

LUCIA

ONLINE SURVEY ON PUBLIC LIGHTING FOR MUNICIPALITIES

Summary of results

INTRODUCTION

BACKGROUND AND AIM OF THE SURVEY

What we know so far is mainly based on experiences in our [pilot municipalities](#) and general literature review.

Through the survey, we wanted to...

- ...acquire a **more comprehensive picture** on the status quo of public lighting in municipalities of the Baltic Sea region,
- ...receive input that allows us to **align future project activities** in line with local needs,
- ...reach out and widen our **network** of “lighting practitioners”.



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SURVEY METHODOLOGY

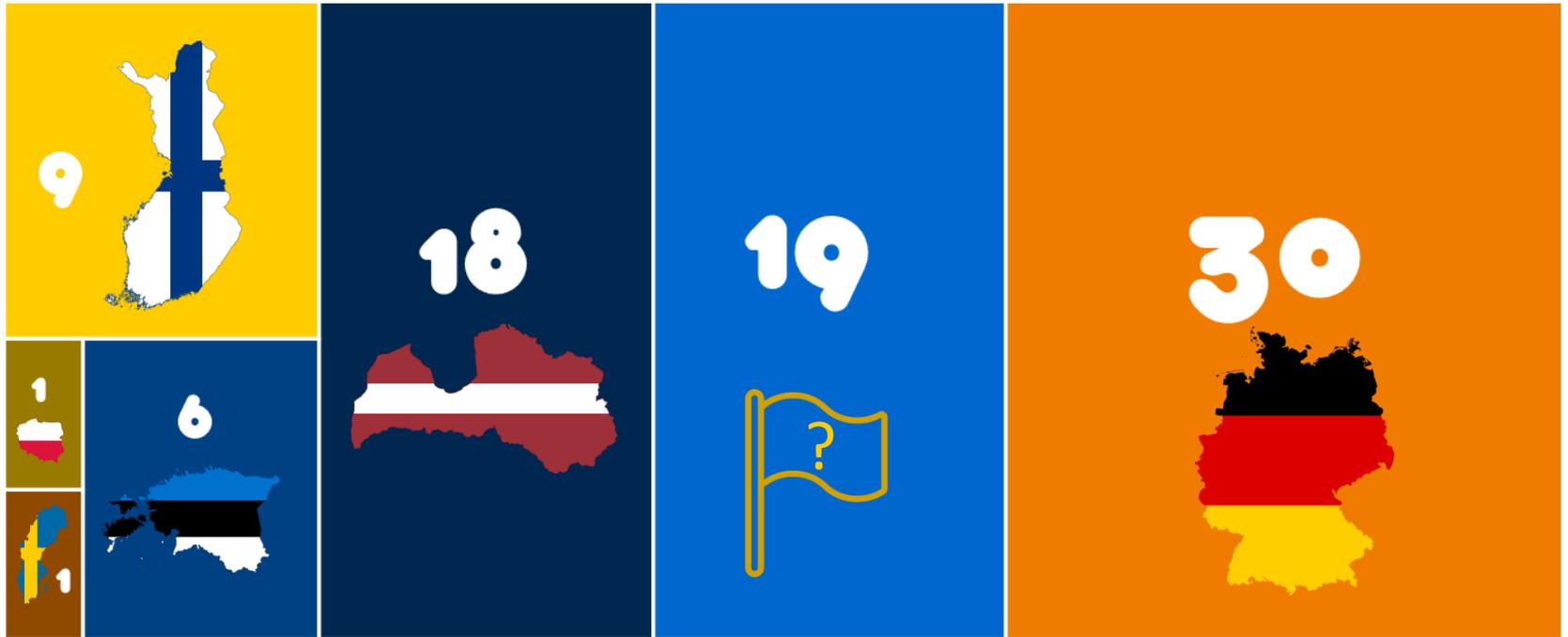
- Open online survey based on **LimeSurvey**
- 37 (mainly closed) questions jointly developed by LUCIA partner
- Invitations through **direct email contacts** of project partners, also advertised on **web and social media** channels
- Open from 18 February to 11 March 2020
- **Not representative**



