A Line Made By Walking

Adaptation To Climate Change In Forestry Across Europe

Rita SOUSA-SILVA,

Bruno VERBIST, Quentin PONETTE, Kris VERHEYEN, Bart MUYS

KU LEUVEN

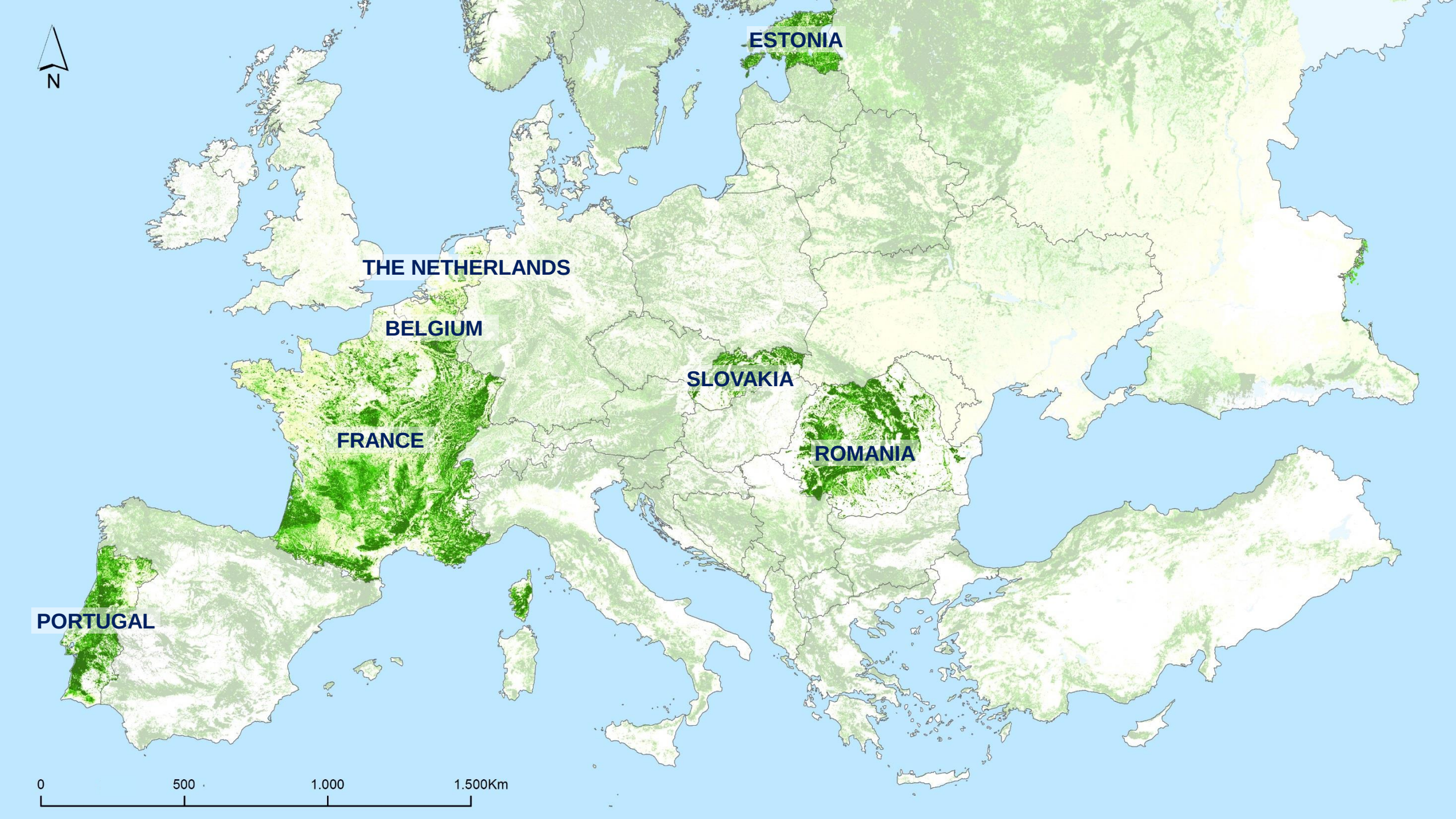
A LINE MADE BY WALKING

ENGLAND 1967

Context

Climate change

Forest management

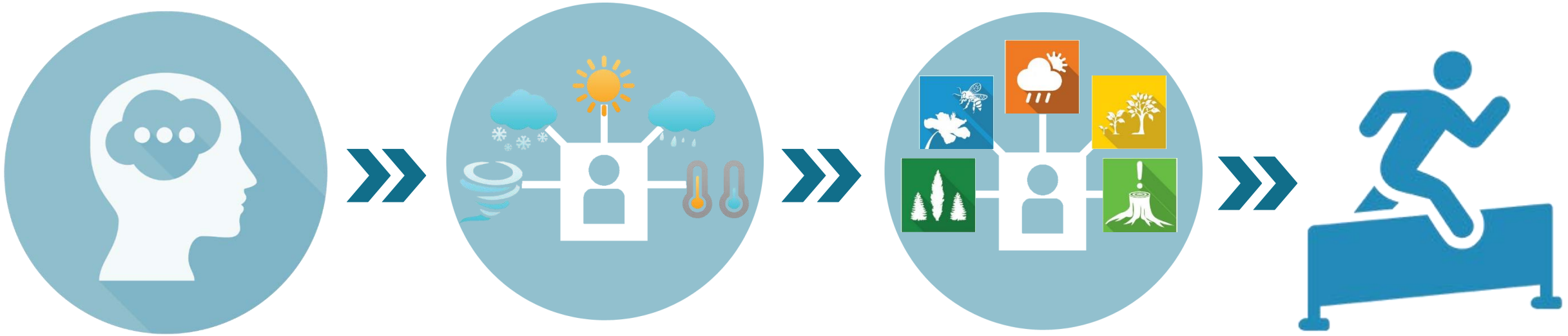

N
ESTONIA
THE NETHERLANDS
BELGIUM
SLOVAKIA
FRANCE
ROMANIA
PORTUGAL
0
500
1.000
1.500Km

Respondents

	Belgium	Estonia	France	Netherlands	Portugal	Romania	Slovakia	
Forest owner	234	35	170	13	83	8	40	**583**
Forest manager, public forest	79	2	0	3	8	162	39	**293**
Forest manager, private forest	78	3	33	4	24	34	37	**213**
Number of responses	**391**	**40**	**203**	**20**	**115**	**246**	**116**	**1131**

