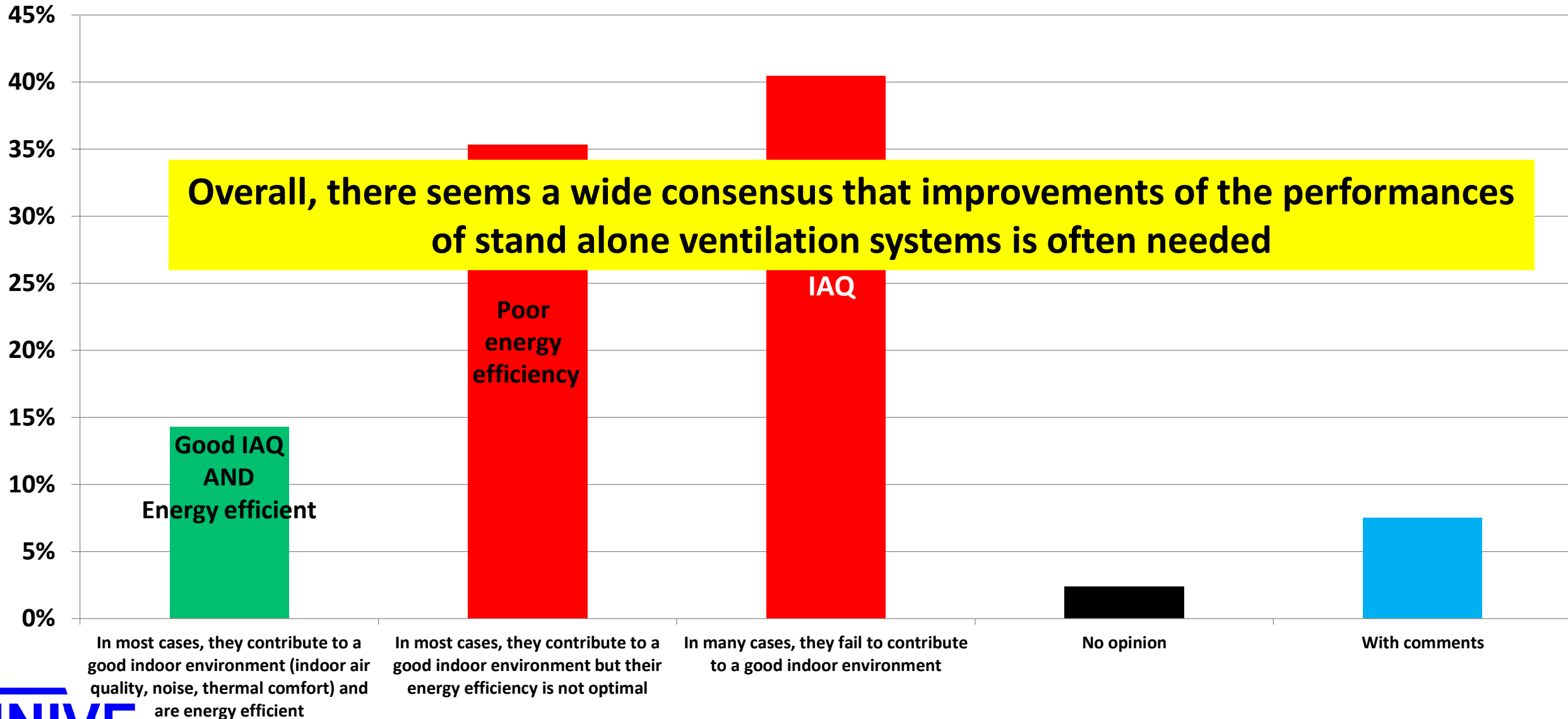


Overview of range of possible measures & possible impacts + Outcome of survey