Photo by Adeolu Eletu
on Unsplash

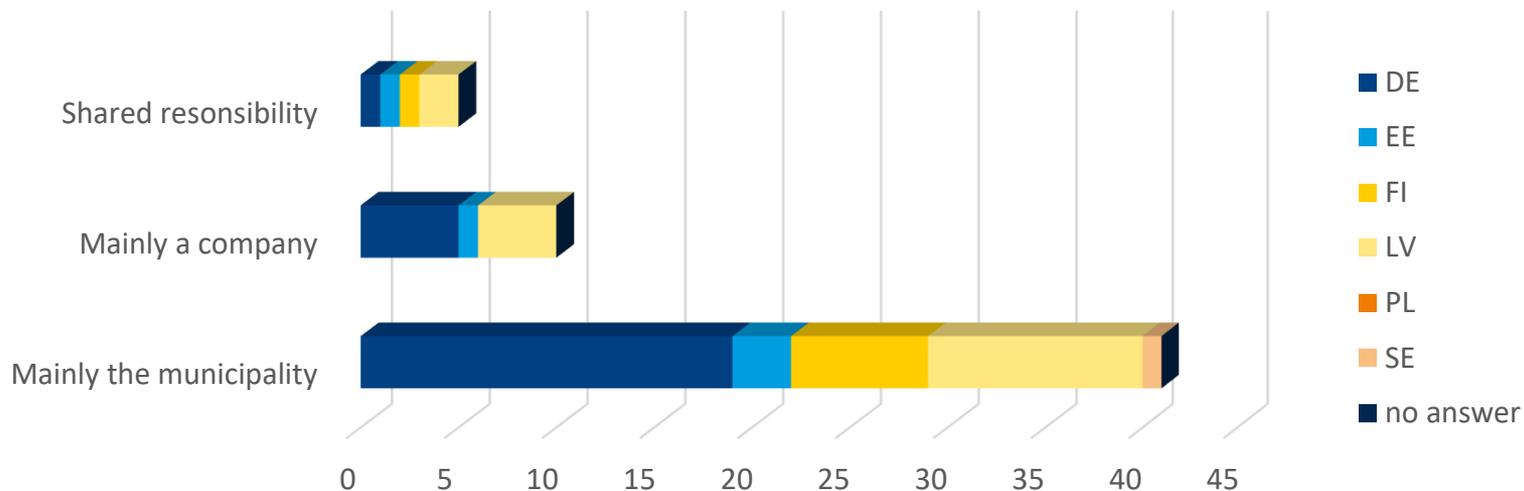
ABOUT THE RESPONDENTS

WHERE RESPONDENTS COME FROM



Question: In which country are you working? | 84 respondents

WHO IS MAINLY IN CHARGE OF PUBLIC LIGHTING?

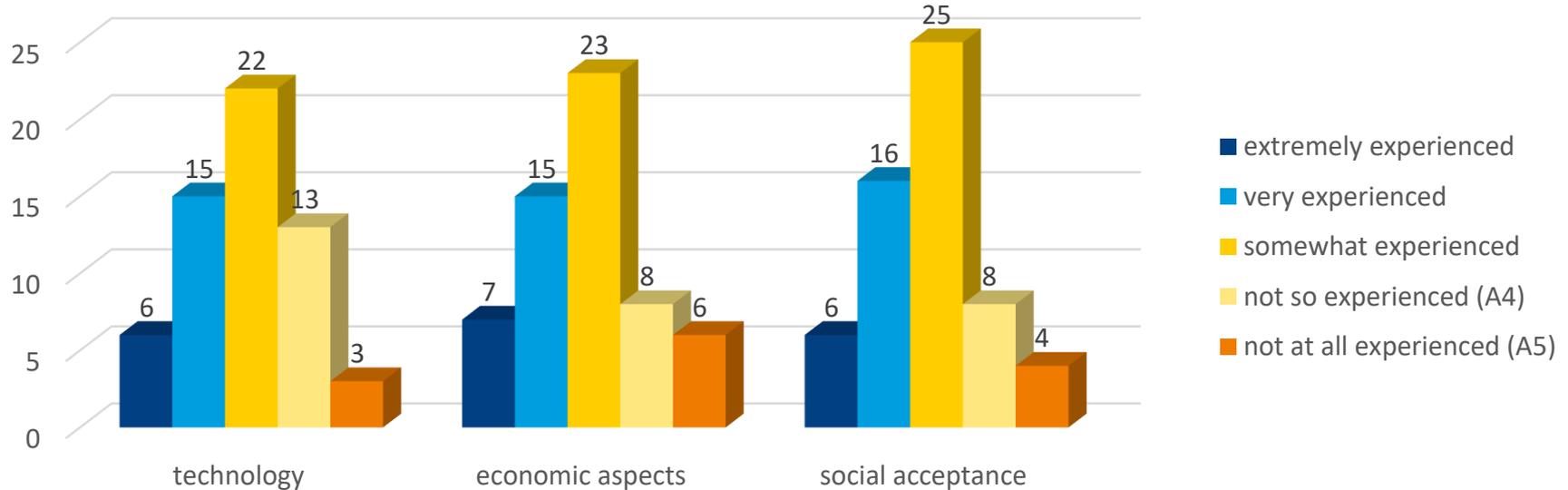


Question:

In your municipality, which municipal department and/or company is mainly responsible for public lighting?