KU LEUVEN

Questions



Perceptions

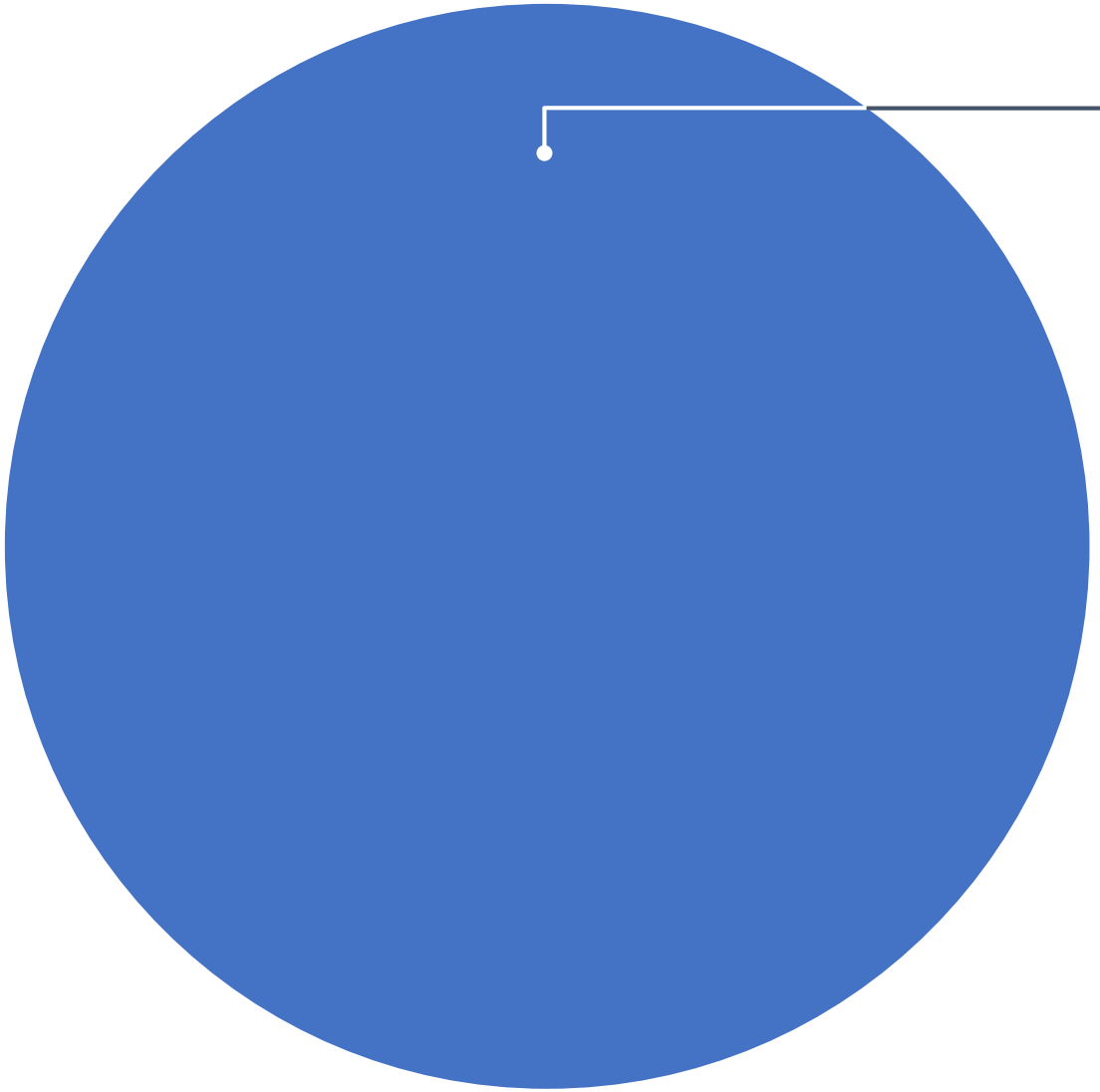
