



Practices to Collect and Assess Data on Energy Audits and Energy Management Systems to Inform the Implementation of the European Energy Efficiency Directive

Energy Evaluation Europe Conference 2025
25. September 2025, Berlin

Ada Elsa Claus, Senior Expert on Industry, German Energy Agency (dena)



Co-funded by
the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.



What is the goal of the European Energy Efficiency Directive (EED)?



Co-funded by
the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.



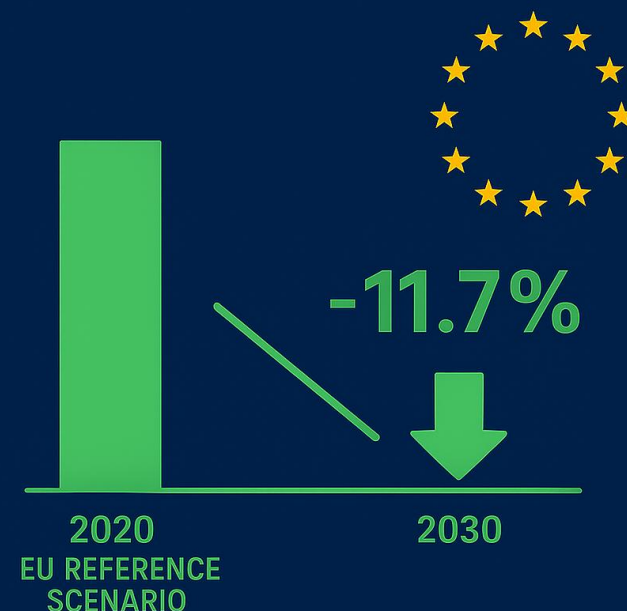
What is the goal of the European Energy Efficiency Directive (EED)?



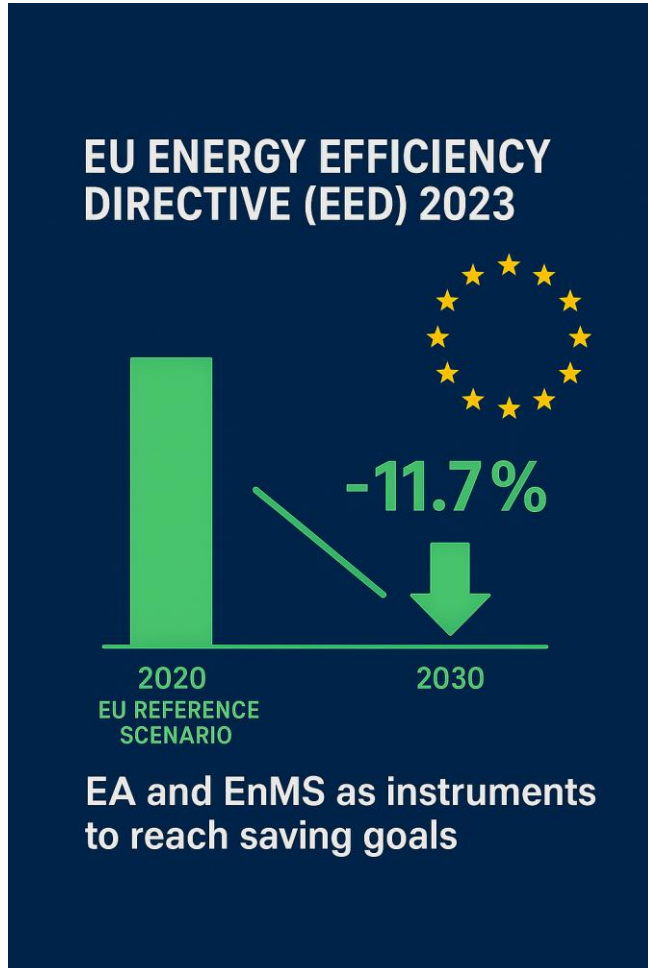
Co-funded by
the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

EU ENERGY EFFICIENCY DIRECTIVE (EED) 2023

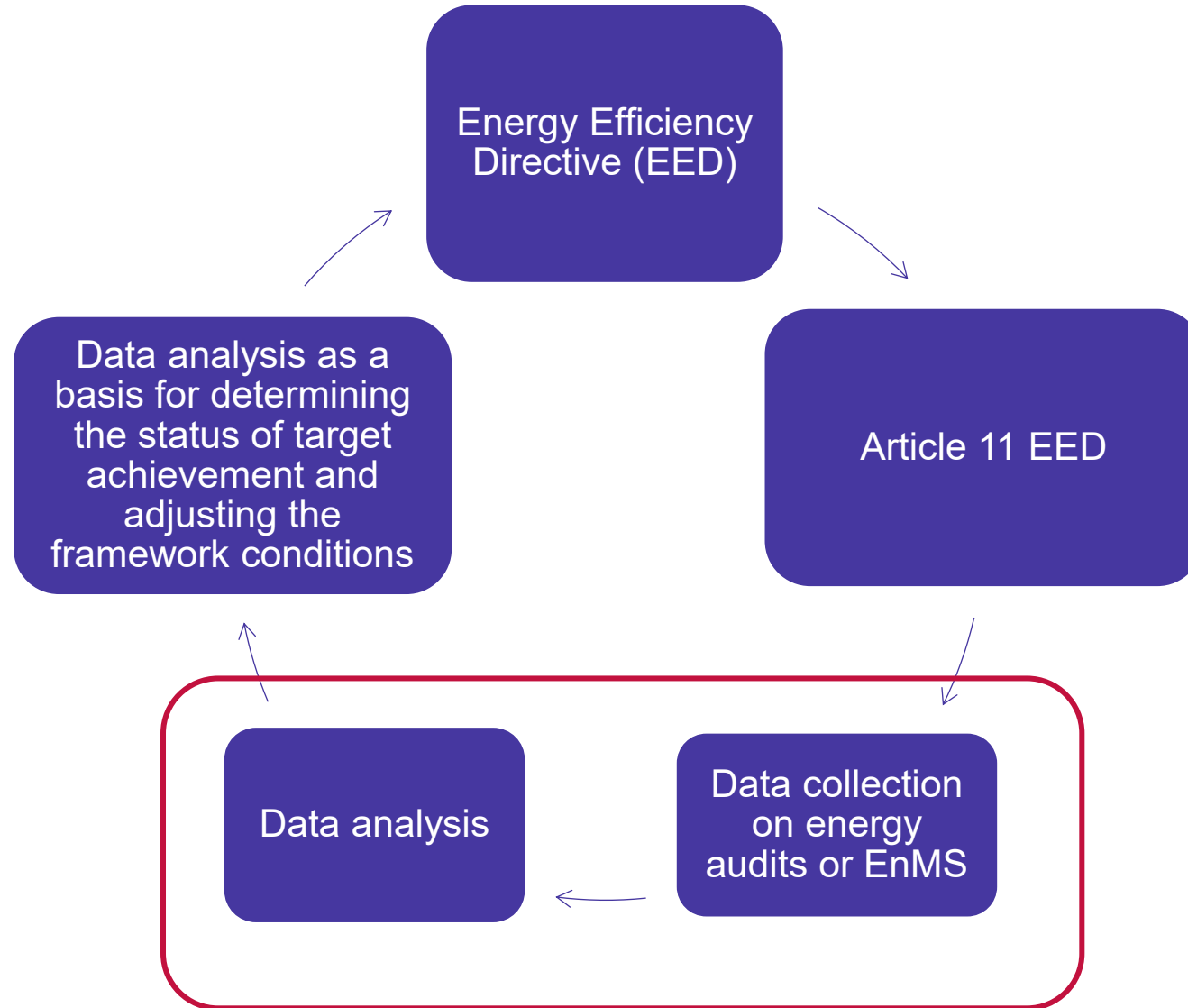


Article 11 EED introduces new energy audit and energy management systems obligations



- Energy audit (EA) obligation for enterprises of all sizes with energy consumption of above 10TJ (average/three years)
- Energy management system (EnMS) obligation for enterprises of all sizes with energy consumption of above 85 TJ (average/three years)
- create and publish “Action Plans” on implementation of energy efficiency measures

How can we determine the effect of the new obligations?