84 respondents | answered by 56 | not answered by 28

RESPONDENTS' LEVEL OF EXPERIENCE



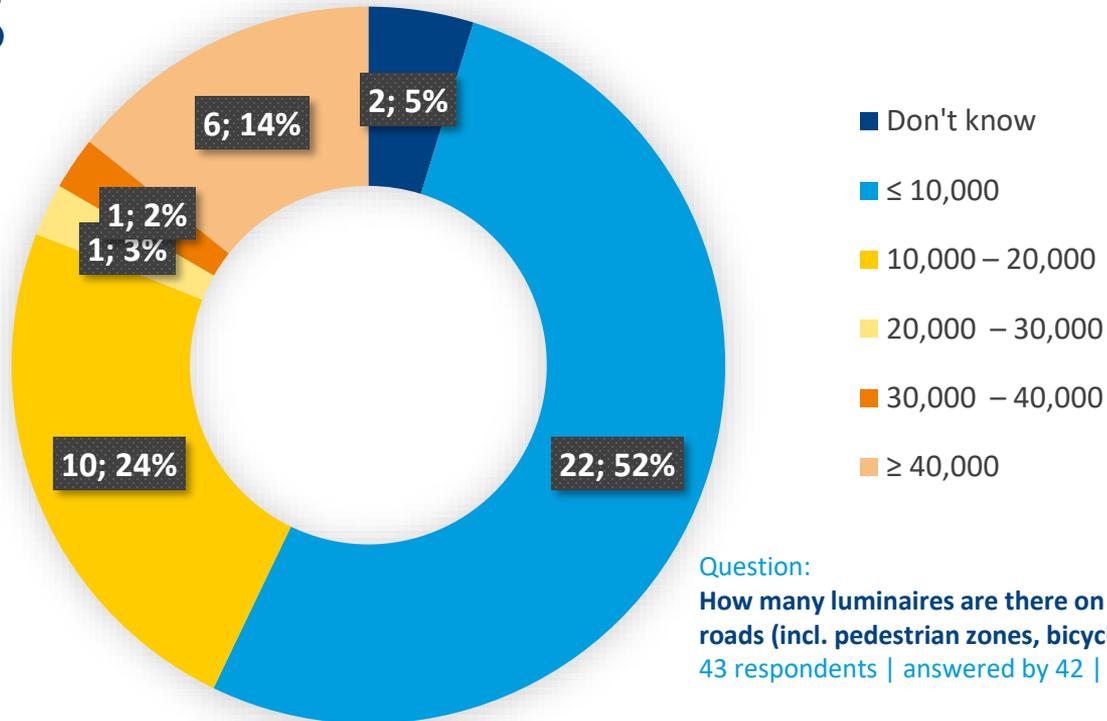
Question:

“How experienced do you consider yourself to be with regards to the following topics?”

84 respondents | answered by 59 | not answered by 25

LIGHTING TECHNOLOGY

NUMBER OF LUMINAIRES ON PUBLIC ROADS

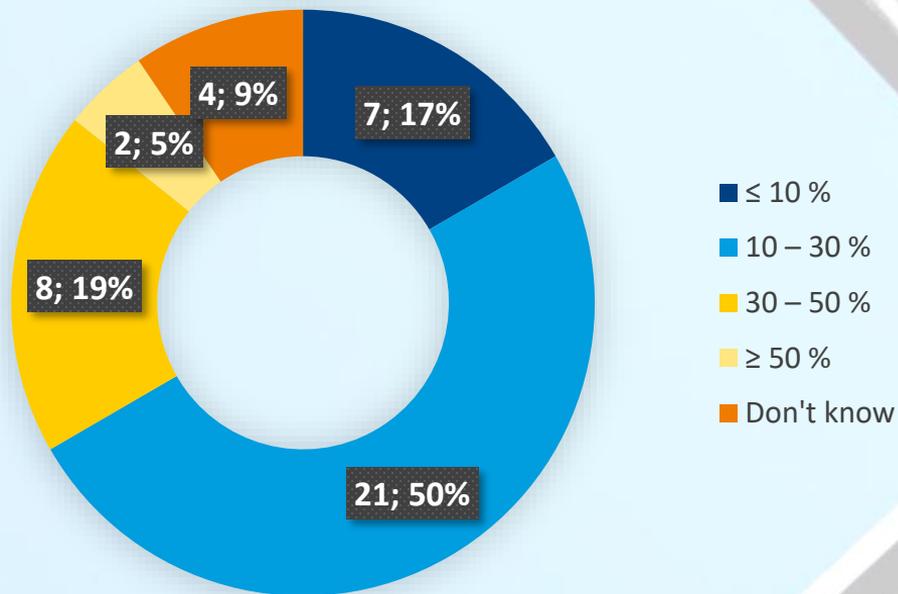


Question:

How many luminaires are there on your municipality's public roads (incl. pedestrian zones, bicycle lanes and public parks)?

43 respondents | answered by 42 | not answered by 1

LED CONVERSION RATE



85%
of respondents say their municipality has converted less than half of its public lighting to LED technology. Only 5% say that more than 50% of lighting has been converted.

Question:

To what extent has the public lighting in your municipality has already been converted to LED lighting?

42 respondents

DIMMING SYSTEMS

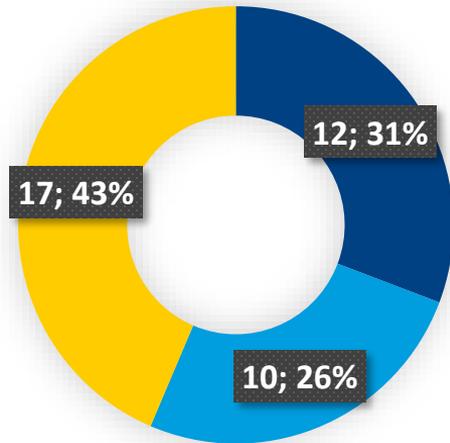
80%

of respondents say their municipality has installed some kind of energy-saving dimming systems during the recent (3–5) years.