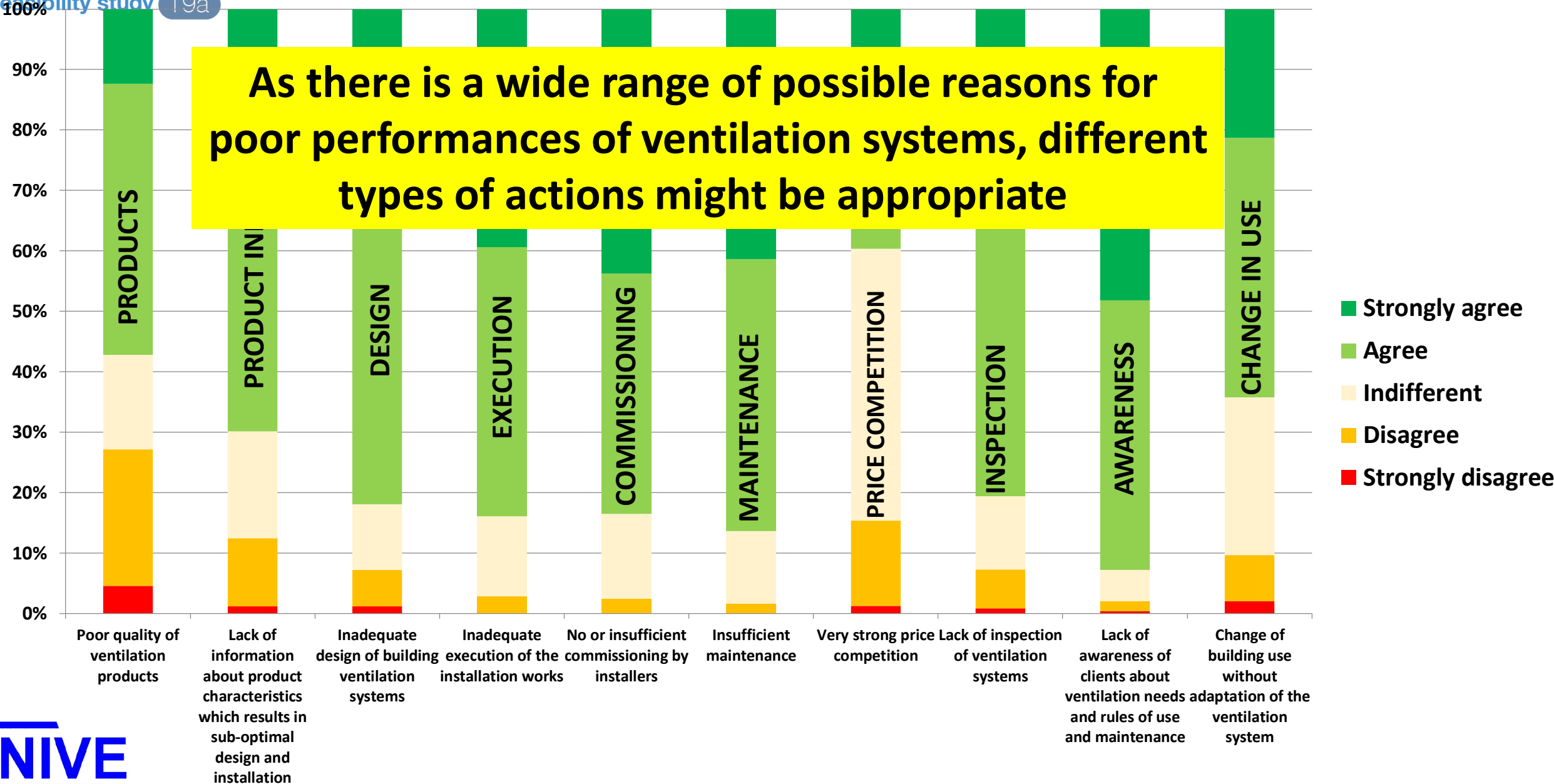
Peter Wouters (INIVE-BBRI)

Your opinion about current overall performance of installed stand-alone ventilation systems?