Status of data collection under EED in ten EU countries

Results of analysis in Leapto11 countries:

- Practice of collecting and analysing data differs from country to country
 - Data collection on energy audits by most national institutions but either no or incomplete data collection on EnMS
 - Differences in the categories of data collected on audits and EnMS
 - Use of data could be enhanced
- **Need of harmonisation and standardisation**



Claus, Ada Elsa, Norpoth, Katharina, Tveleneva, Polina, Vallentin, Daniel, Westhoff, Laura (authors), Leapto11 (publisher), Article 8 EED Implementation in the Participant Agencies' Countries: analysis of Practices to Collect, Store and Assess Information from Energy Audits and Energy Management Systems, 30.09.2024.

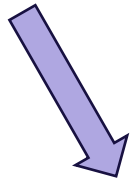


Similar results:

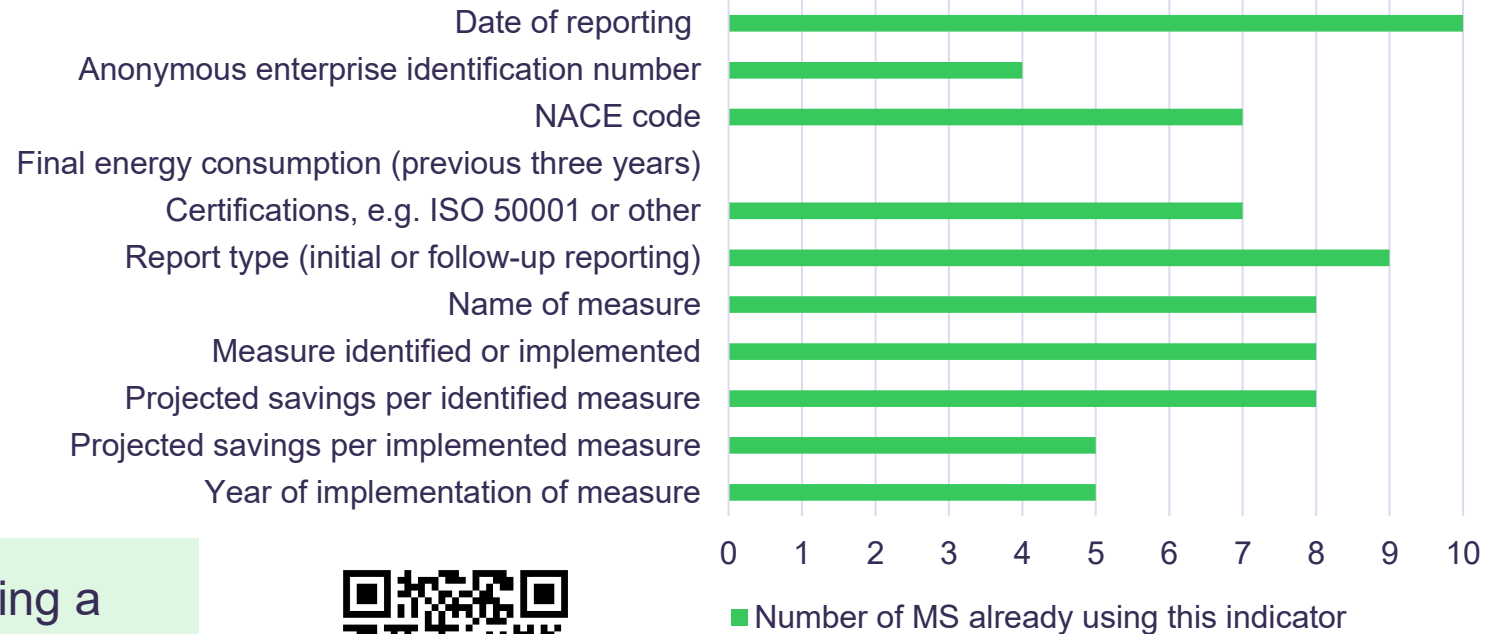
- Eichhammer and Rohde, 2016
- Hirzel et al., 2016
- Nabitz and Hirzel, 2019
- Serrenho, 2019
- Barkhausen, Hirzel and Durand, 2020
- DG Energy et al., 2022
- adelphi, 2023
- Johnsson, Andrei and Johansson, 2025

Basic data set to better evaluate effects of Article 11 EED

Current data situation does not allow detailed evaluation of the effects of Article 11 EED



The data situation can be improved by using a **basic data set** with **common indicators** for EU Member States



Article in Energy Efficiency Journal



Goal: Enable **better impact analysis** of Article 11 EED with **little additional burden**



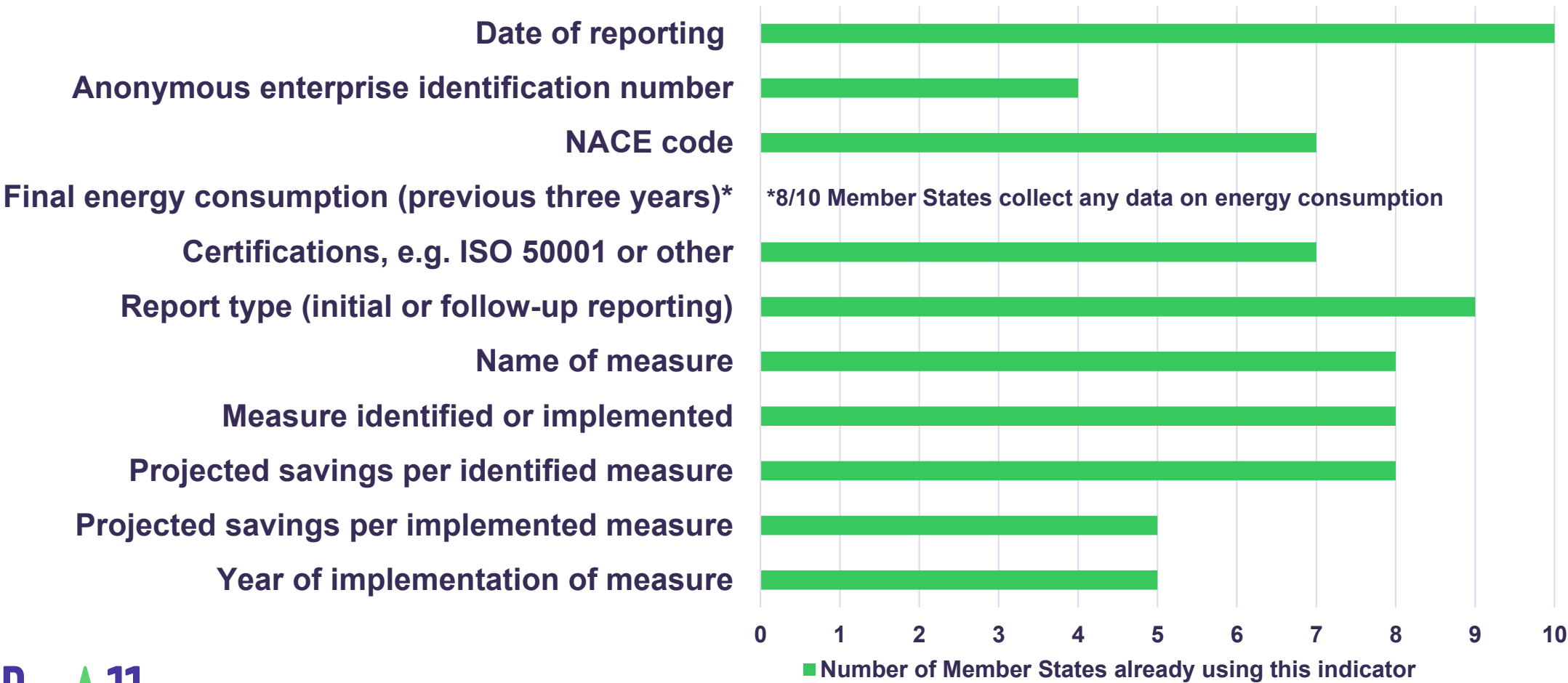
Method of the analysis

- Combination of qualitative and quantitative analysis
- Questionnaires completed by experts from 10 national energy agencies
- Data collection through agency knowledge, desk research, and consultation with ministries and research institutions
- Comparison with other proposals for improving data management under EED
→ see e.g. proposal of Johnsson et al. from March 2025



