



# **Actions to reduce domestic heating emissions in the Malopolska Region**

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# Air quality in Małopolska Region

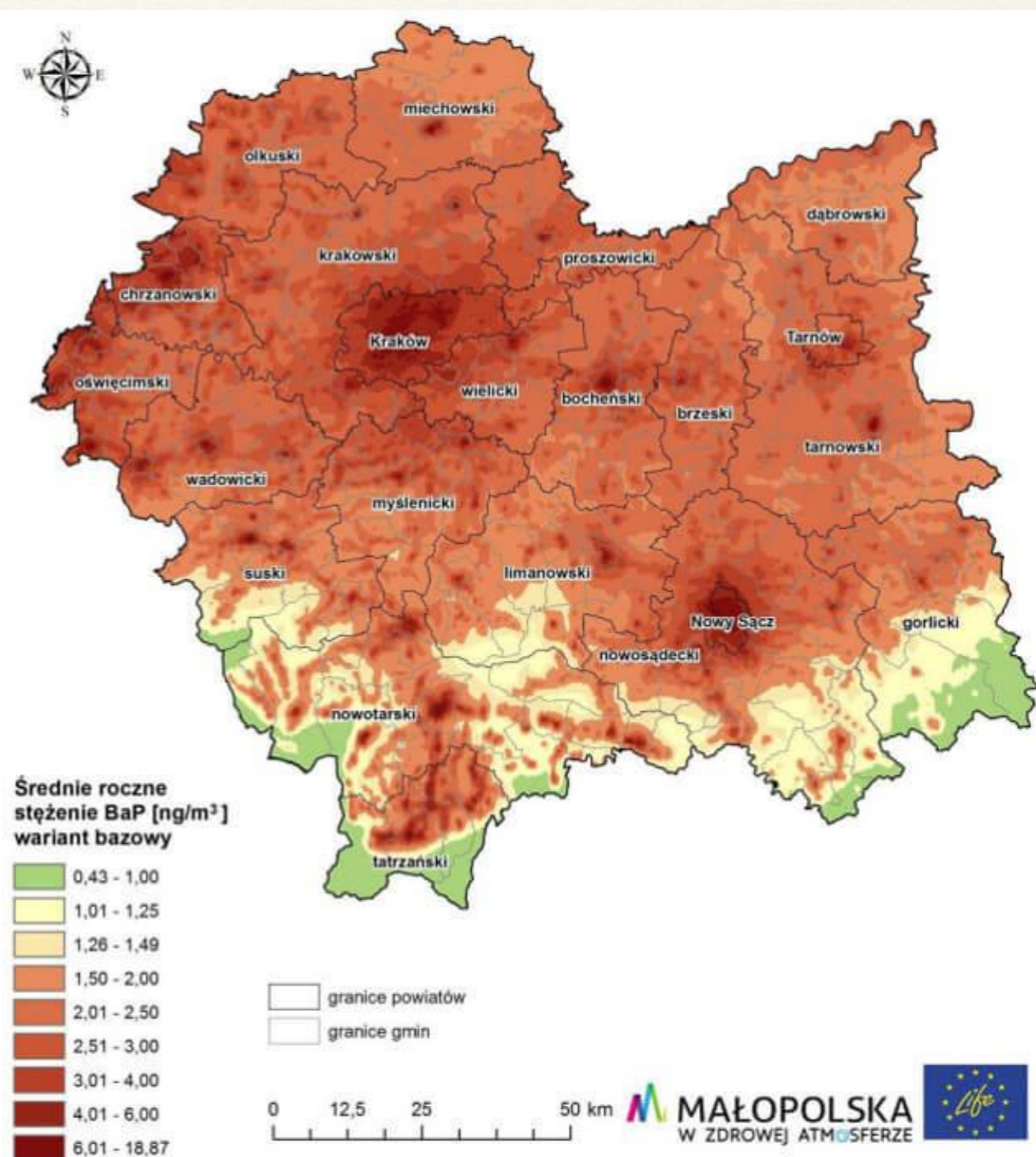
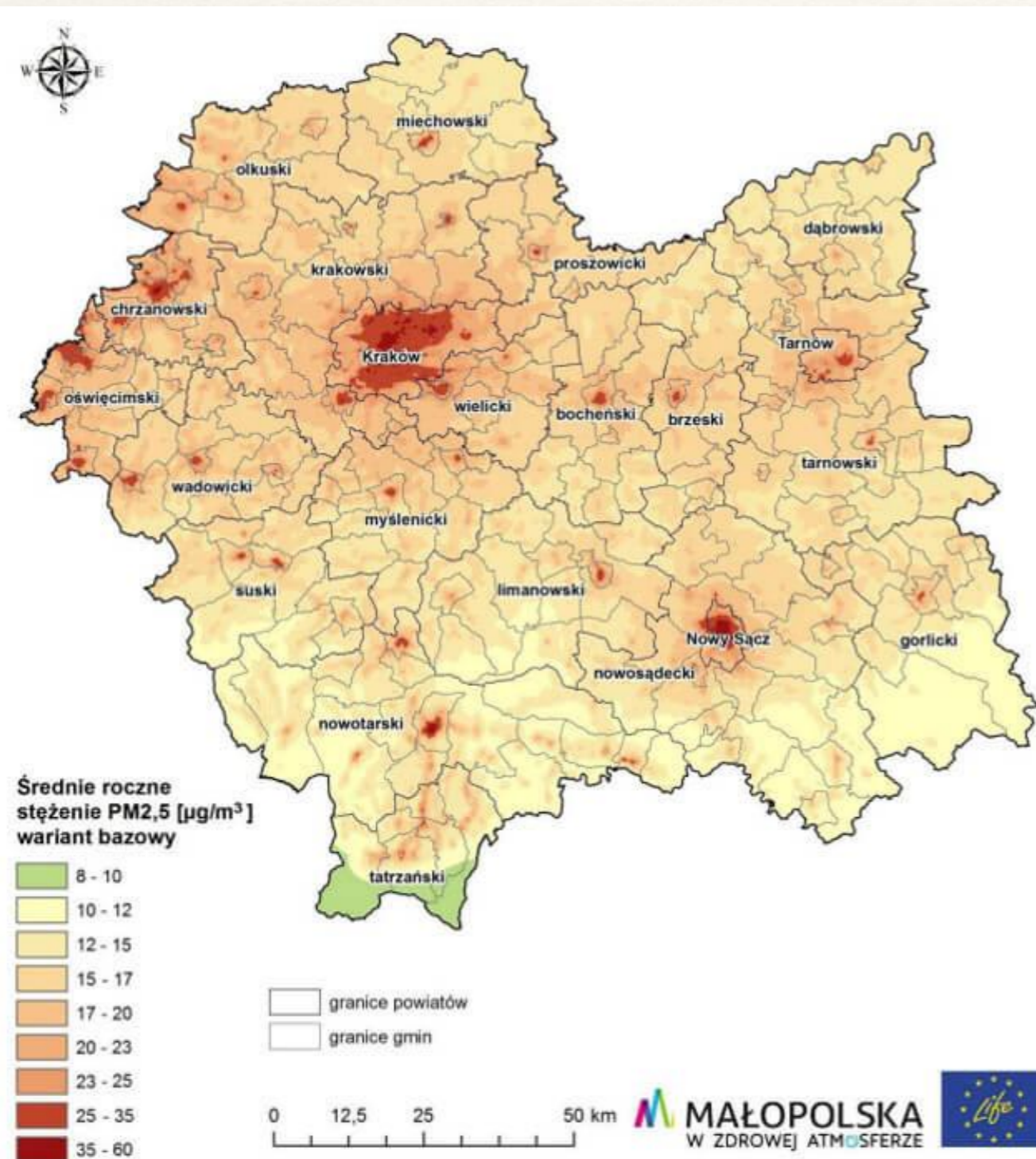
- The Małopolska Region has some of **the poorest air quality** in the EU.
- **98% of residents** live in areas where WHO standards for PM2.5 and benzo(a)pyrene are exceeded.
- The main cause of air pollution is emission from inefficient **old boilers** that use **solid fuels** – mostly coal.
- In Malopolska about **500,000** solid fuel boilers are used.