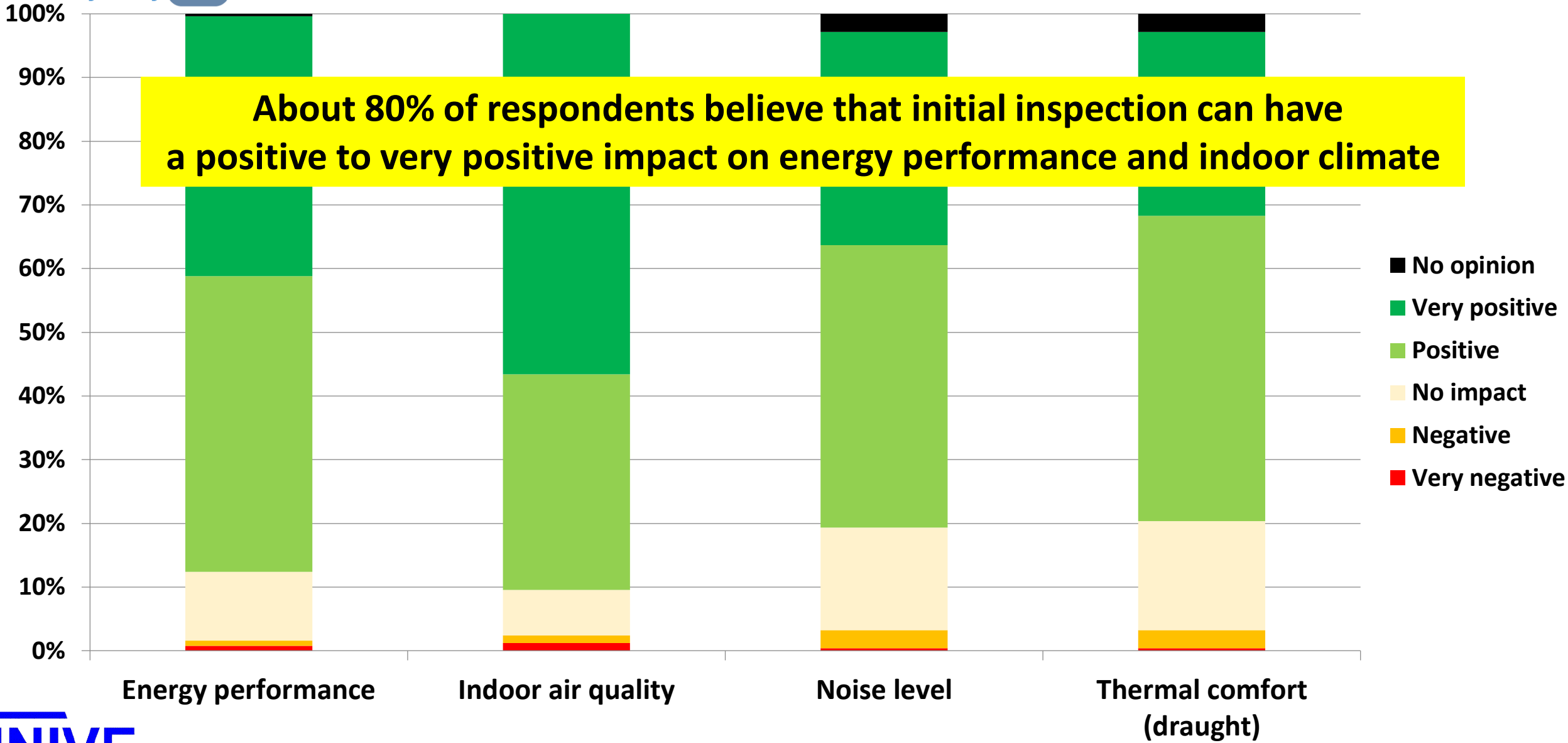


Reasons for poor performances?

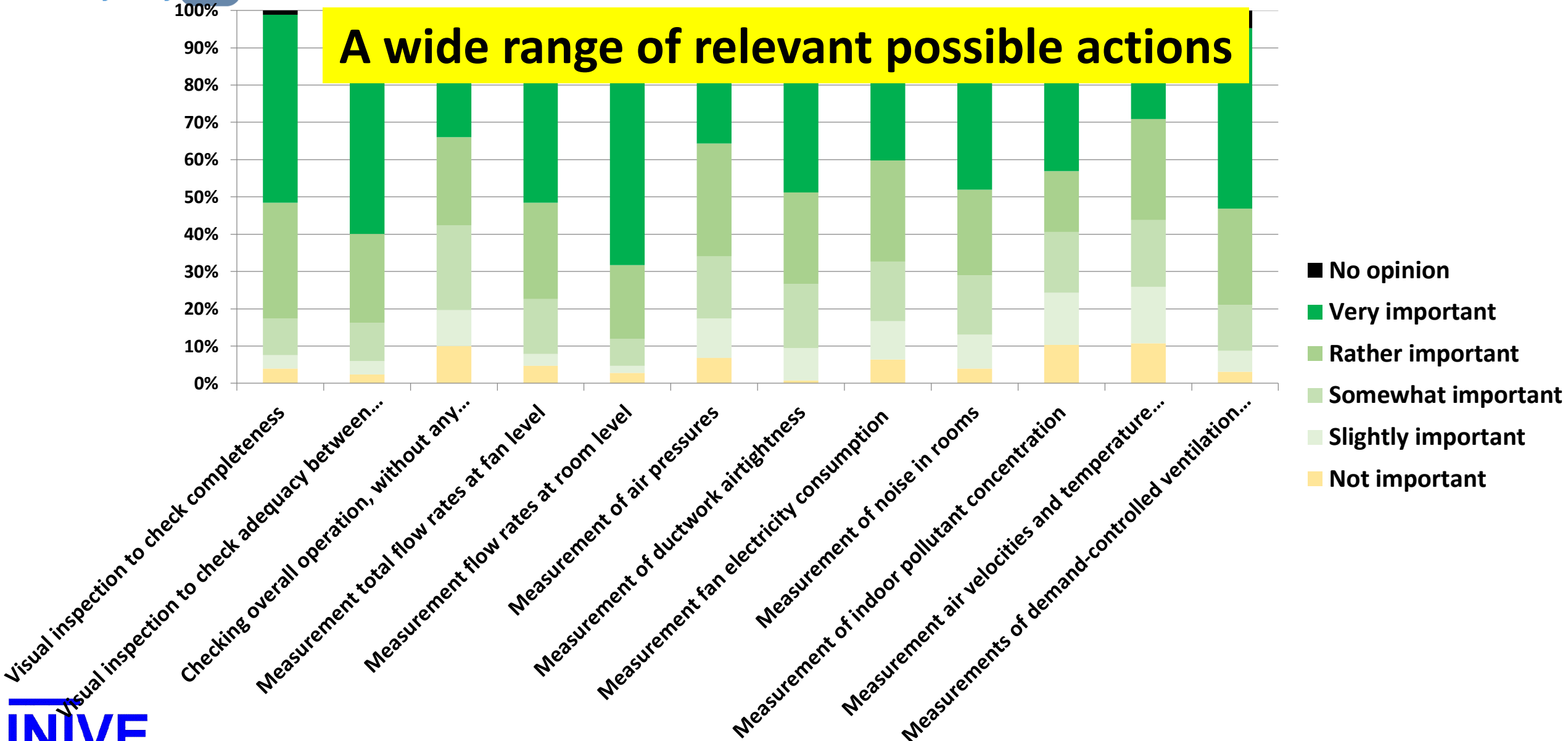
As there is a wide range of possible reasons for poor performances of ventilation systems, different types of actions might be appropriate