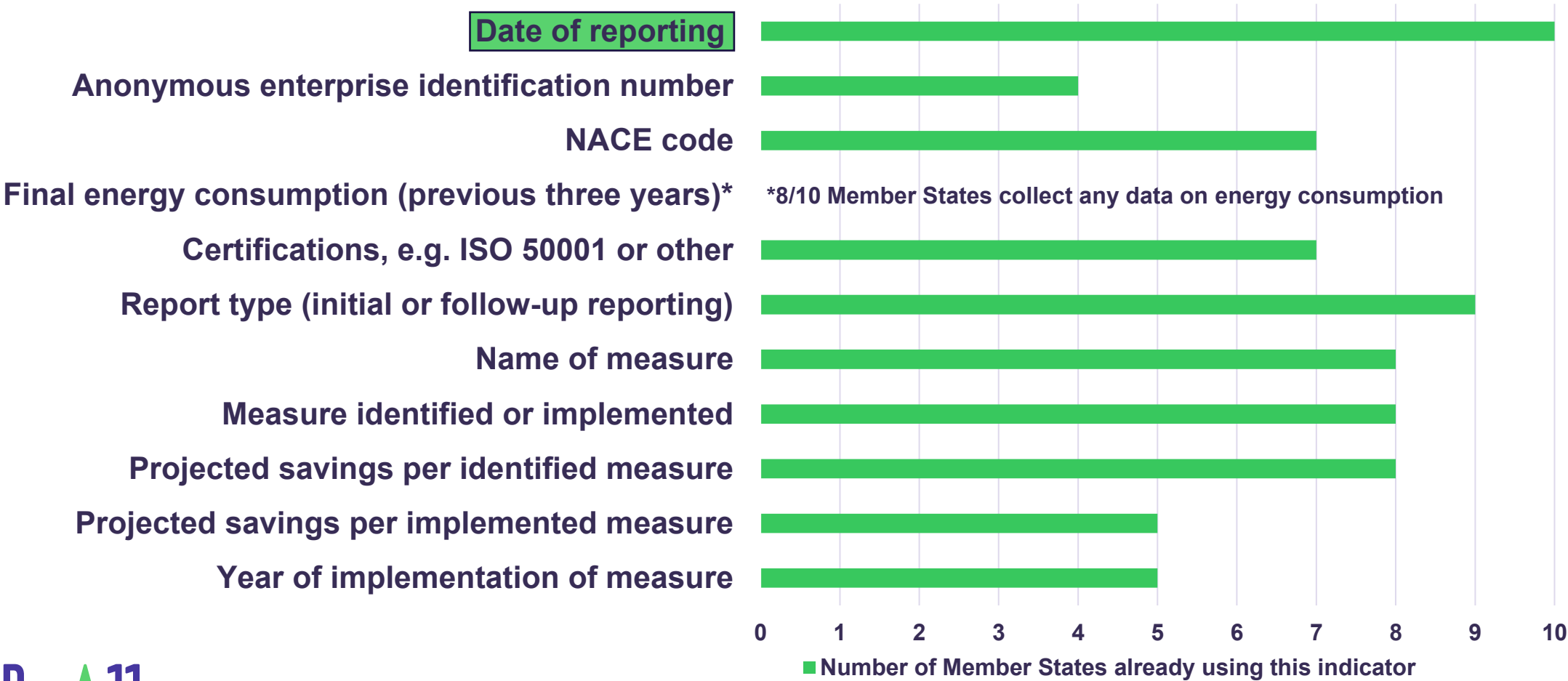
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



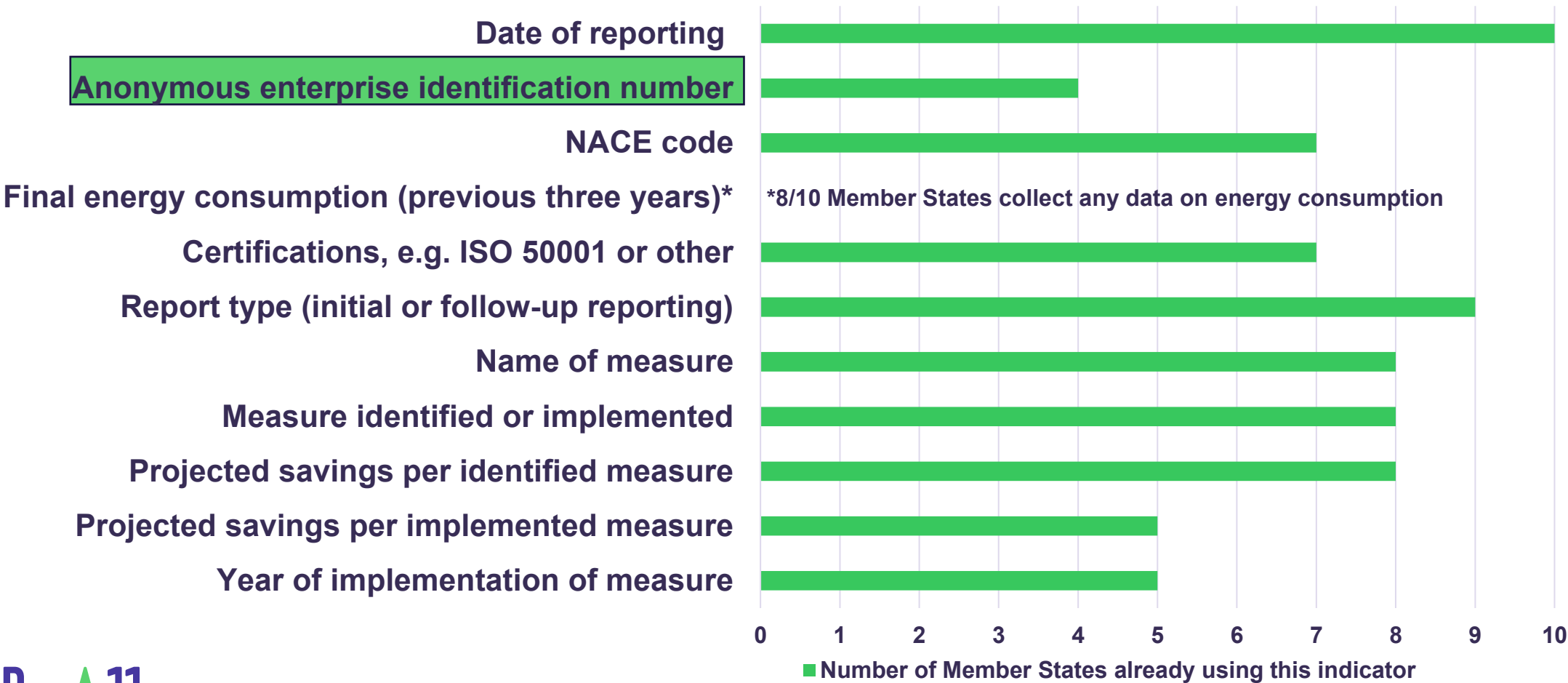
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