# Air quality in Malopolska Region

## PM2.5 [ $\mu\text{g}/\text{m}^3$ ]

## BaP [ $\text{ng}/\text{m}^3$ ]



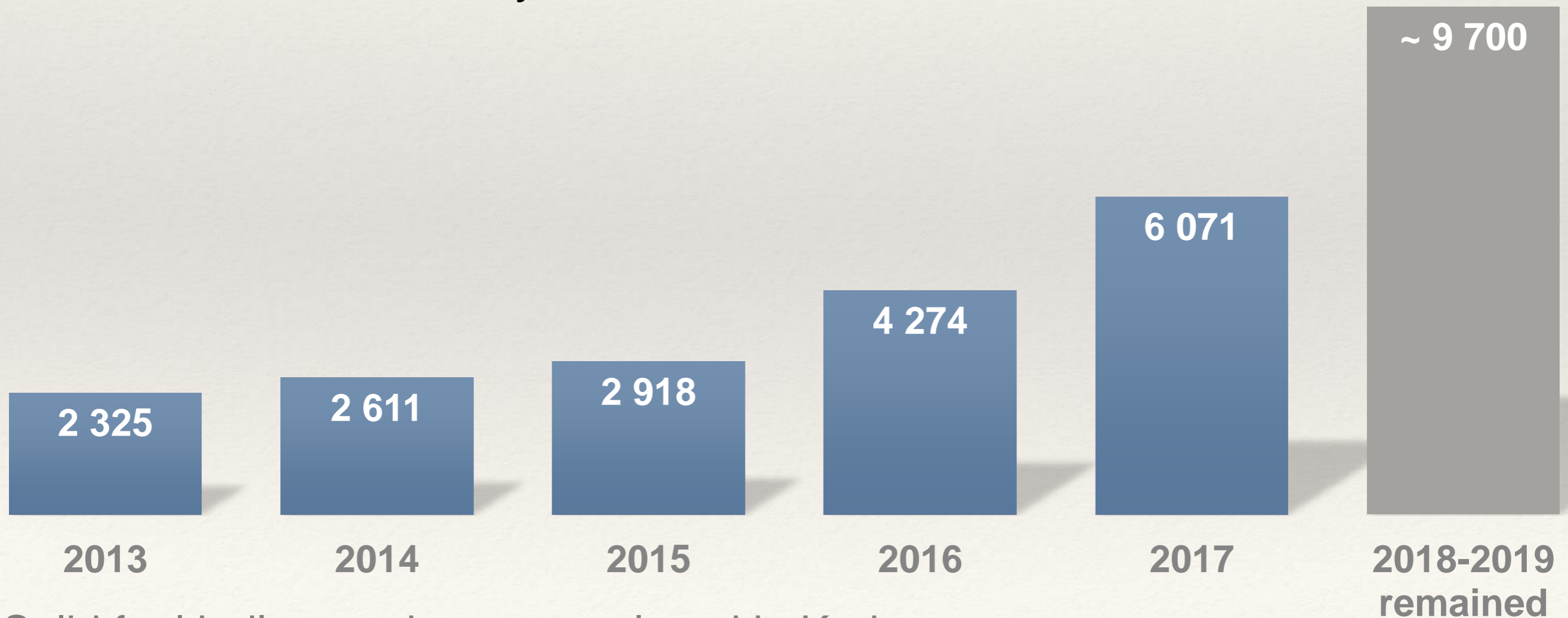
# Anti-smog resolution for Krakow

- Anti-smog resolution for Krakow was adopted in **January 2016**.
- From **1 September 2019** in Krakow will be effective **total ban on using solid fuels** (coal and wood) in boilers and space heaters.



# Solid fuel boilers replacement in Krakow

- City of Krakow offered **subsidies up to 100%** for solid fuel boiler replacement (2013-2016), 80% in 2017 and 60% in 2018.
- In 2013 Krakow introduced **additional subsidies for the poorest** compensating **higher costs of fuel**. Subsidies are part of the social care system.



Solid fuel boilers and stoves replaced in Krakow

# Anti-smog resolution for Malopolska

- Adopted in January 2017. Effective from **1 July 2017**.
- Ban on using **new solid fuel boilers or space heaters** (e.g. fireplaces) which do not comply with **ecodesign emission standards**.
- Ban on burning **coal sludge** or wood with moisture content above 20%.
- New boilers have to be equipped with **automatic fuel feeding**.



