### IEA SHC Task 50: Advanced lighting solutions for retrofitting buildings



# Lighting retrofit in current practice Evaluation of an international survey within the IEA Task 50

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→ Focus on the Brazilian context





### SubTask C: Method and Tools C1 – Analysis of workflow and needs



Answers per language

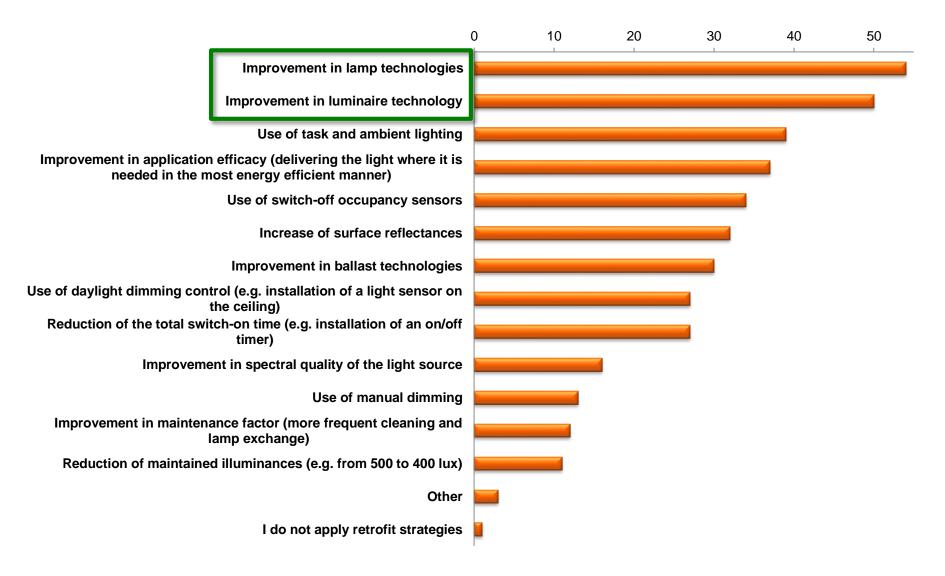
Total answer : 1169

Available answers: 1075

Language	Nb of respondents
French	421
English	285
German	224
Dutch	82
Portuguese (Brazil)	72
Finish	30
Italian	24
Danish	19
Spanish	8
Japanese	4



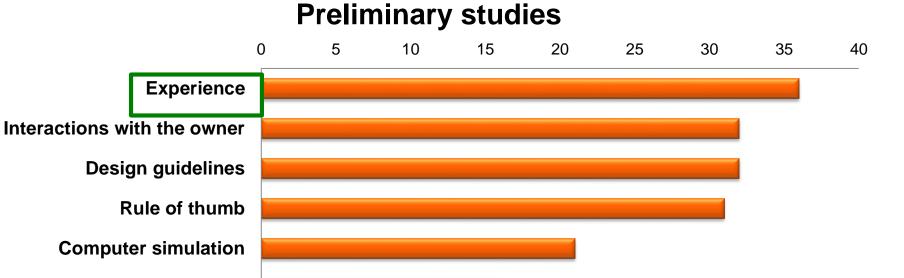
#### Q4 : Please select the main retrofit strategies you use in your current practice.