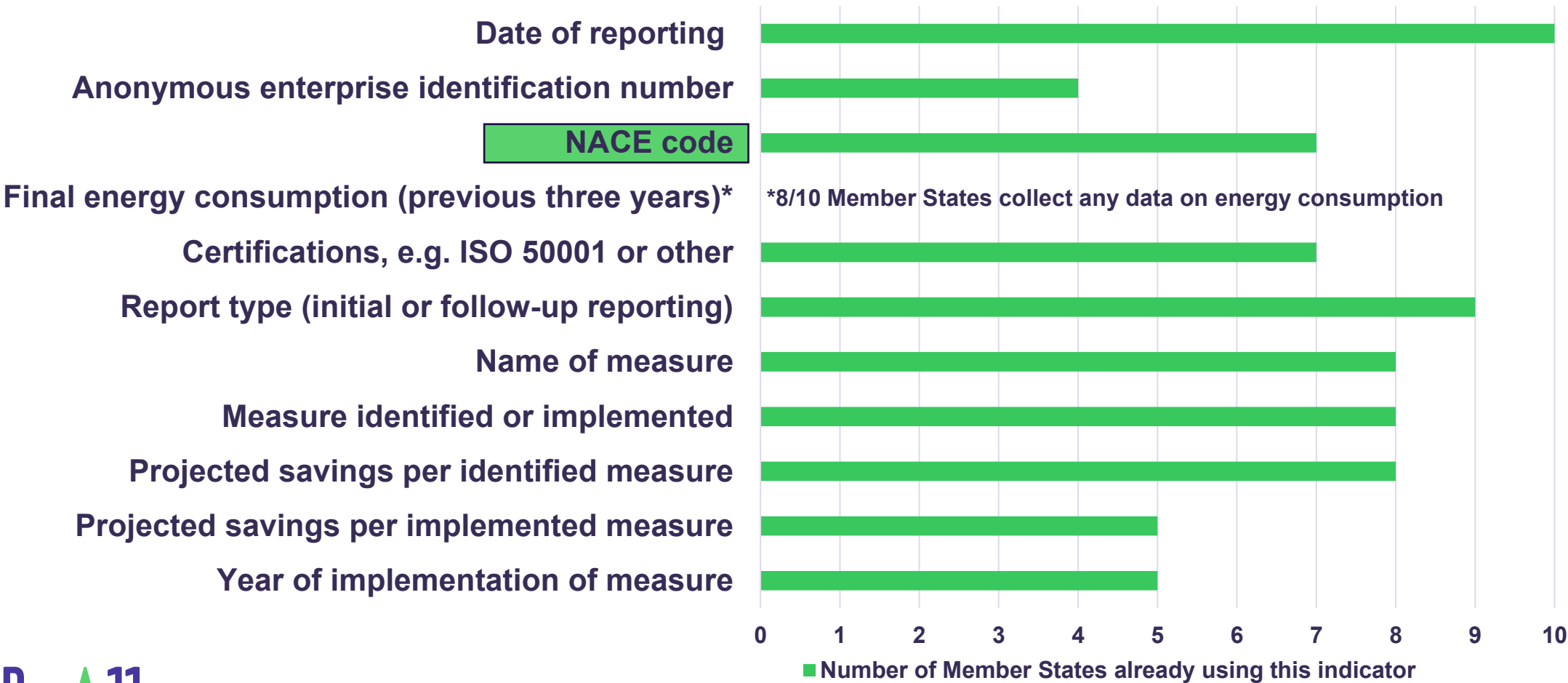
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



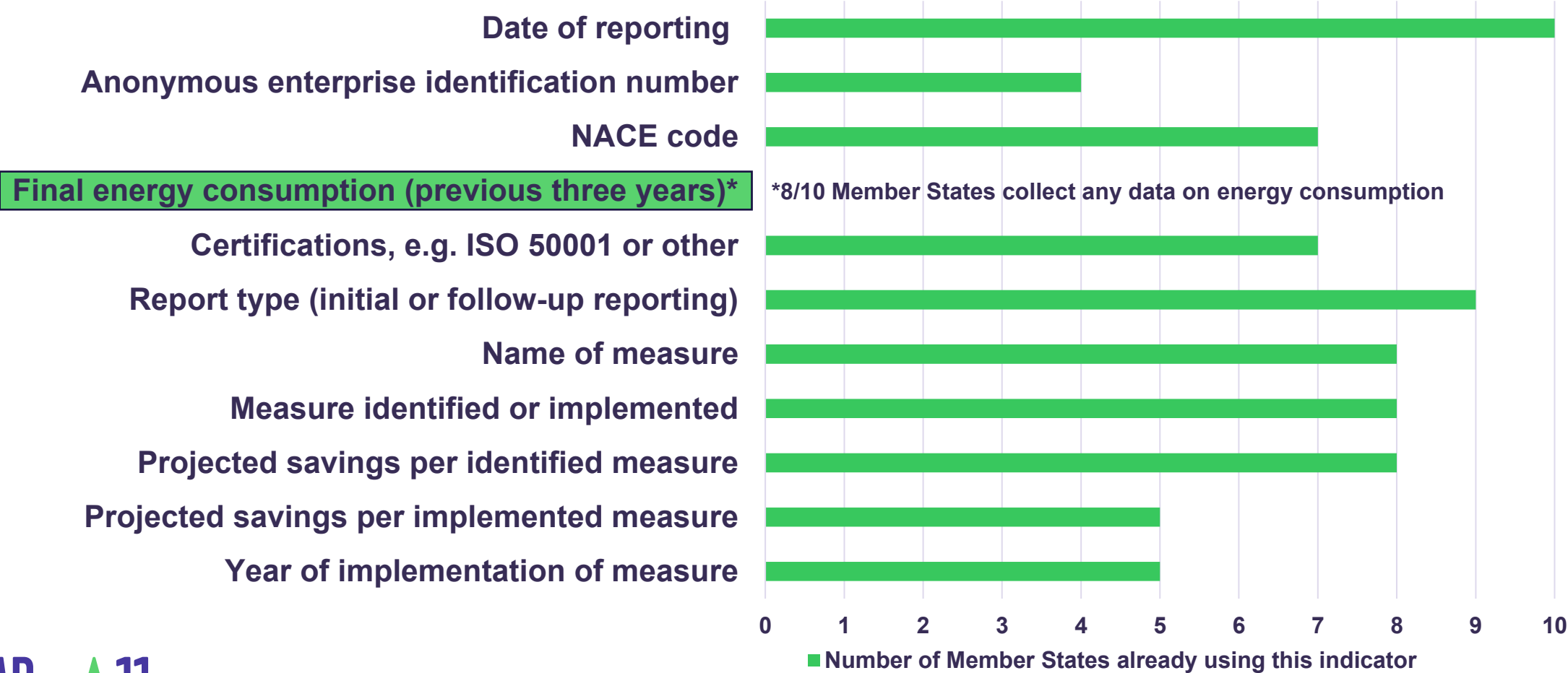
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



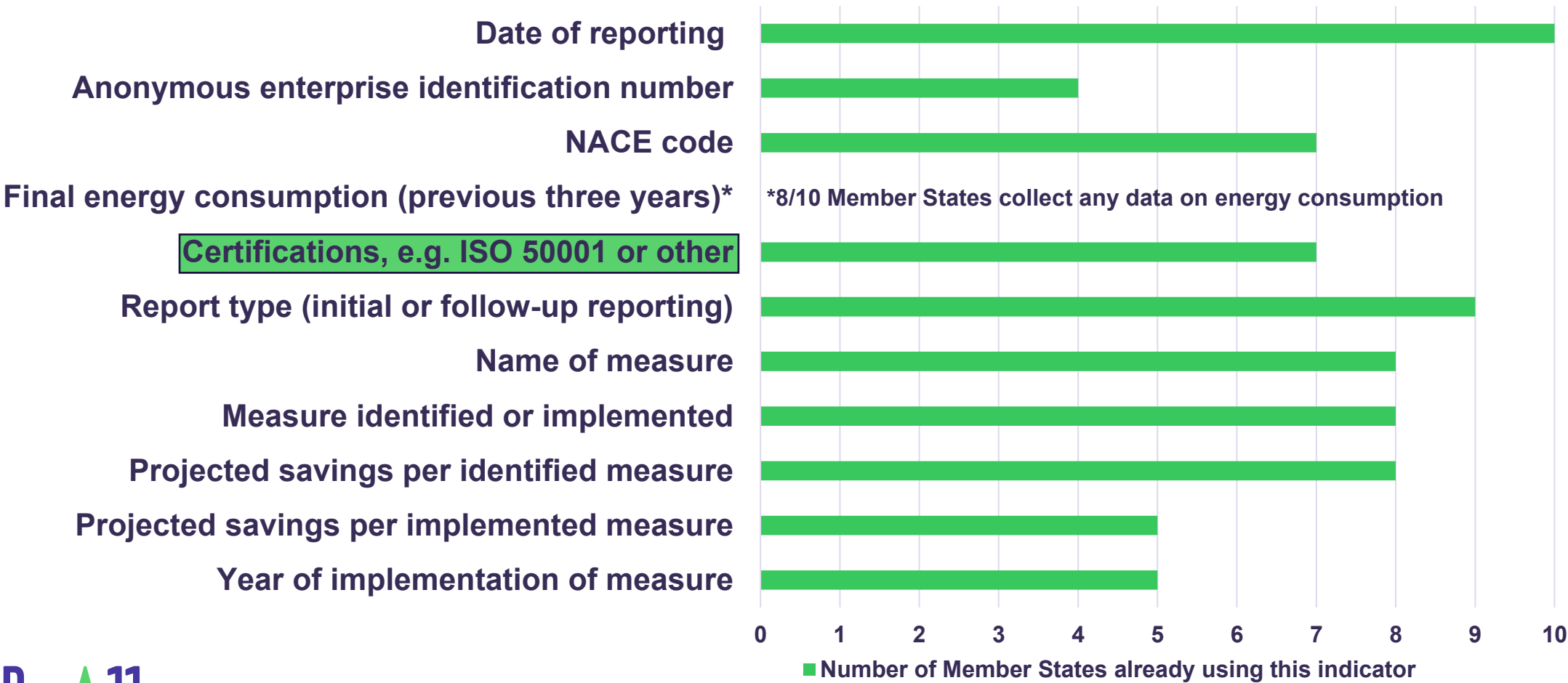
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