Question:
Has your municipality installed energy-saving dimming systems during the recent (3–5) years?
43 respondents |
answered by 41 |
not answered by 2

USE OF MULTIFUNCTIONAL TECHNOLOGIES IN LIGHTING SYSTEMS



- Yes, already using
- No, but planning to use in the near future
- No, not planning to use

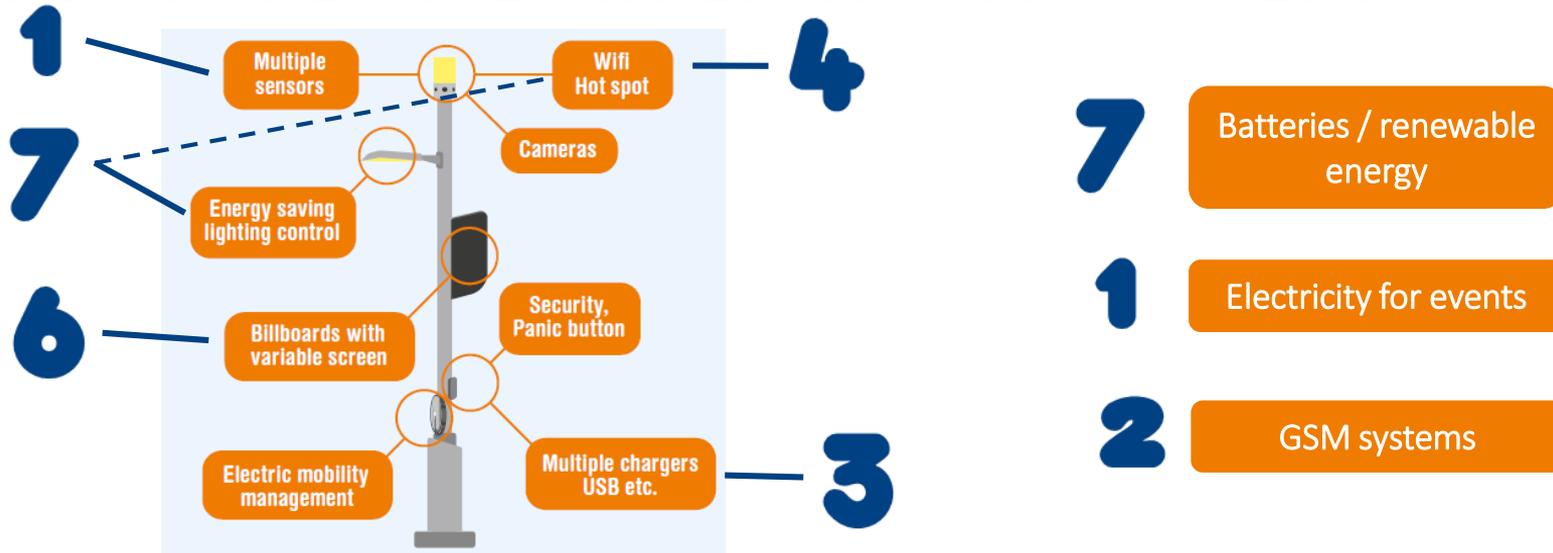
57%
of respondents say their municipality is already using or planning to use integrated and supporting technologies in the near future (3-5 years).

Question:

Does your municipality already use or plan to use integrated and supporting (“multifunctional”) technologies in lighting systems?

43 respondents | answered by 39 | not answered by 3

USE OF MULTIFUNCTIONAL TECHNOLOGIES IN LIGHTING SYSTEMS



Question:

Which integrated and supporting (“multifunctional”) technologies is your municipality using / planning to use?

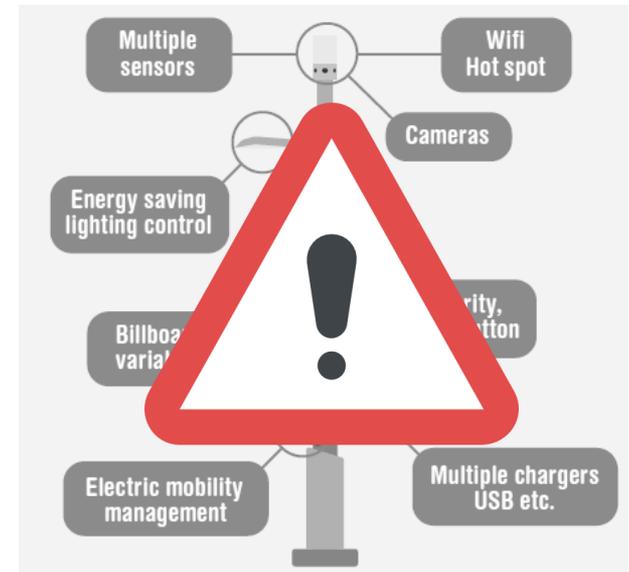
32 respondents (multiple choice possible)

