

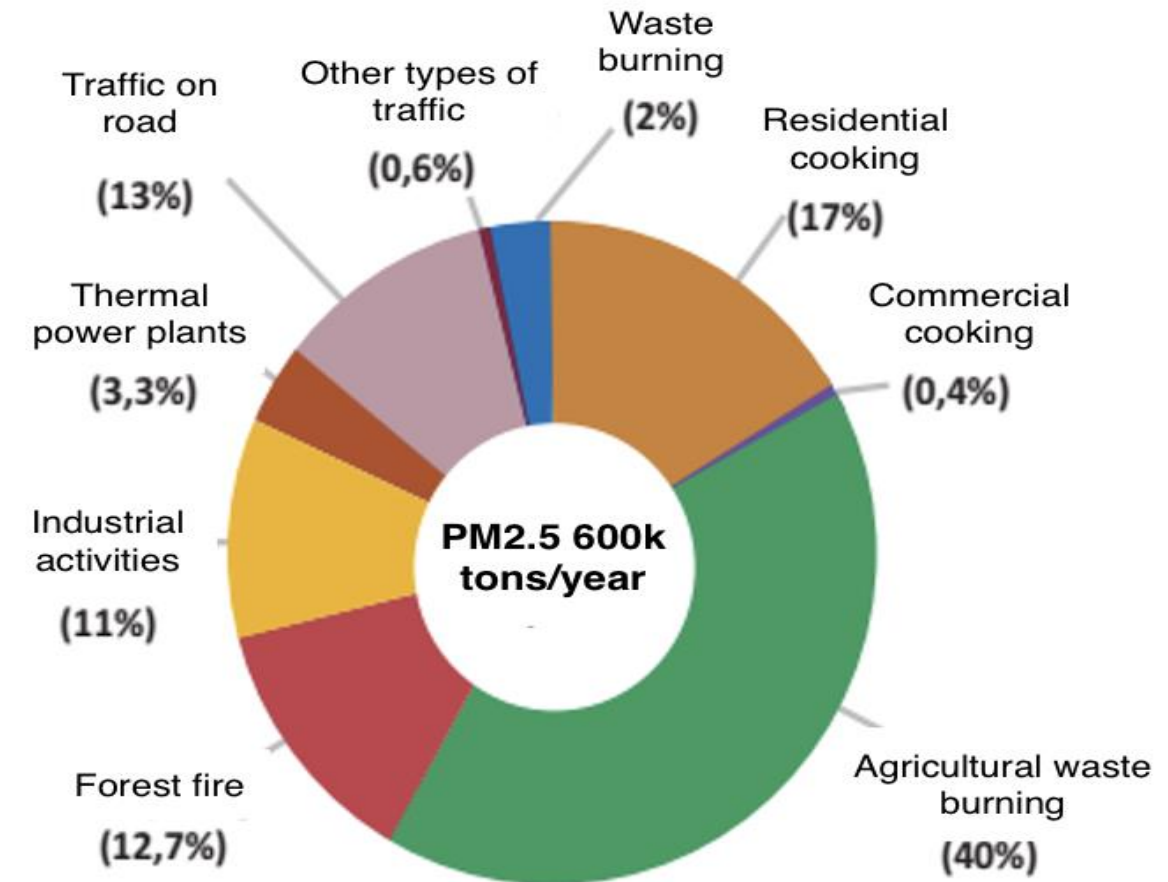
# Air pollution situations in different regions of Vietnam



City	2022	2021
Hà Nội	40.1	36.2
Đà Nẵng	18.8	14.1
Thanh Hoa	29.9	46.9
Ho Chi Minh City	21.2	19.4
Long Xuyen	24.8	26.0

Vietnam's annual average PM2.5 concentration increases to 27.2  $\mu\text{g}/\text{m}^3$  by 2022

## Source of PM 2.5 pollution in 2021



Source: MONRE, 2021

## Current status of the by-products and other waste treatment in the crop sector

No.	Rice by-products and waste	Treatment method (%)						Total
		Burn	Leave on fields	Collect and process	Bury	Reuse	Others	
1	Straw	21.7	20.1	22.4	0.8	30.6	4.4	100
2	Husk	4.0	7.5	20.2	0.0	49.4	19.9	100
3	Plastic bag to cover plants	13.5	-	21.0	2.5	56.2	6.8	100
4	Plastic bag to anti-mouse	11.0	1.0	27.0	9.0	50.7	1.3	100
5	Fertilizer packaging	3.1	1.2	6.5	1.1	79.7	8.4	100
6	Pesticide packaging	15.6	10.4	54.6	7.6	4.6	7.1	100