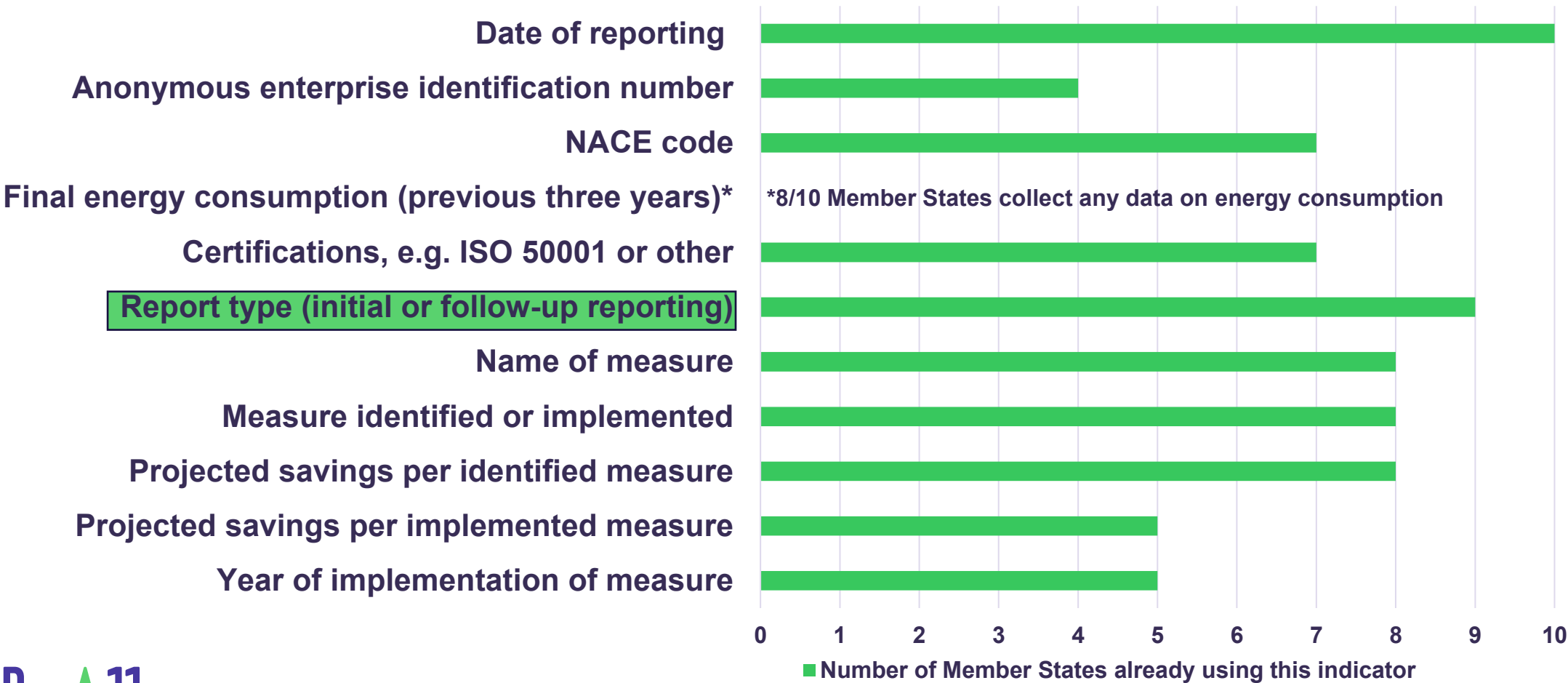
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



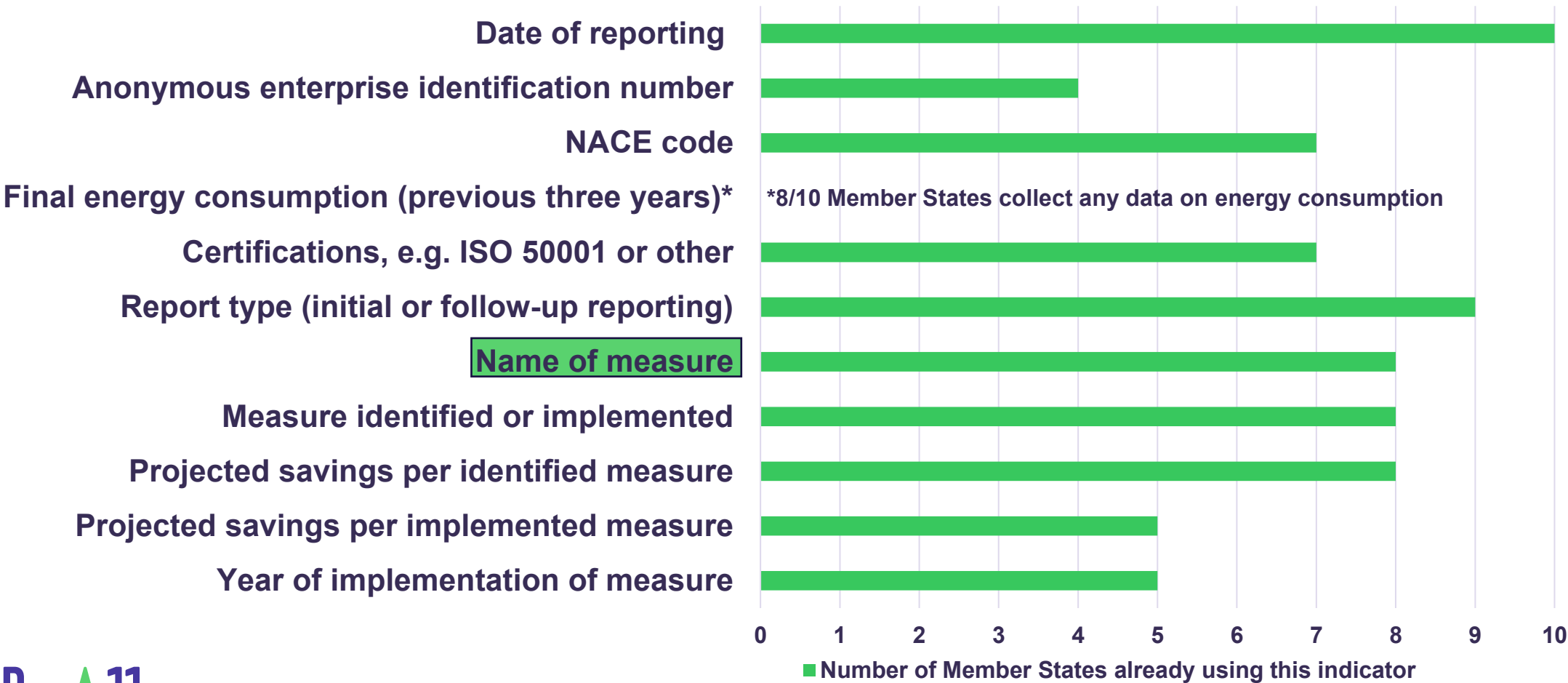
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