FAILURES IN THE USE OF MULTIFUNCTIONAL TECHNOLOGIES

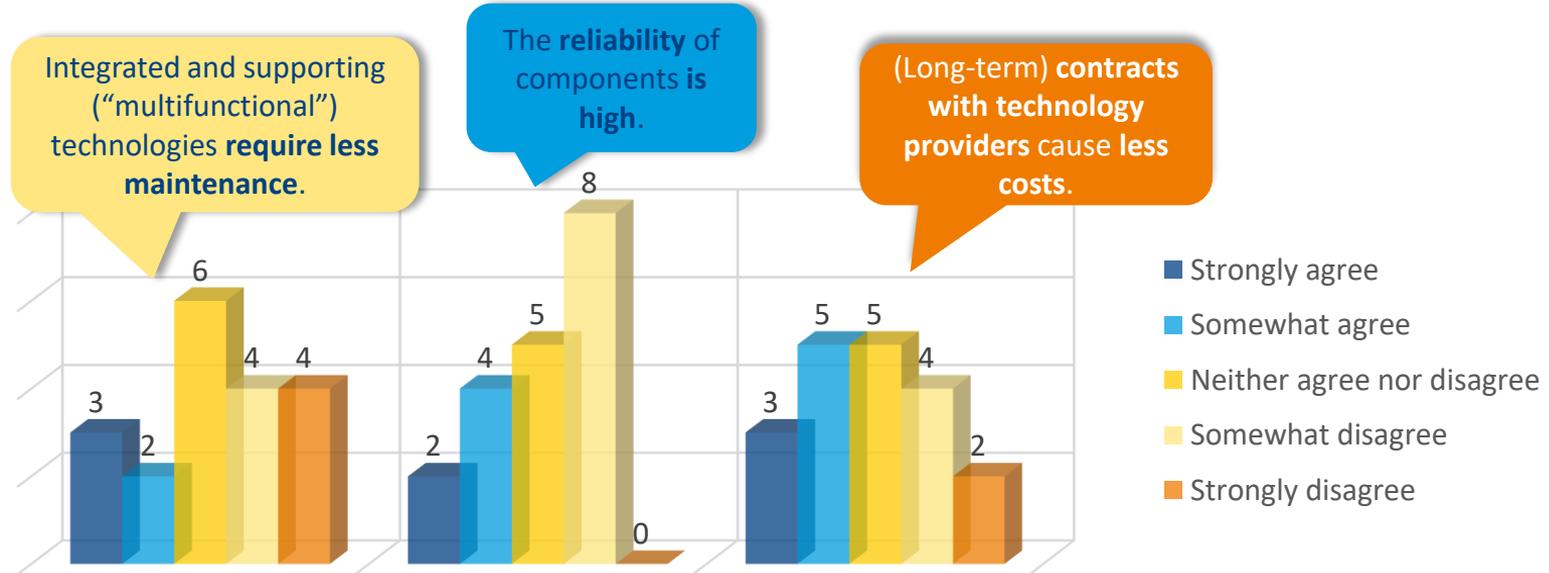
- 0  Failures of (standard) batteries
- 0  Failures of renewable batteries
- 2  Failures of charging systems
- 1  Failures of smart information panels

3  No failures

Question:
Which sorts of failures has your municipality faced in the use of integrated and supporting (“multifunctional”) technologies?
6 respondents (multiple choice possible)



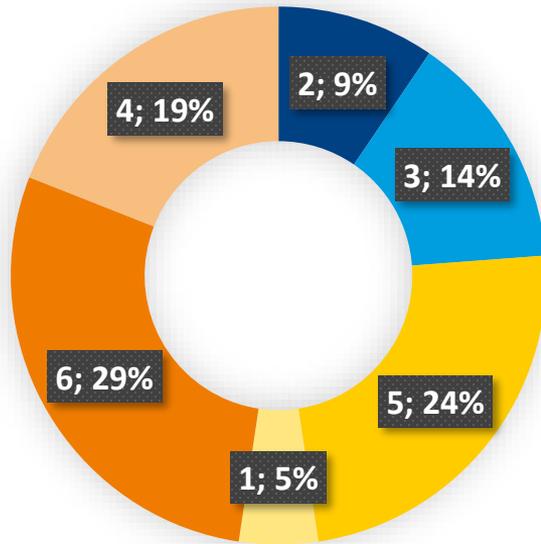
WHAT RESPONDENTS THINK ABOUT MULTIFUNCTIONAL TECHNOLOGIES



Question:

How much do you agree to the statements about integrated and supporting (“multifunctional”) technologies? | 19 respondents

CHALLENGES MUNICIPALITIES ARE FACING



- Low acceptance among inhabitants
- Low acceptance within city administration
- Lack of knowledge
- Lack of skilled work force
- Lack of access to providers of lighting solutions
- High costs / lack of finance

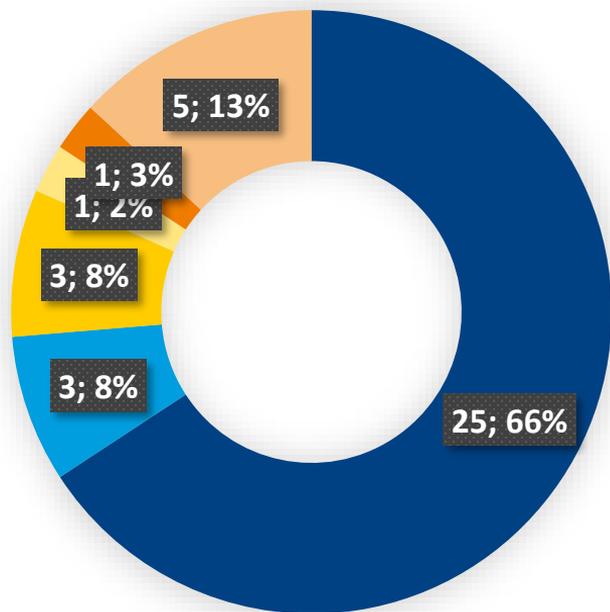
Question:

Which challenges related to the transition towards energy efficient and “multifunctional” lighting systems are you facing as a municipality?