Q5: Please indicate for each design phase, the type of tools or methods you use

#### **DAYLIGHTING**





Interactions with future users

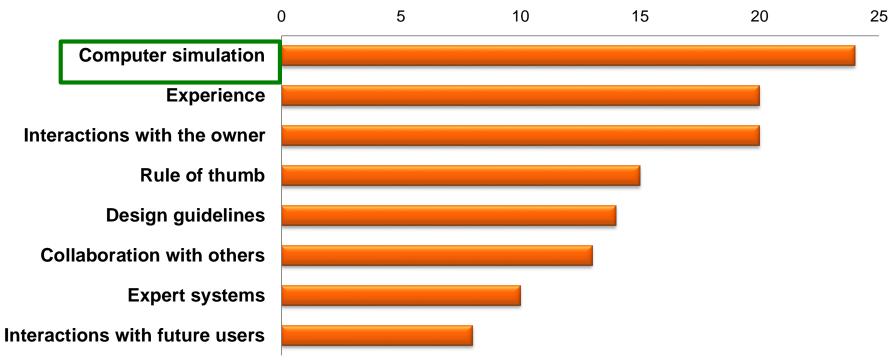
**Collaboration with others** 

**Expert systems** 

Q5: Please indicate for each design phase, the type of tools or methods you use

### **DAYLIGHTING**



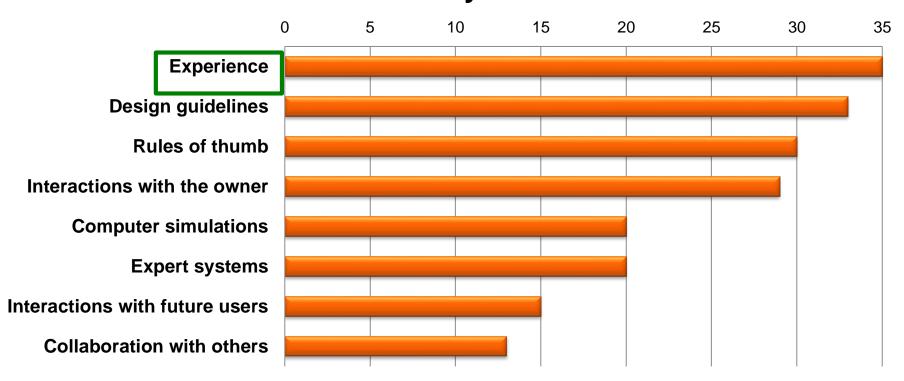




Q6: Please indicate for each design phase, the type of tools or methods you use

#### **ELECTRIC LIGHTING**

### **Preliminary Studies**

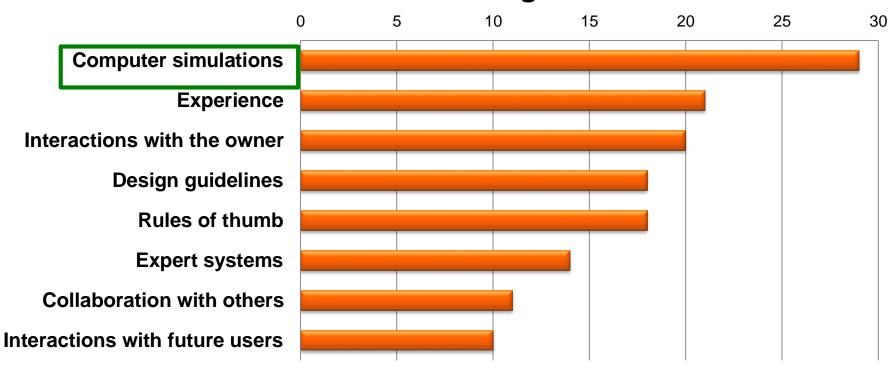