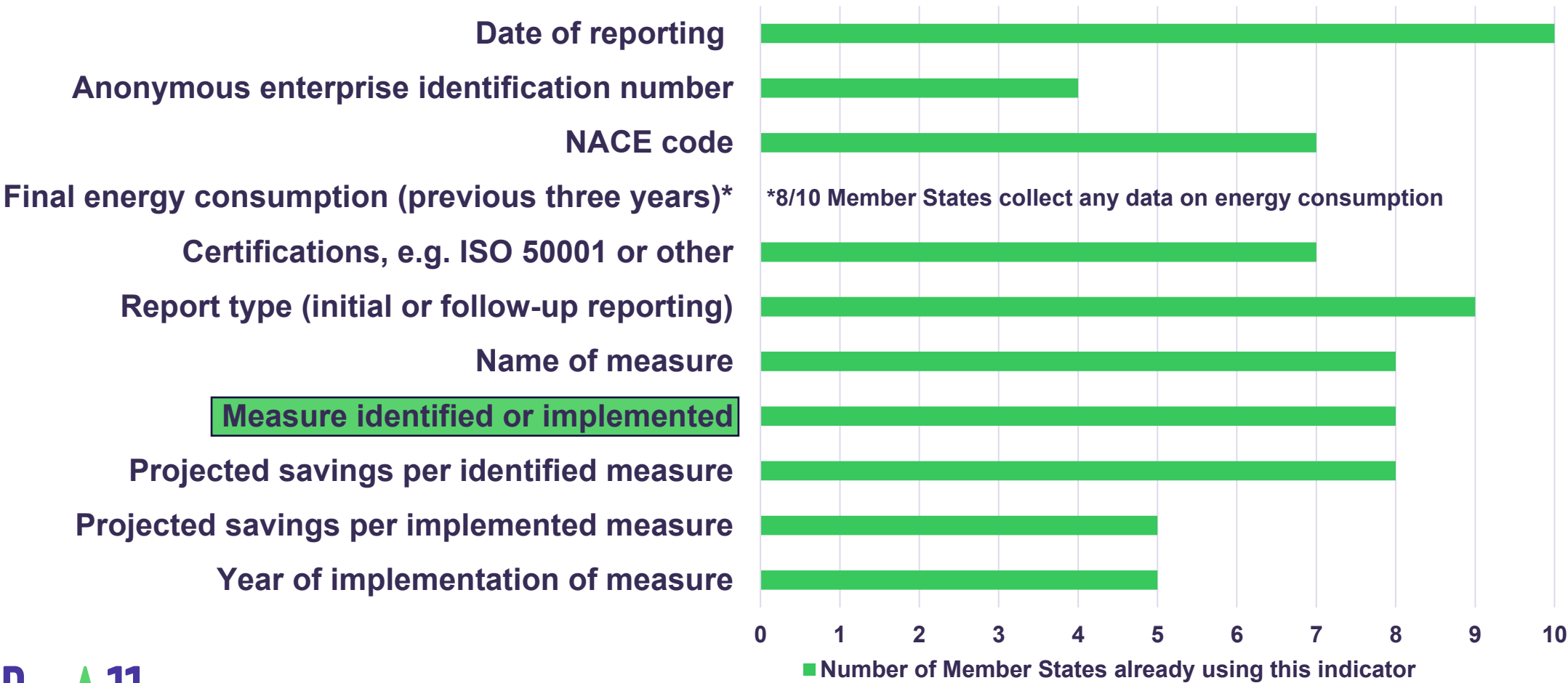
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



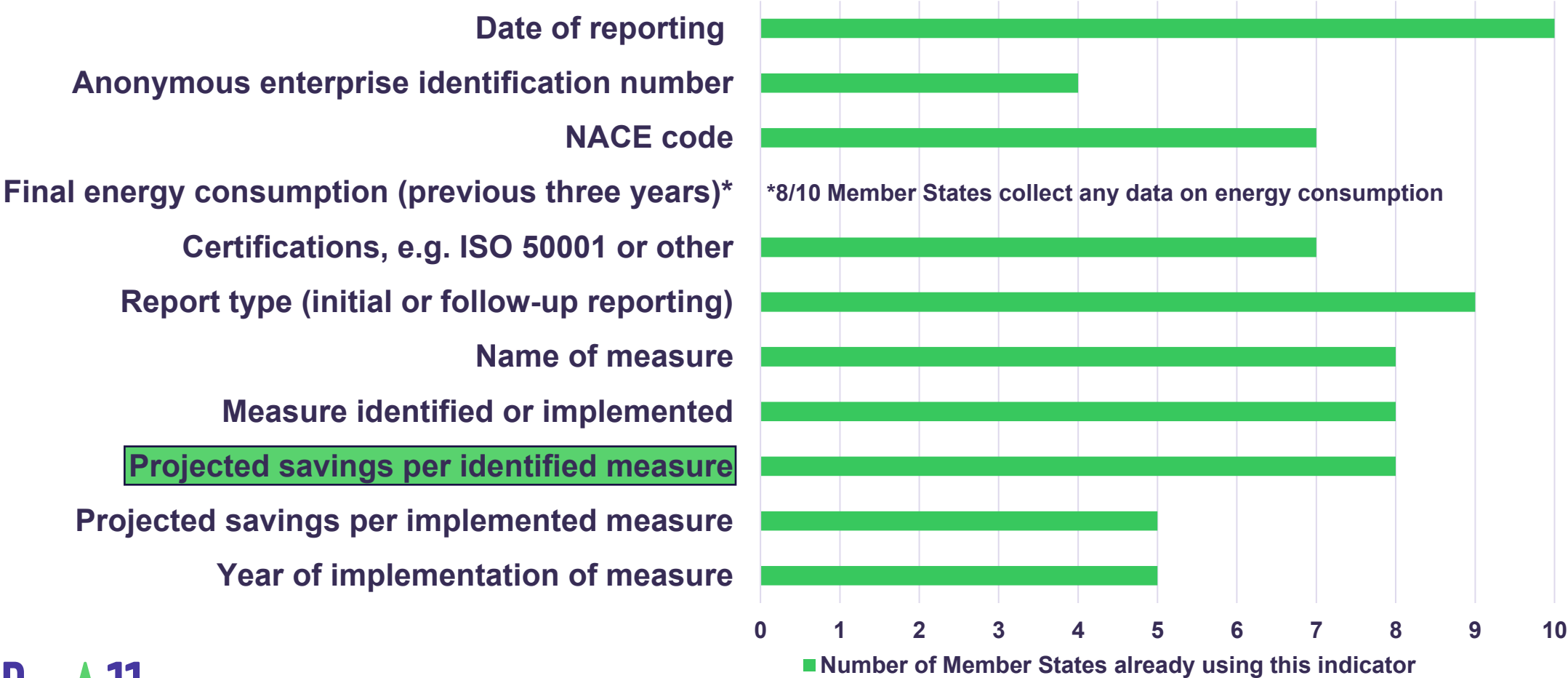
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