21 respondents (multiple choices possible)

ECONOMIC ASPECTS OF PUBLIC LIGHTING

ANNUAL AVERAGE COSTS OF LIGHTING



- ≤ € 50 / year / citizen
- € 50 – € 100 / year / citizen
- € 100 – € 200 / year / citizen
- € 200 – € 300 / year / citizen
- ≥ € 300 / year / citizen
- Don't know (A6)

66%
of respondents say the average costs for public lighting in their municipality are below € 50 per year and citizen.

Question: How high are the average annual costs spent for public lighting in your municipality per citizen? | 38 respondents

PLANS TO INVEST IN ENERGY EFFICIENT LIGHTING SOLUTIONS



Question: Does your municipality plan to invest in energy efficient lighting solutions during the coming 3-5 years? | 38 respondents

EXPECTED SAVINGS

On average, respondents estimate that their municipalities will save

30%

compared to the current costs by using more energy efficient lighting solutions.

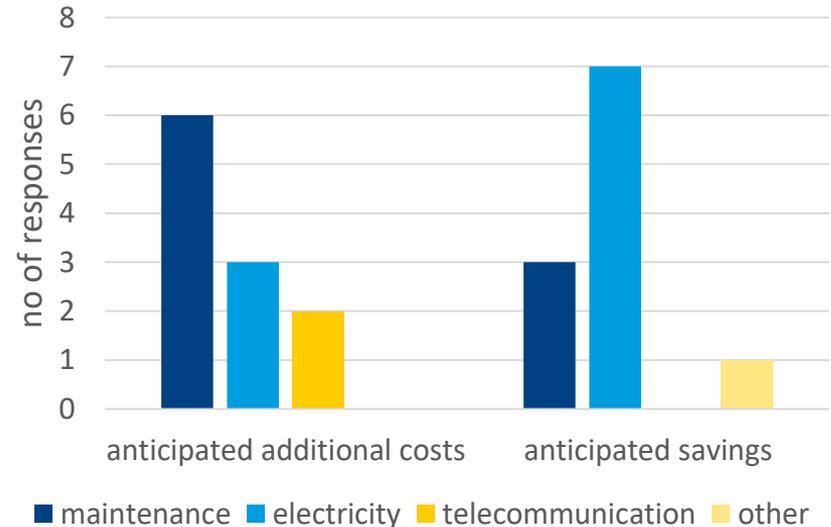


Question: How large do you expect your annual savings to be? Please estimate the amount you expect to save by using more energy efficient lighting solutions (in % related to your current average annual costs).
14 respondents



Photo by Didier Weemaels on Unsplash

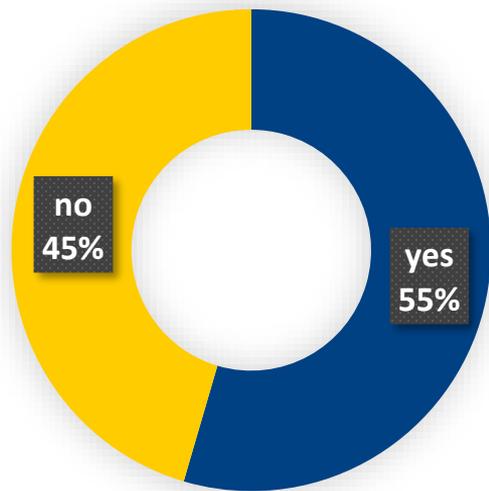
MULTIFUNCTIONAL TECHNOLOGIES: REDUCING OR INCREASING TOTAL COSTS?



Questions: Do you expect these investment to reduce or increase costs within the upcoming period of 3-5 years? and: In which area(s) do you see the main savings / the main additional costs? | 19 respondents | answered by 15 | not answered by 4