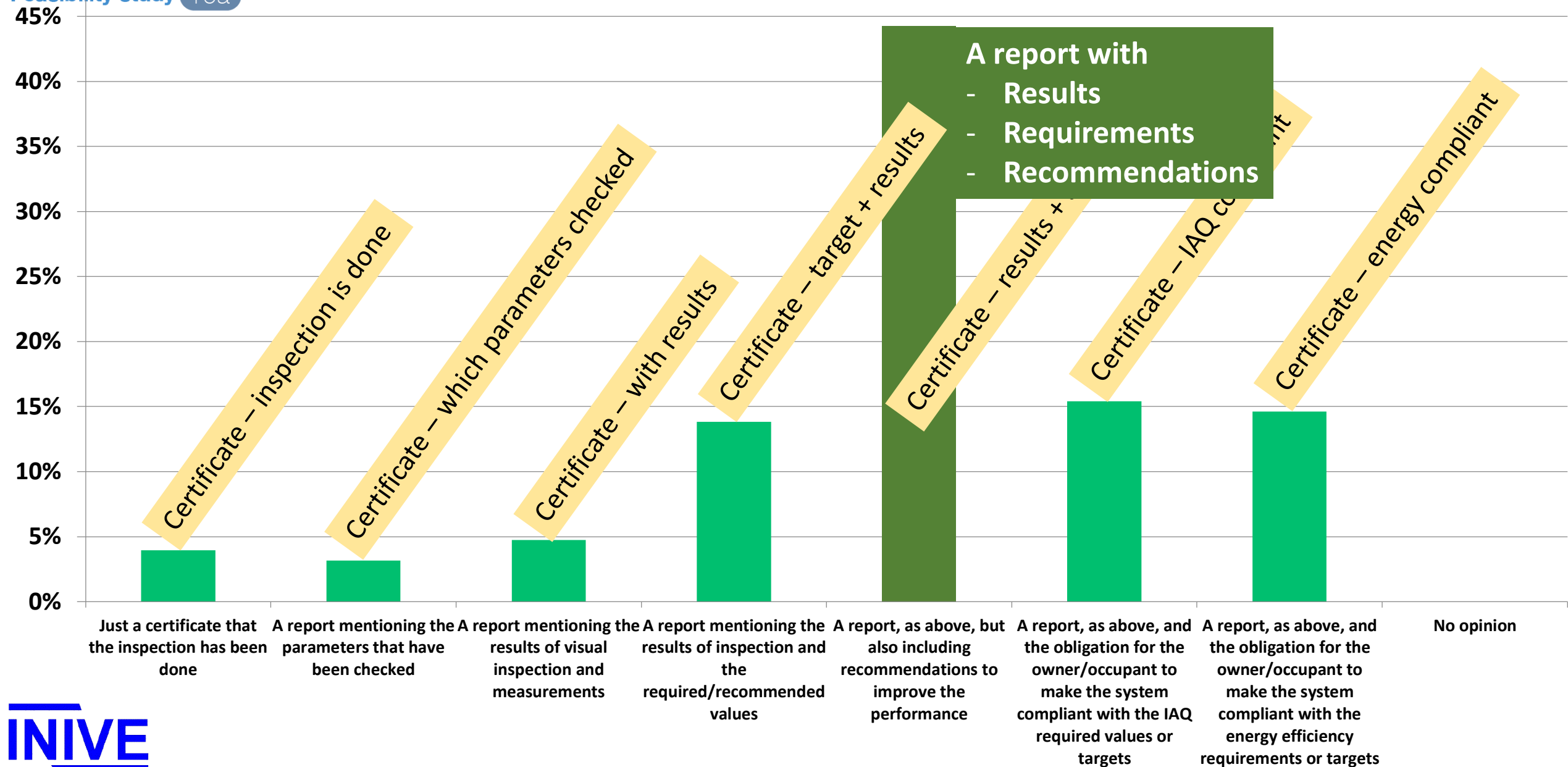
Impact of initial inspection?