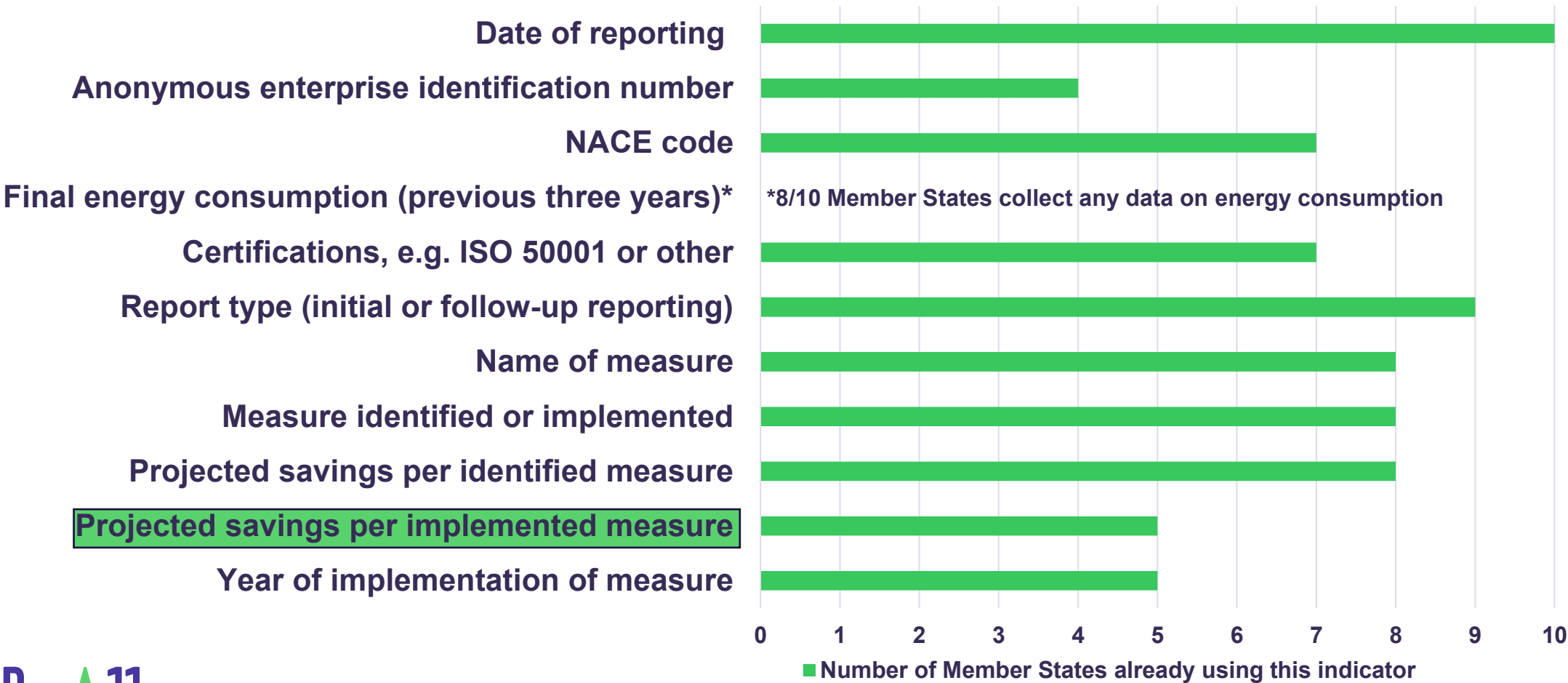
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set



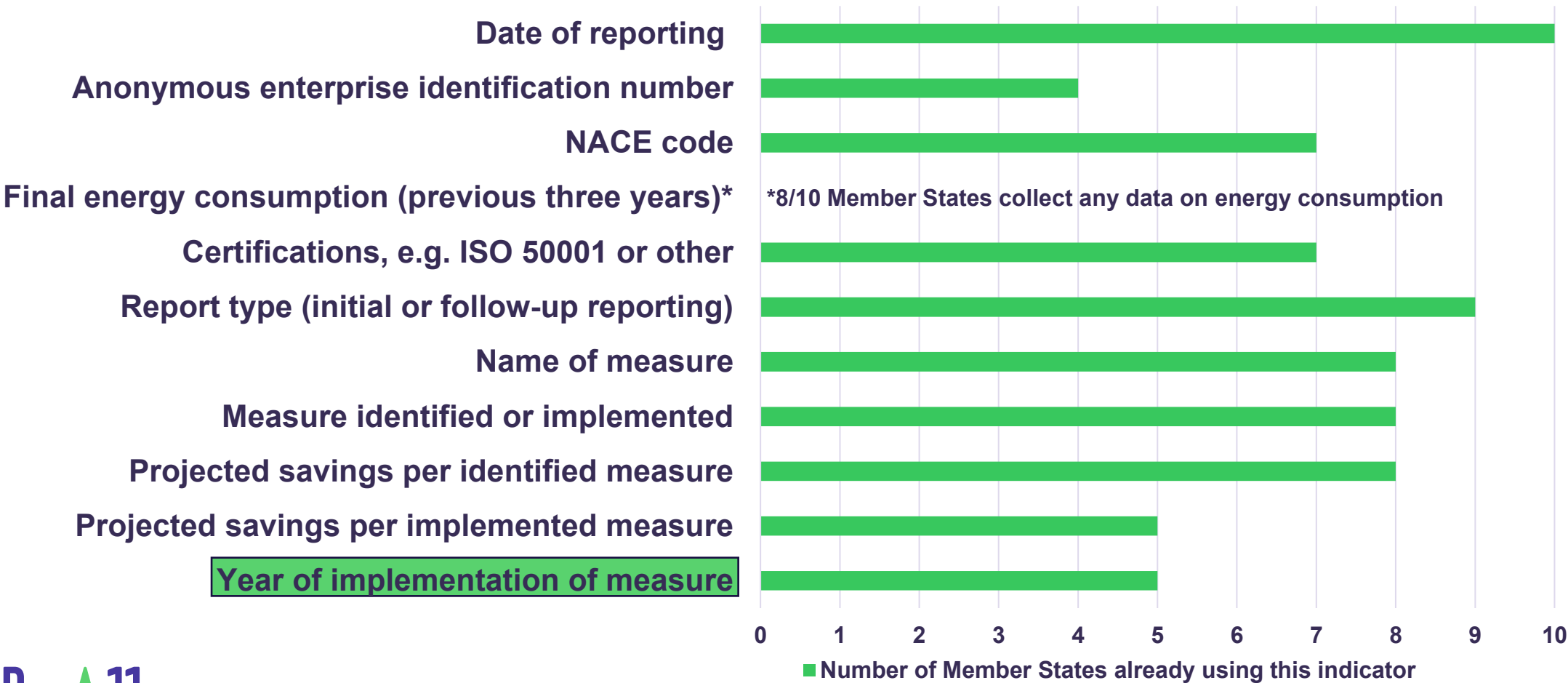
National institutions gather data from enterprises to monitor implementation of obligations

Indicators for basic data set

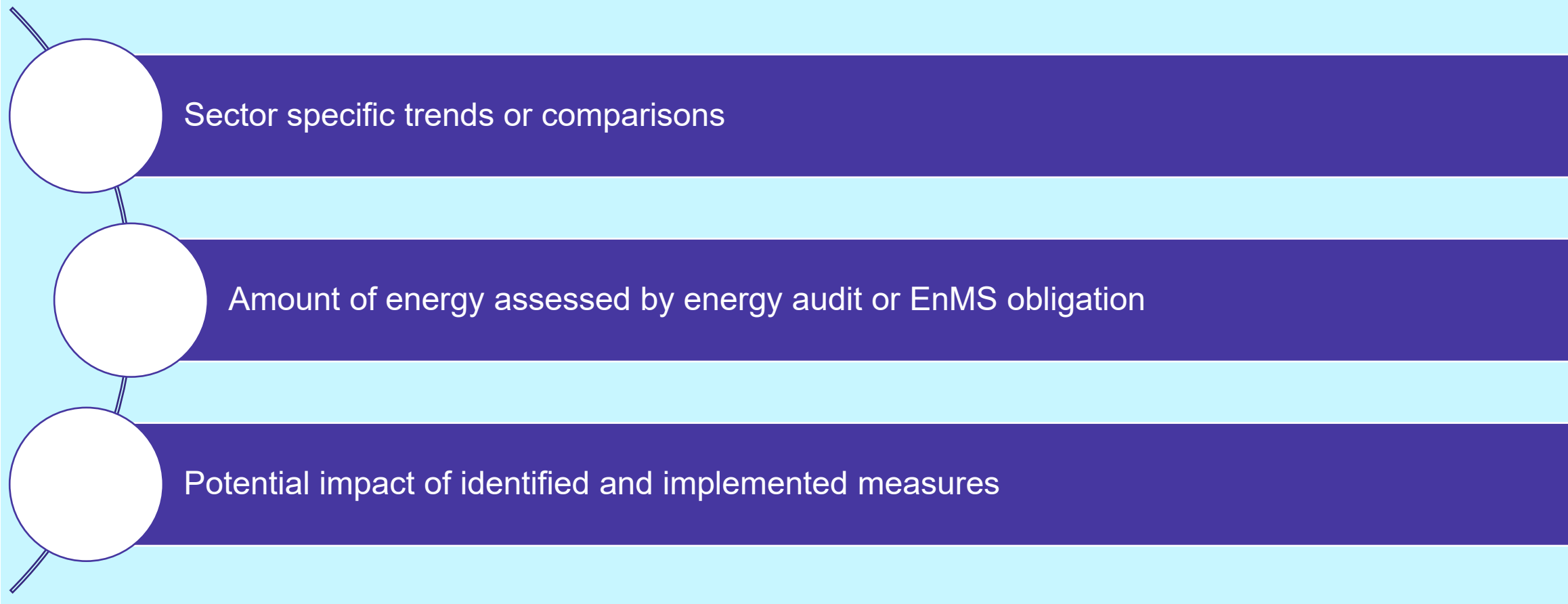


National institutions gather data from enterprises to monitor implementation of obligations