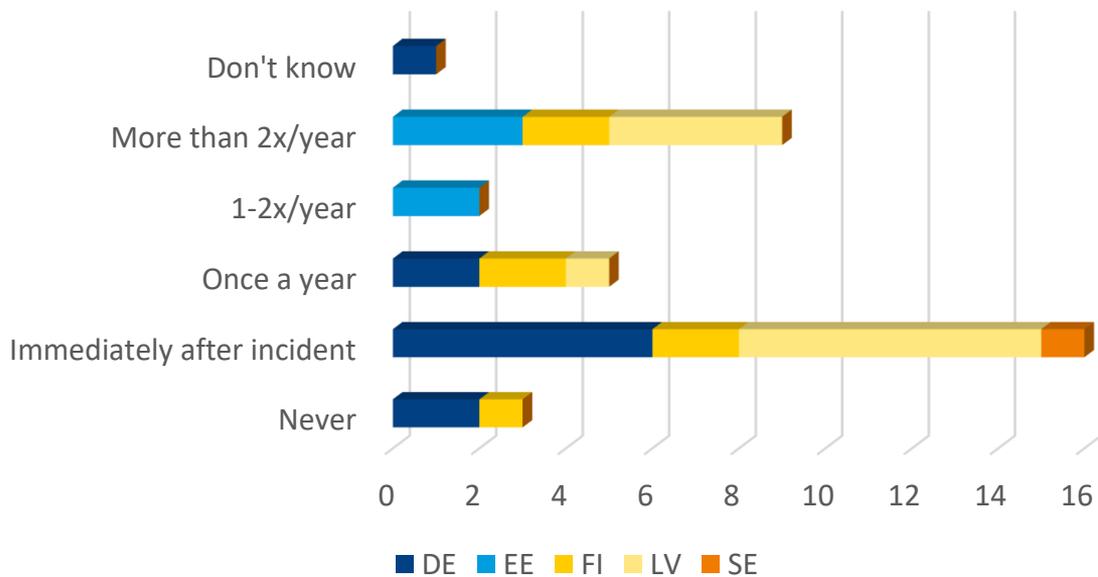
SOCIAL ACCEPTANCE OF PUBLIC LIGHTING

BINDING RULES FOR CONSERVATION AND PROTECTION OF SPECIES?

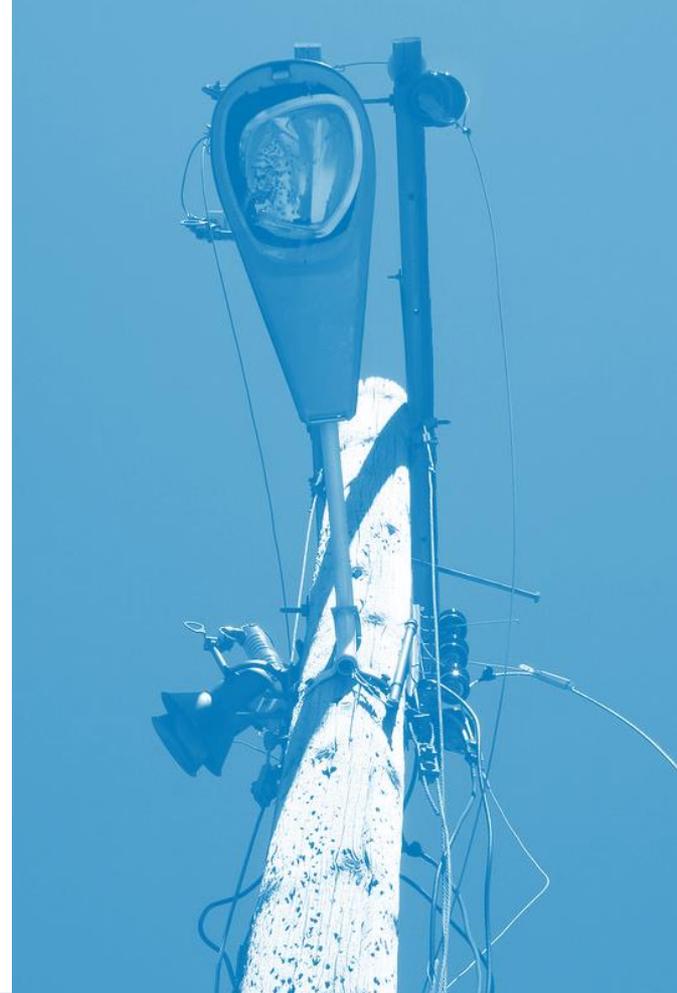


Question: When planning public lighting, do you have to take into account binding local rules and regulations for the conservation and protection of species (e.g. nocturnal species, insects, bats)? | 33 respondents

REPORTING OF VANDALISM



Question: How often is vandalism to public lighting evaluated in your municipality? | 36 respondents

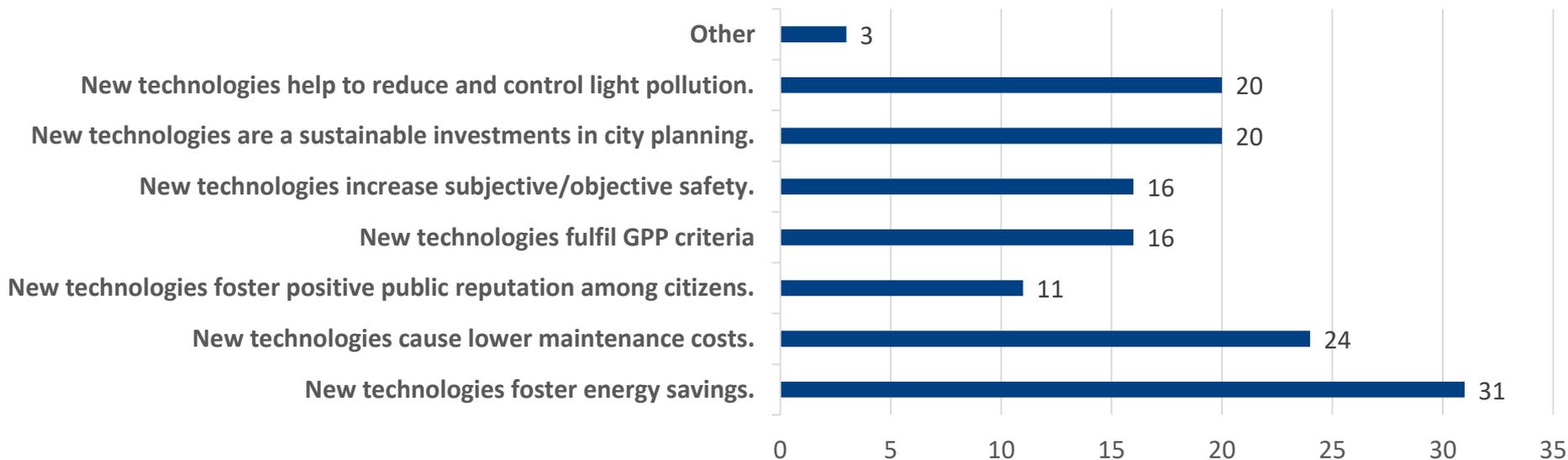


ARE THERE AREAS WHERE REGULAR VANDALISM IS OBSERVED?