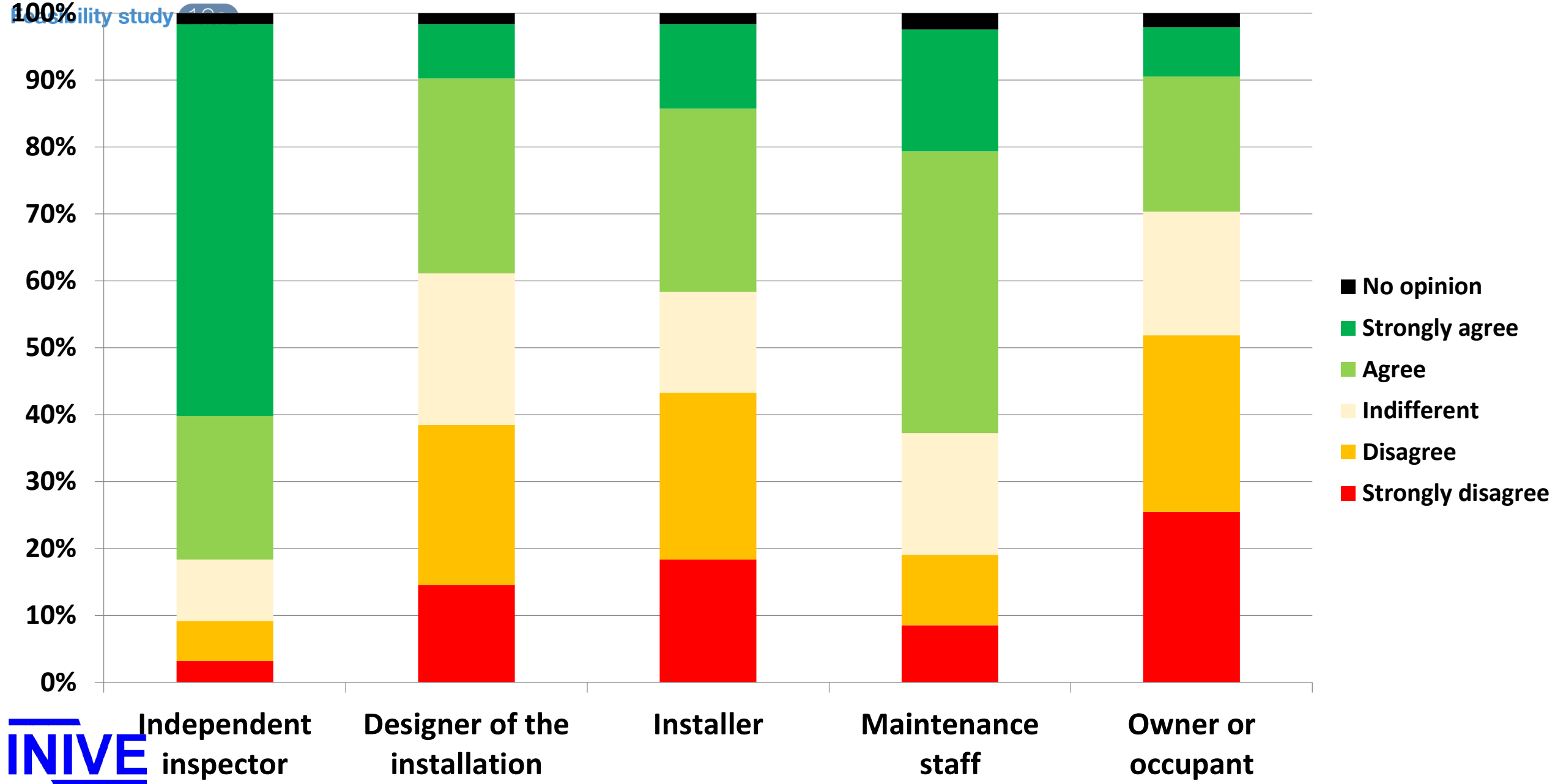
What should be included into the initial inspection of a newly installed ventilation system?



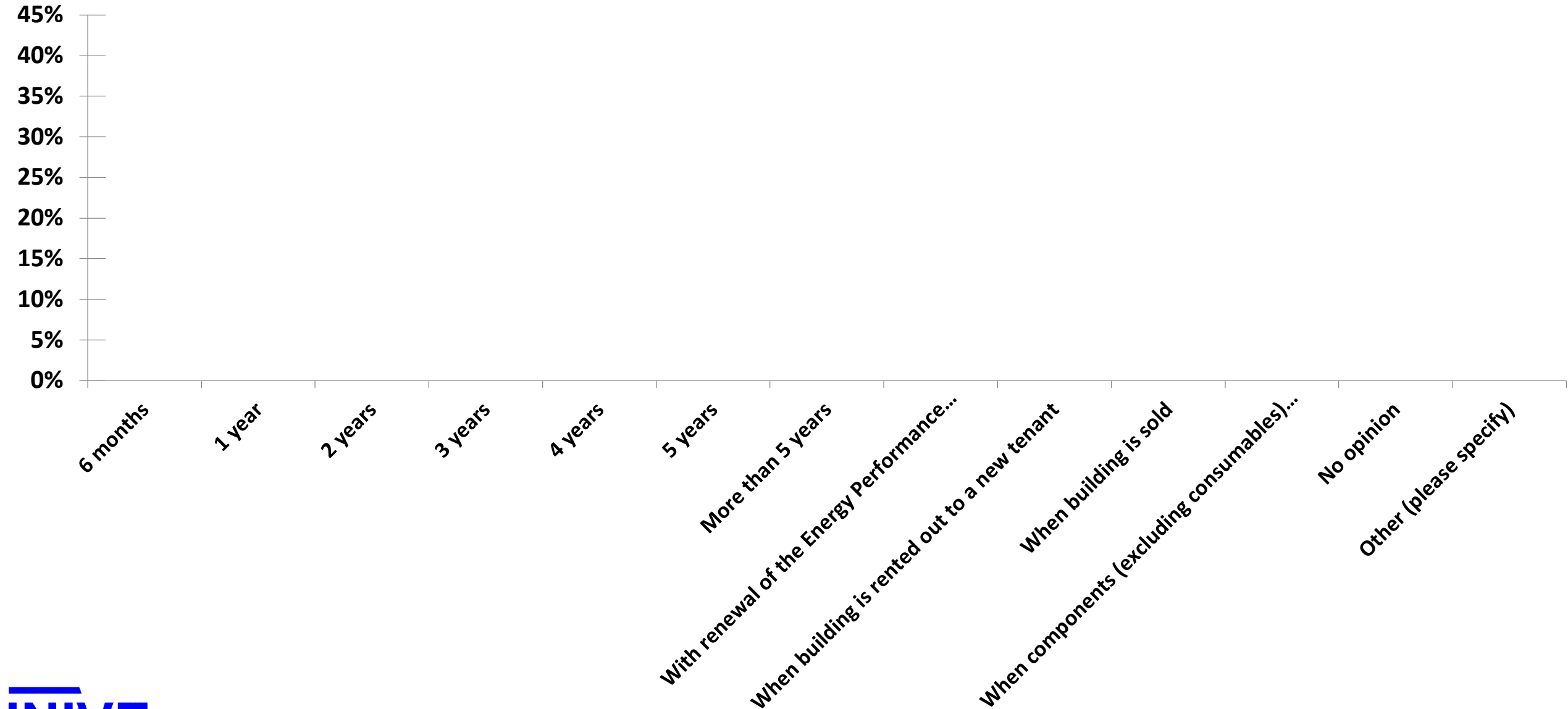
What should be the practical result of an inspection?