Q6: Please indicate for each design phase, the type of tools or methods you use

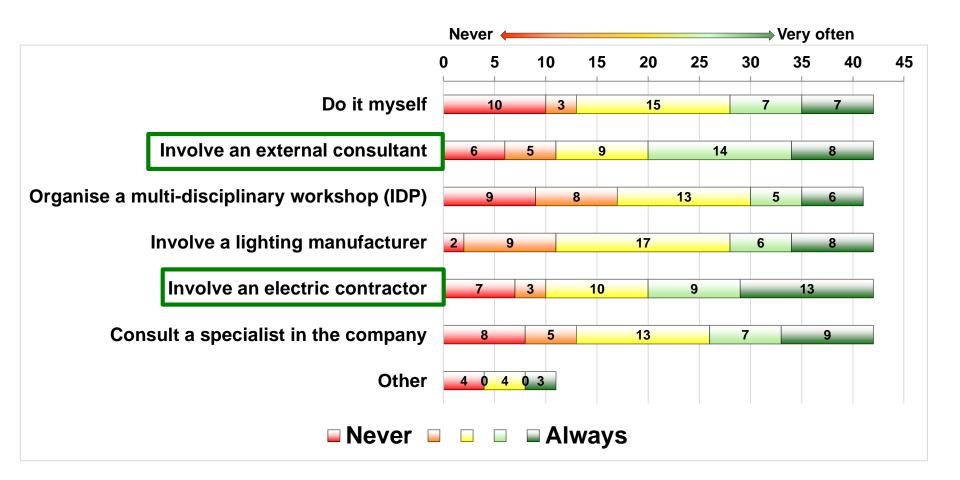
### **ELECTRIC LIGHTING**

### **Detailed design**



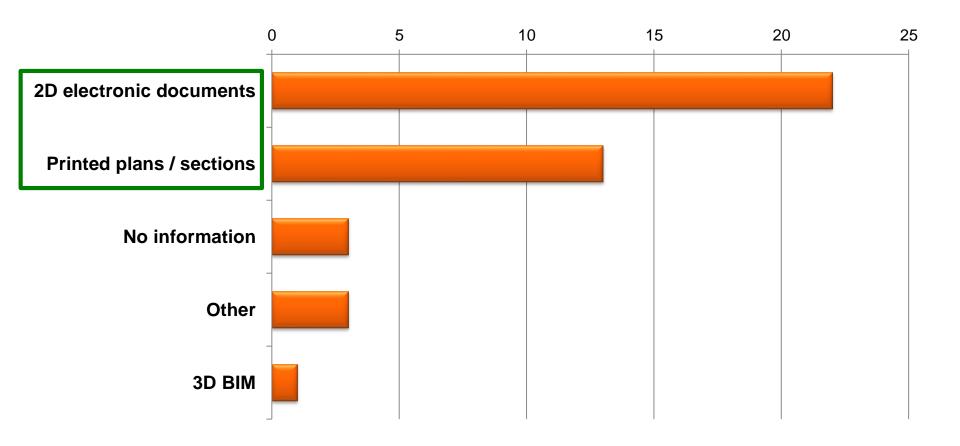


## Q7: How do you usually handle the design and decision process concerning the integration of lighting technologies in retrofit projects?



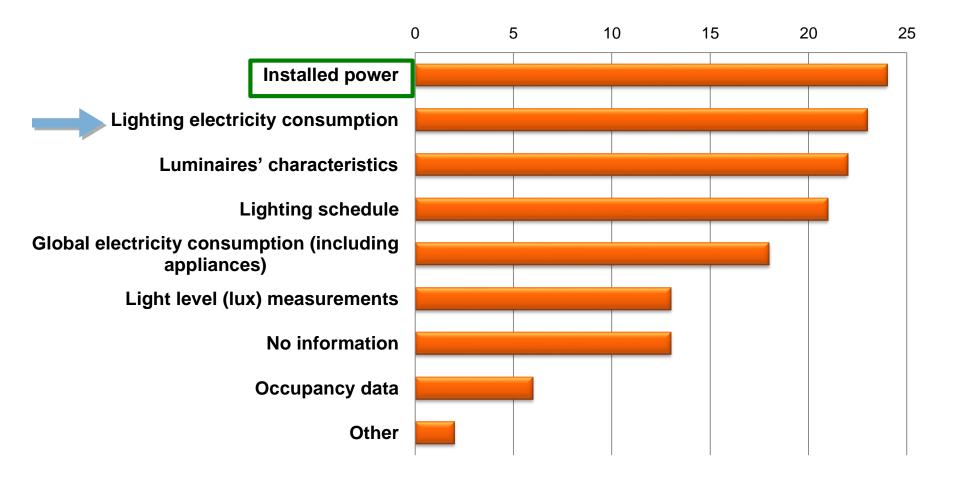


# Q8: What kind of information about the BUILDING or INFRASTRUCTURE is usually available at the beginning of your lighting retrofit projects?