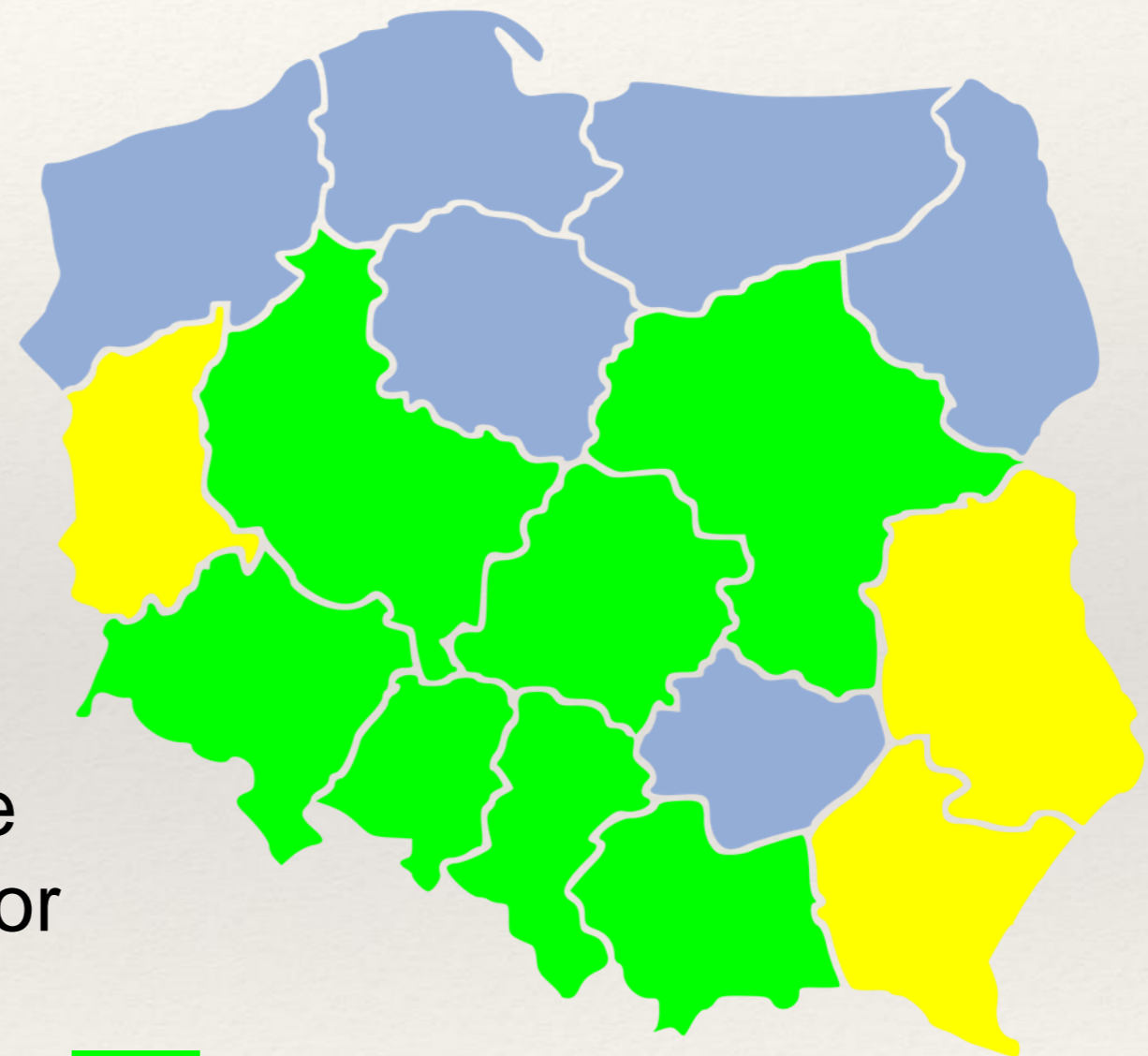
# Anti-smog resolution for Malopolska

- All **existing boilers** in Malopolska which do not comply with class 3 (EN 303-5:2012) **have to be replaced** until **31 December 2022** and boilers class 3 and class 4 until 31 December 2026.
- **Space heaters** below ecodesign standard have to be **replaced until 31 December 2022** or **equipped** in electro-filter.



# Anti-smog resolutions in Poland

- In 2017 **seven regions in Poland** adopted anti-smog resolutions: Śląskie, Dolnośląskie, Mazowieckie, Łódzkie, Wielkopolskie, Opolskie.
- Currently **three other regions** are working on their own resolutions.
- Regional anti-smog resolutions are response to the lack of actions at the national level (no quality standards for coal, before Oct 2017 no emission standards for solid fuel boilers).



Anti-smog resolutions adopted in 2017

Work in progress, planned in 2018



**POWIETRZA!**

# Thank you!



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