Who should do the inspection?



What should be the frequency of the regular inspection of an existing ventilation system?



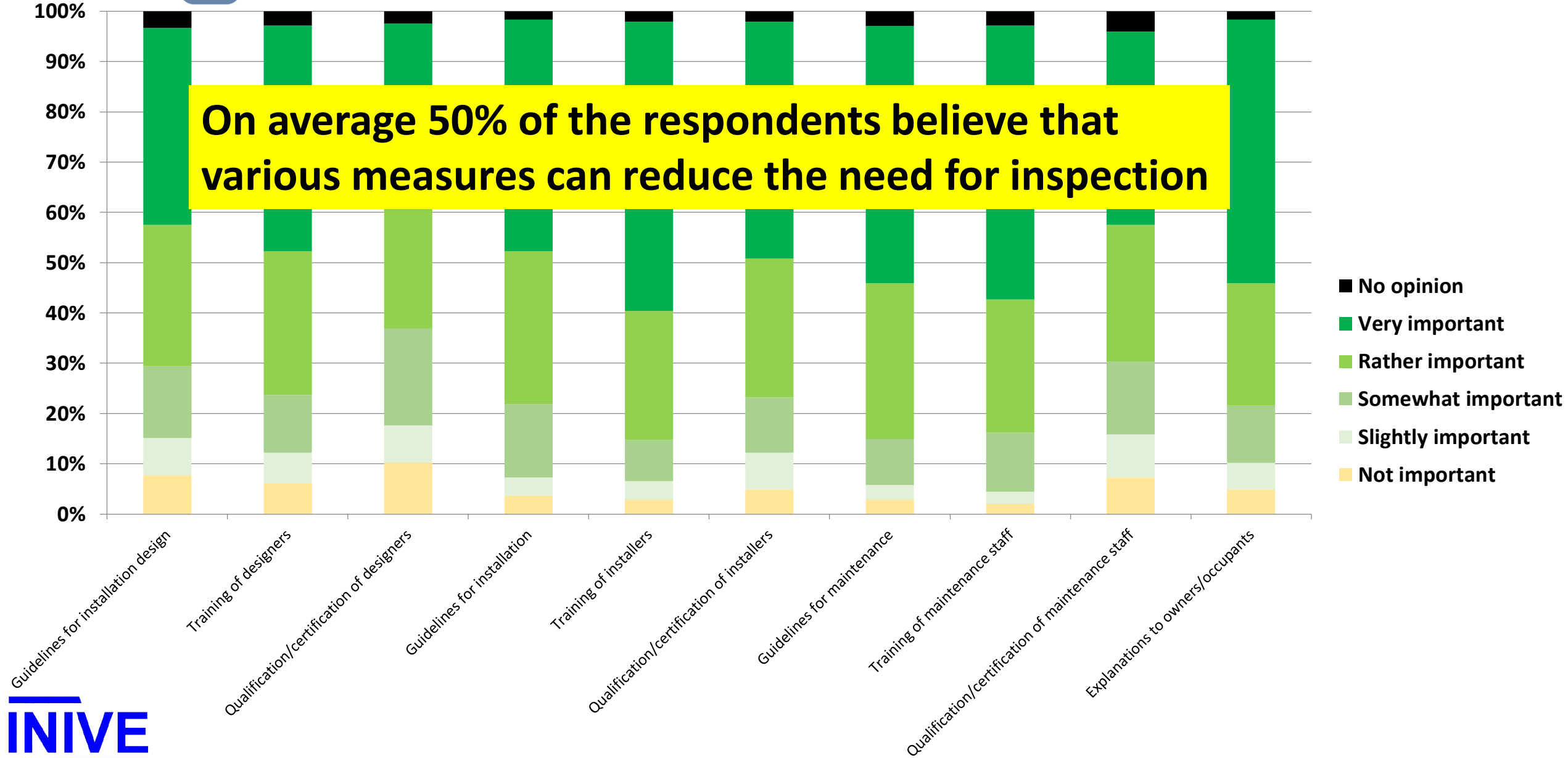
In your country, how much would you assume an average owner of a single-family house or an apartment would be willing to pay for a mandatory inspection?