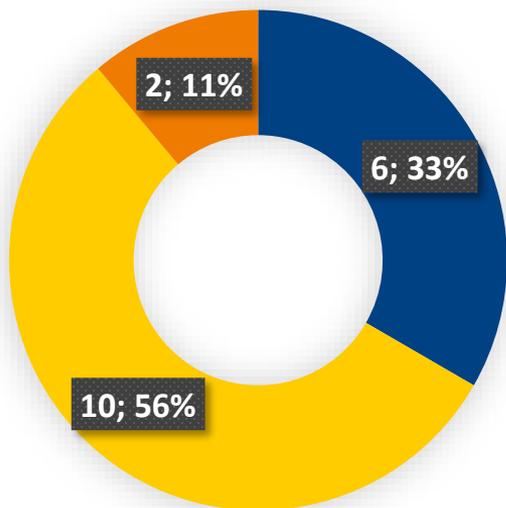
Question: **Are there areas in your municipality in which you observe regular vandalism to public lighting?** |
18 respondents (multiple choices possible)

ARGUMENTS USED TO PROMOTE SUSTAINABLE AND SMART LIGHTING



Question: What are the main arguments used in your municipality when planning and promoting investments in sustainable and smart lighting systems? | 36 respondents (multiple choices possible)

CONSIDERATION OF LIGHT POLLUTION



- Yes, within the municipal administration
- Yes, within the municipality in general
- No, not at all

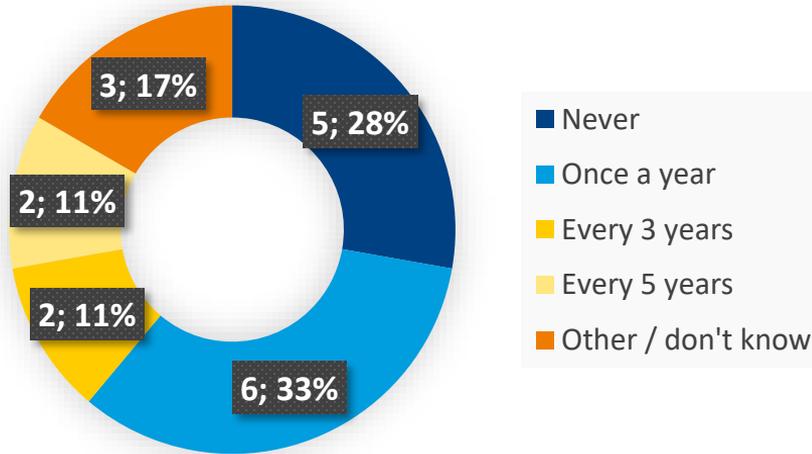
48%

of respondents say they receive **POSITIVE OR VERY POSITIVE FEEDBACK** when raising awareness for the topic of light pollution.



Questions: Do you consider the topic of light pollution in your municipality when planning / building new public lighting in certain areas (e.g. parks)? And When raising awareness about light pollution, what kind of feedback do you get? | 18 / 16 respondents

EVALUATION OF SATISFACTION

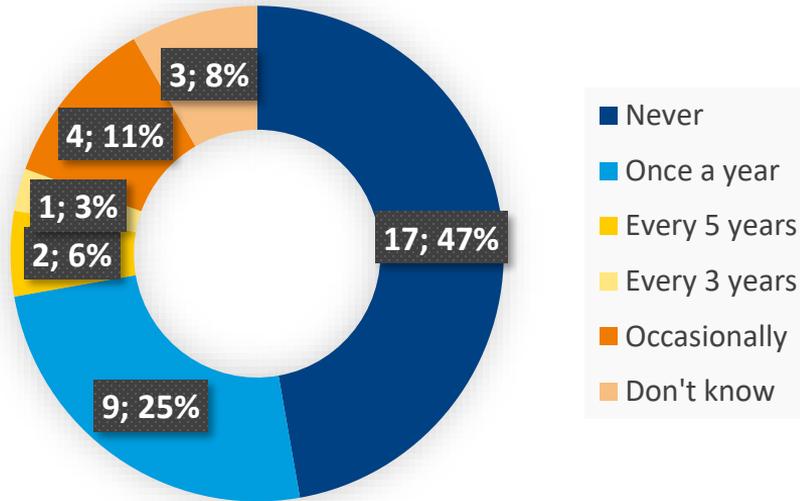


Question: How often do you evaluate the satisfaction with your public lighting system among citizens? | 18 respondents



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EVALUATION OF PERCEIVED SAFETY



Question: How often do you evaluate the perception of (objective/subjective) security with regards to lighting in public spaces among certain target groups (e.g. women, people with disabilities, elderly)? | 36 respondents



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