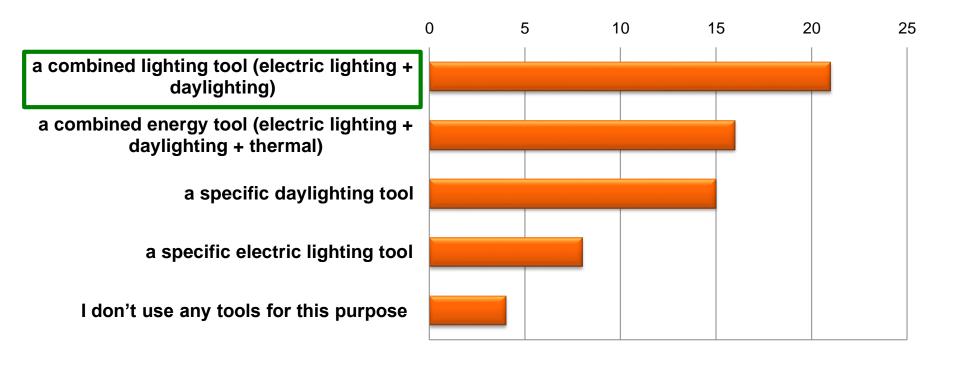


# Q9: What information is usually available about the EXISTING LIGHTING SITUATION at the beginning of the lighting retrofit projects?





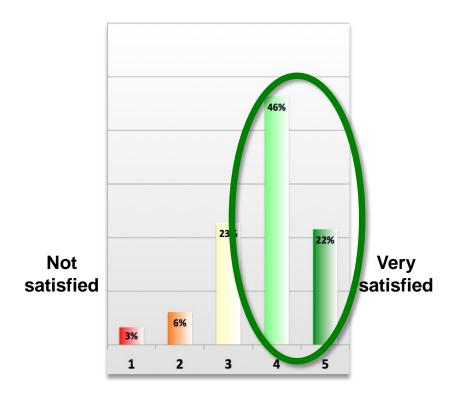
# Q12: In your office /, which type of tool(s) do you normally use for daylighting and electric lighting analysis?

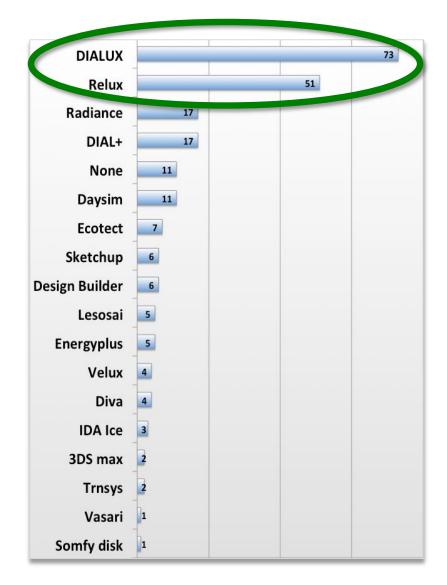




Q134a: Simulation tools

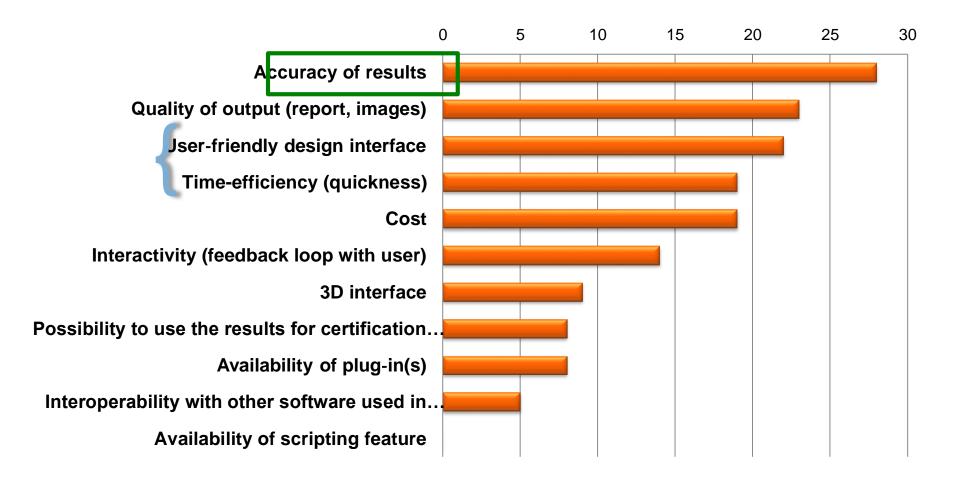
(Global results)