40% feasibility study 19a

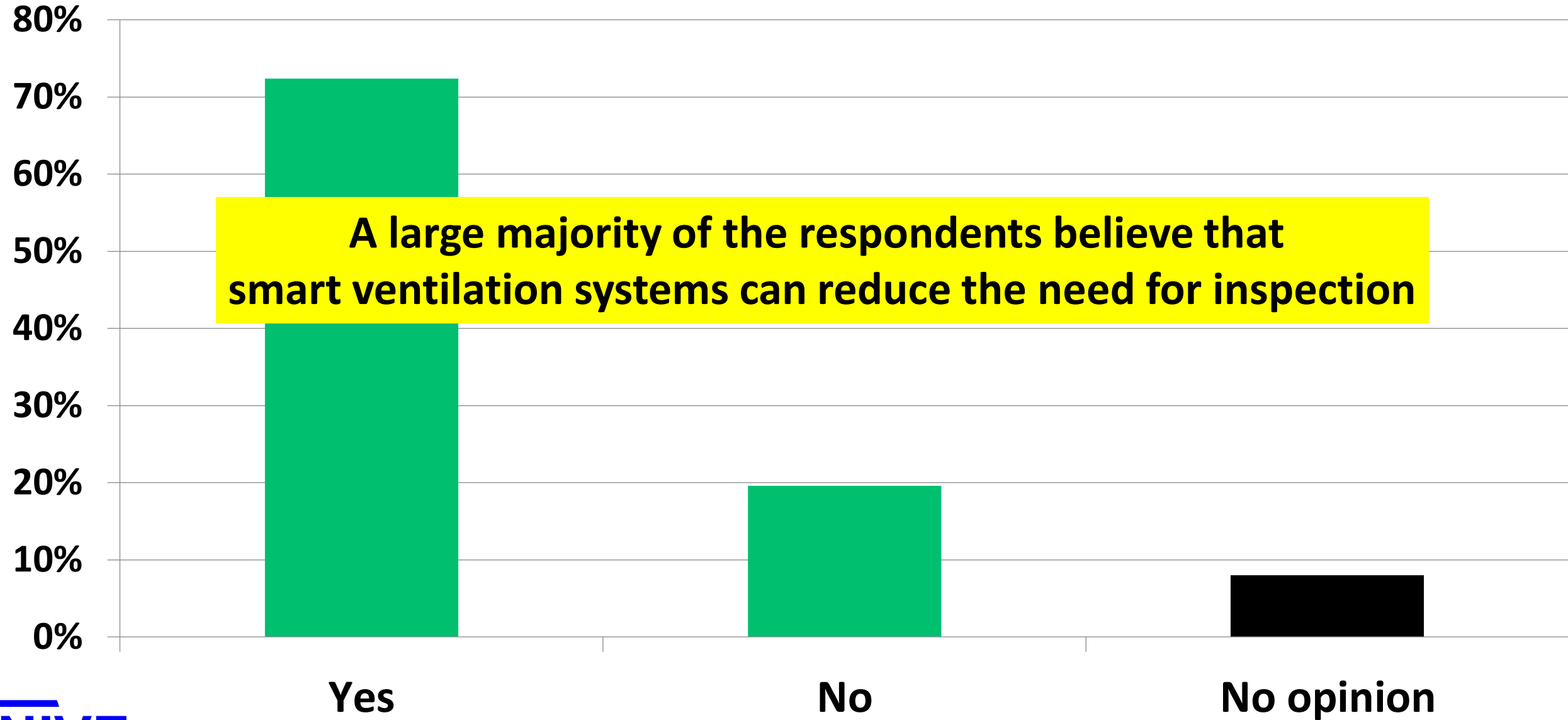


Which measures can reduce the need for inspection?

On average 50% of the respondents believe that various measures can reduce the need for inspection