Source: Compiled from local sources and estimates from the Institute of Agricultural Environment, 2023

# MAC of different GHG mitigation in rice production



harvesting



Straws (50%)



Rice seed (50%)



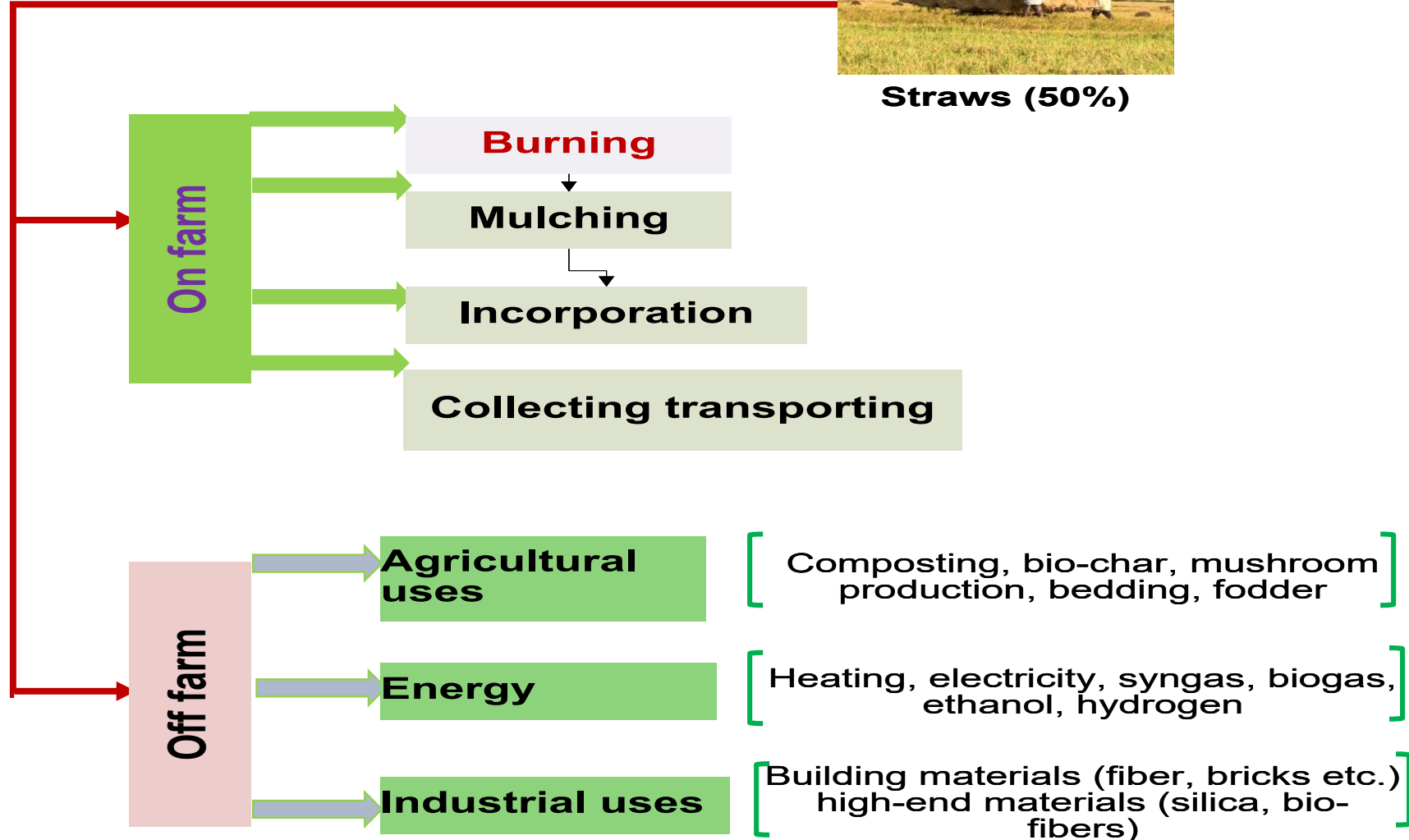
Rice grain (65%)



Husk (20%)



Bran (15%)



# Rice straw management and a potential contribution to clean air and NDC in Vietnam

- Regulation by Hanoi city on zero straw burning in the area close to the airports and in the subur area
- In new program (being approved soon) of one million ha high quality and low carbon rice also targted zero burning
- In VN NDC by 2030: 50% of rice straw will be properly managed/used to contribute to a reduction of 5.38 million Mt CO<sub>2</sub>e