentissage tout au long de la vie

Annex B - Dataset

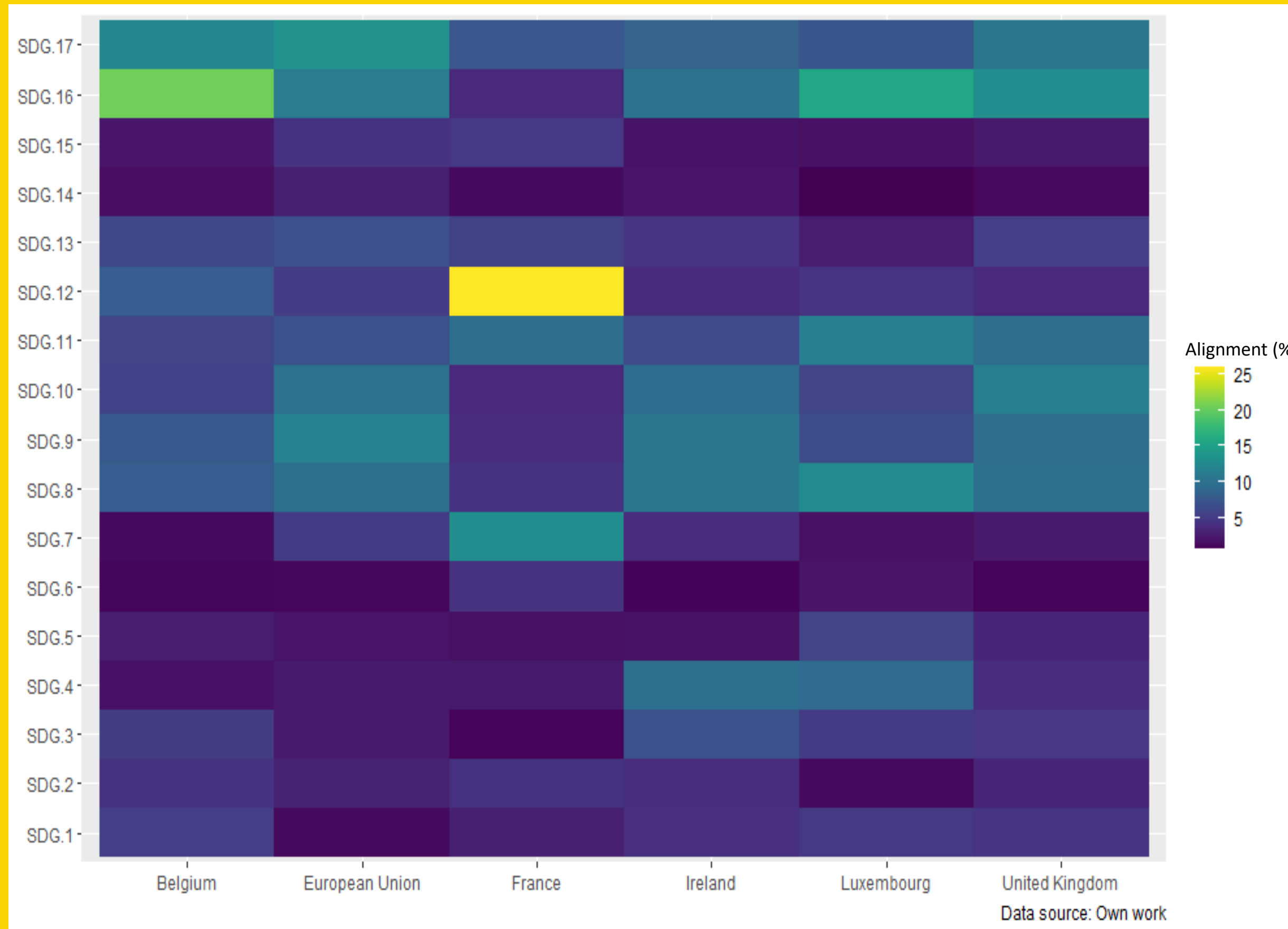
Institutional Settings	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total documents
Belgium	0	7	5	7	8	12	4	4	3	50
European Union	0	0	59	58	62	62	64	64	32	401
France	0	0	0	0	9	7	6	5	0	27
Ireland	8	7	6	7	20	18	10	11	2	89
Luxembourg	0	19	19	19	22	21	22	20	12	154
United Kingdom	0	17	16	17	15	16	33	34	16	164
Total documents	8	50	105	108	136	136	139	138	65	885

Annex C - Top eight departments by Agenda&SDGs saliency



Data source: Own work

Annex D – SDGs alignment normalized by setting



Annex E - SDGs saliency by department