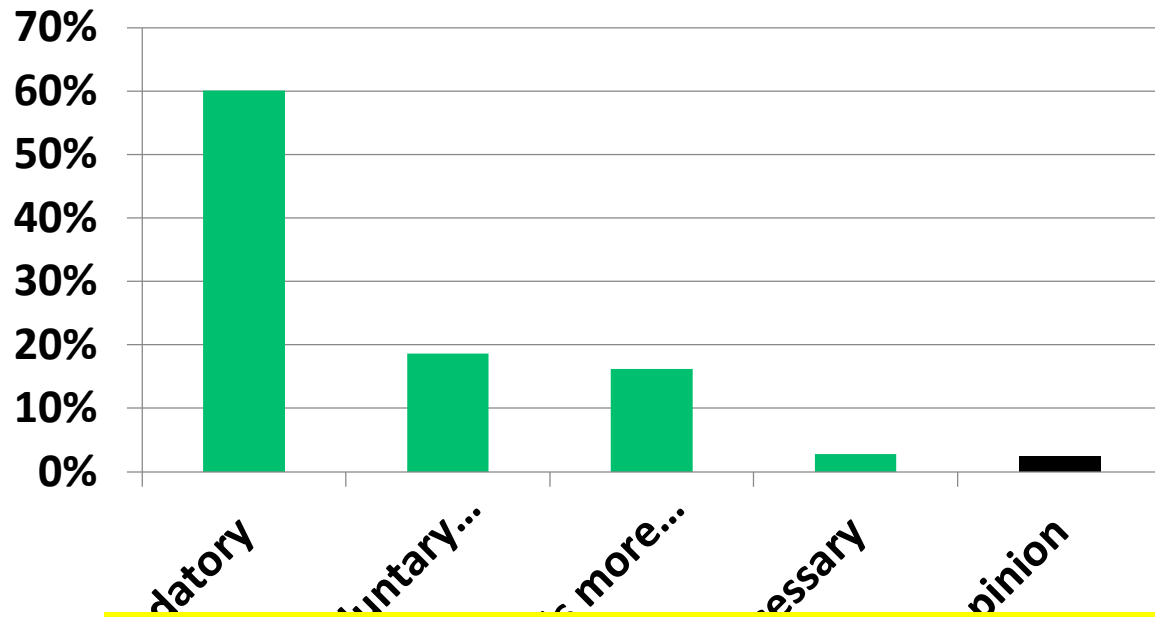


Do you think that smart ventilation systems could reduce inspection needs (e.g. by providing themselves information about their correct operation)?

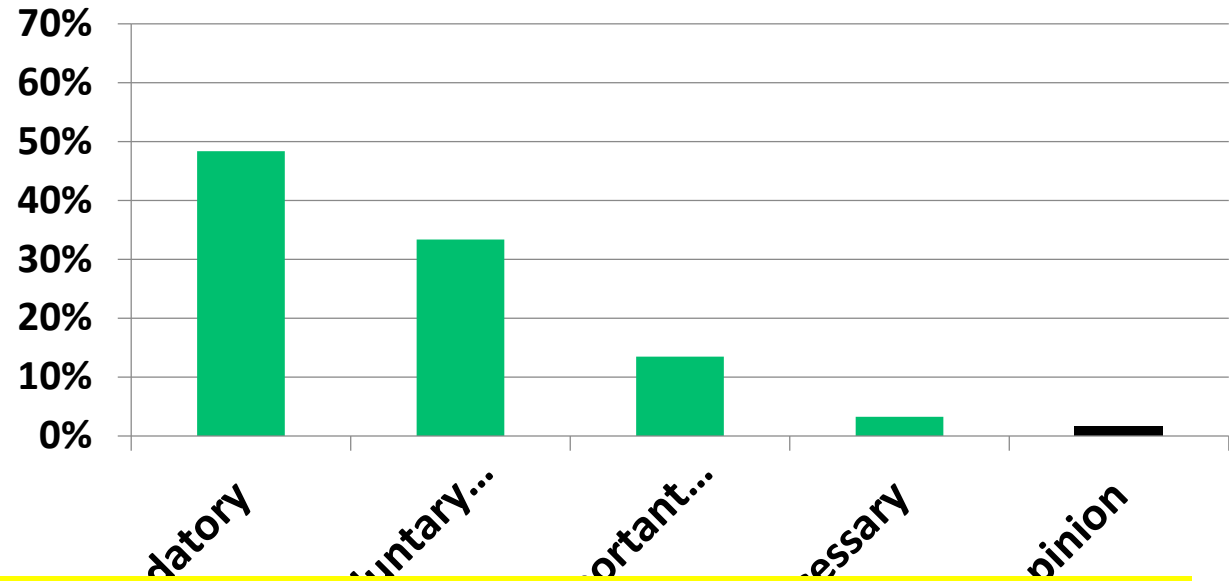


Do you believe a systematic inspection should be considered?

Newly installed ventilation systems



Ventilation systems that are already installed



**80% is in favour (mandatory or voluntary) for a systematic inspection
In case of new installations a higher percentage for mandatory inspection**

Scope of possible measures?

- Inspection can be an option
- There might be alternative possibilities

Inspection: Whole range of variables...

- **Which performances?**
 - Air flows
 - Energy performance aspects
 - Acoustics
 - Maintenance & cleanliness
 - ...
- **Building type?**
 - Individual dwellings
 - Collective dwellings
 - Non-residential buildings
 - ...
- **By who?**
 - Third party accredited inspection body
 - Independent person
 - Person involved in the project
 - ...
- **Which requirements?**
 - To measure accurately the performances
 - To make the installation compliant with the requirements
 - Additional energy requirements
 - ...
- **Status of building?**
 - New construction
 - Existing building
- **Sanctions or rewards?**
 - Nothing
 - Installation must be made compliant
 - Financial penalty
 - Subsidy if compliant
 - ...

If only 3 options per variable: $3^6 = 729$

Also to consider other possibilities with various types of impacts

Examples of other actions than inspection:

- **Better knowledge about status on the ground:**
 - Better information on performances in practice by collection of field data will allow to have a better understanding of the problems and, if actions are needed, may increase the societal support for action
- **Awareness raising actions:**
 - Among investors, designers, installers, ...
- **Skills improvement:**
 - Education/training /...
 - With/without examination/certification
- ...

Next months...

- Identify relevant approaches for improvement of the performances of stand alone ventilation systems
- Impact assessment
- Recommendations

thank
thank
you!