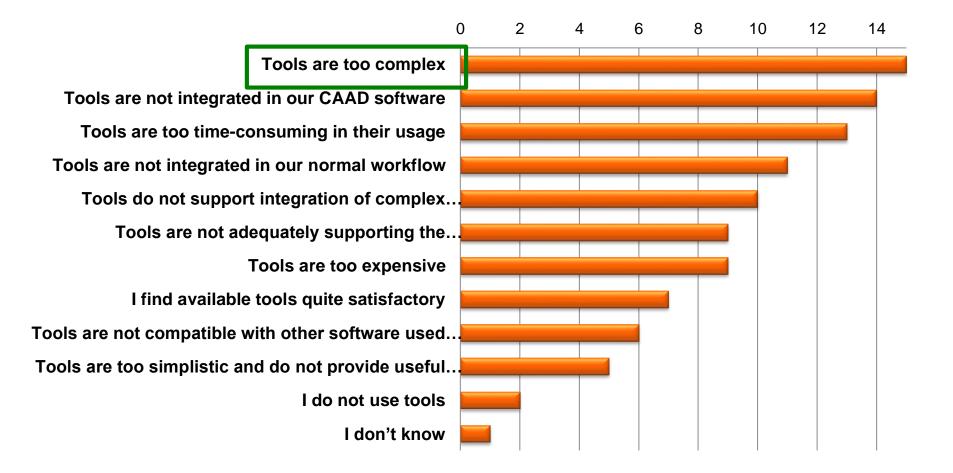


#### Q14: Please list the up to 5 factors that most influence your choice of software



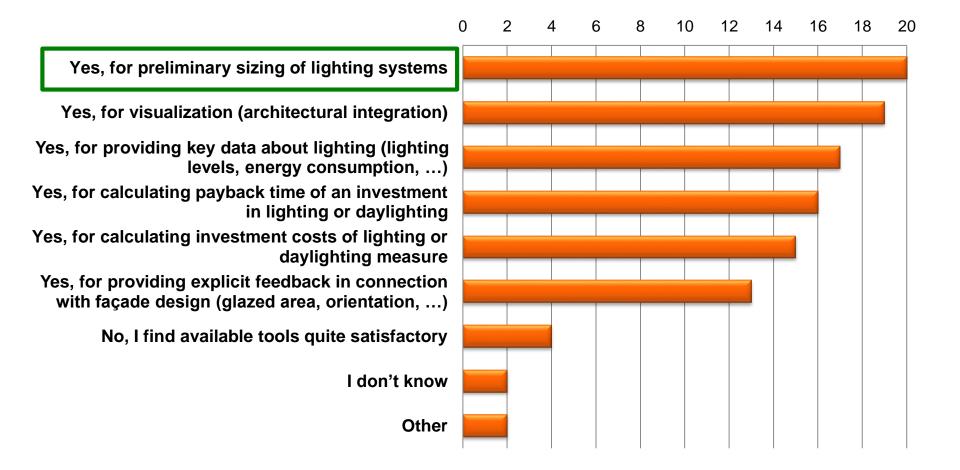


Q15: Among the following list, please select the up to 5 most important barriers you identified when applying lighting or daylighting design as part of the retrofit process?





### Q16: Do you see the need for improved tools to support the integration of electric lighting or daylighting considerations within the retrofit process?





#### Completion of the questionnaire

### The ideal tool?

- Simple
- > Fast
- Integrated with normal design flow
- Useful for preliminary design
- Combined (electric & dayligthing + energy)



#### Completion of the questionnaire

### Final result

# Available on a website Global result