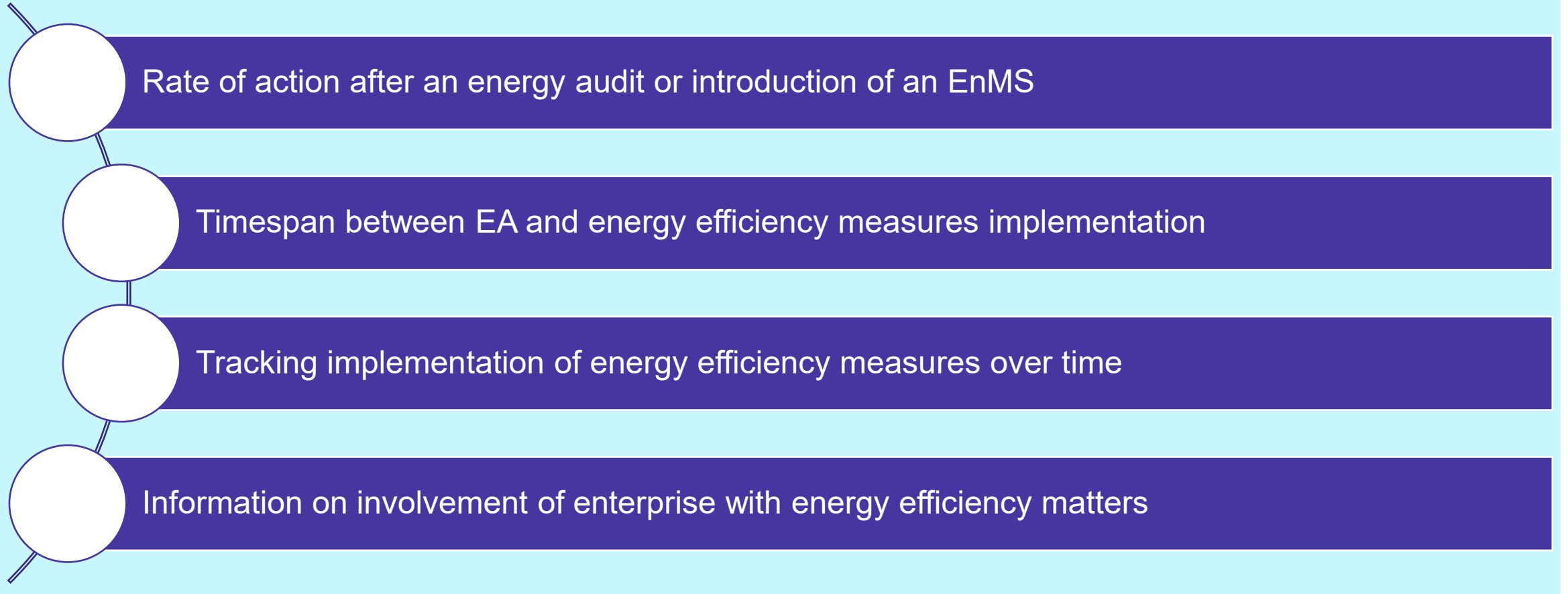
Indicators for basic data set



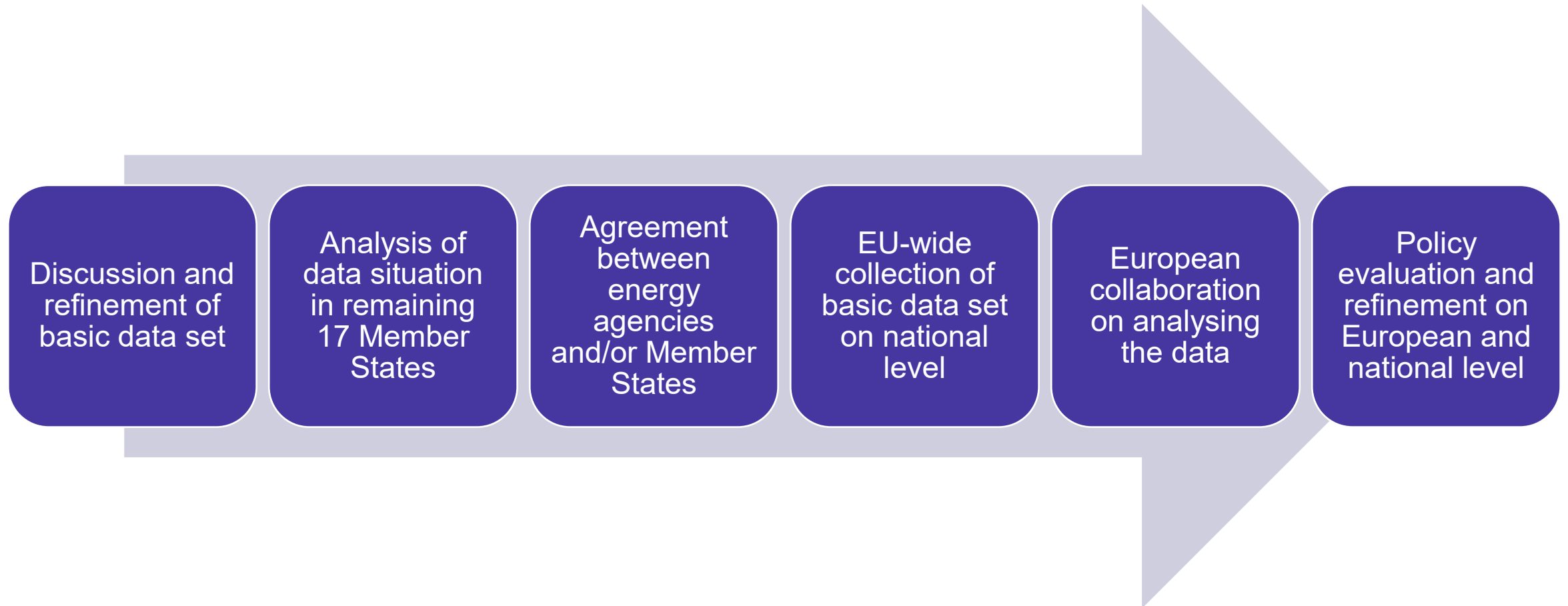
Potential of basic data set



Potential of basic data set



Future steps



About LEAPto11

LEAPto11 aims to support European Member States during the implementation and execution of the new article 11 of the Energy Efficiency Directive (EED).

This initiative is a collaborative effort by ten National Energy Agencies across the continent.

The main goal is to contribute to a comprehensive improvement of the quality framework for Energy audits and Energy management systems (EnMs) through the evaluation, update, upgrade, and optimisation of current national programmes.

Get in touch

Ada Elsa Claus

Senior Expert Industry

Ada-Elsa.Claus@dena.de

Dr. Daniel Vallentin

Team Leader Industry

Daniel.Vallentin@dena.de



www.leapto11.eu



[Deliverable 2.1](#)



[Article in Energy Efficiency Journal](#)



Co-funded by
the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.