Experiences

Impacts

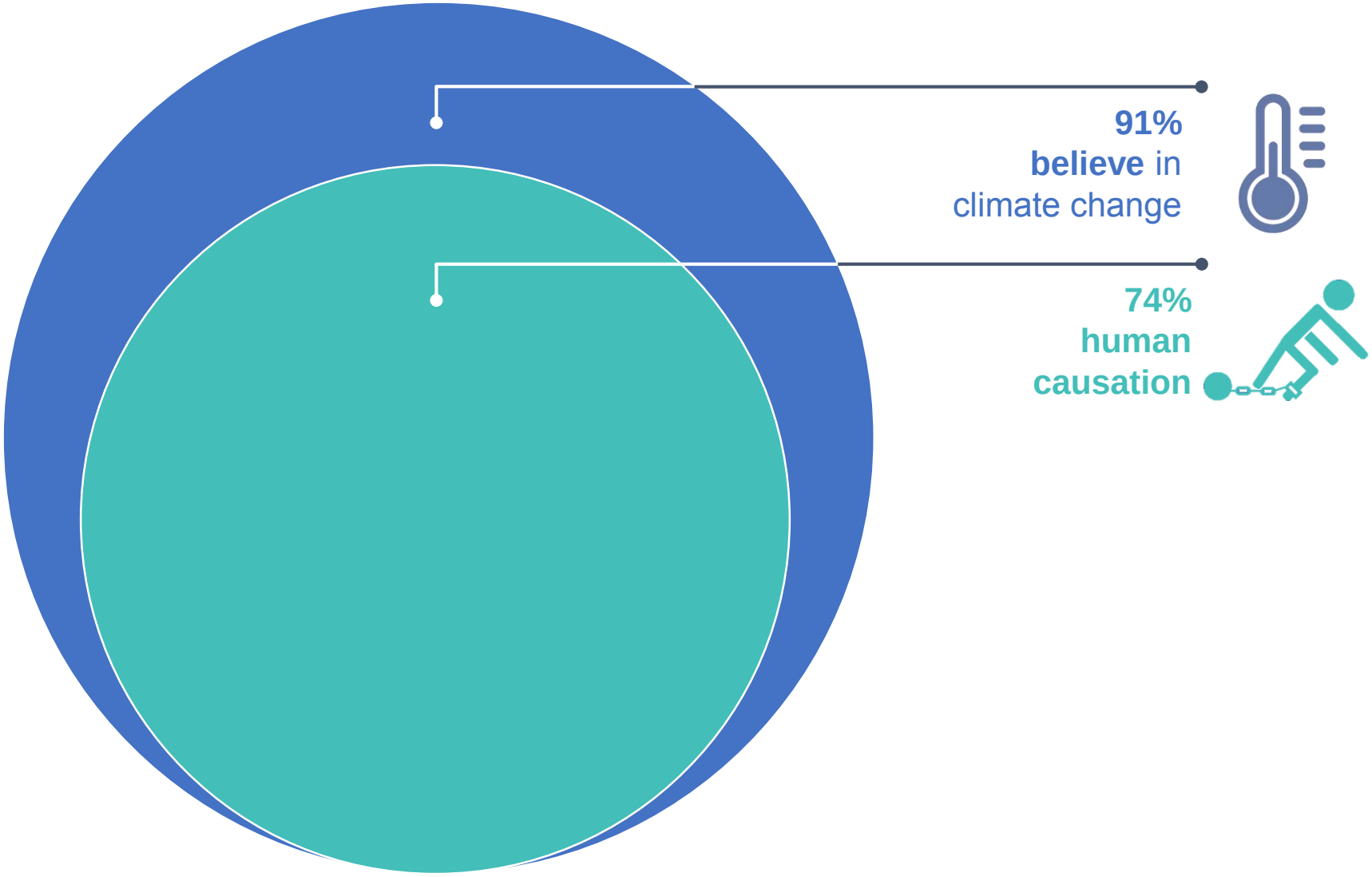
Adaptation

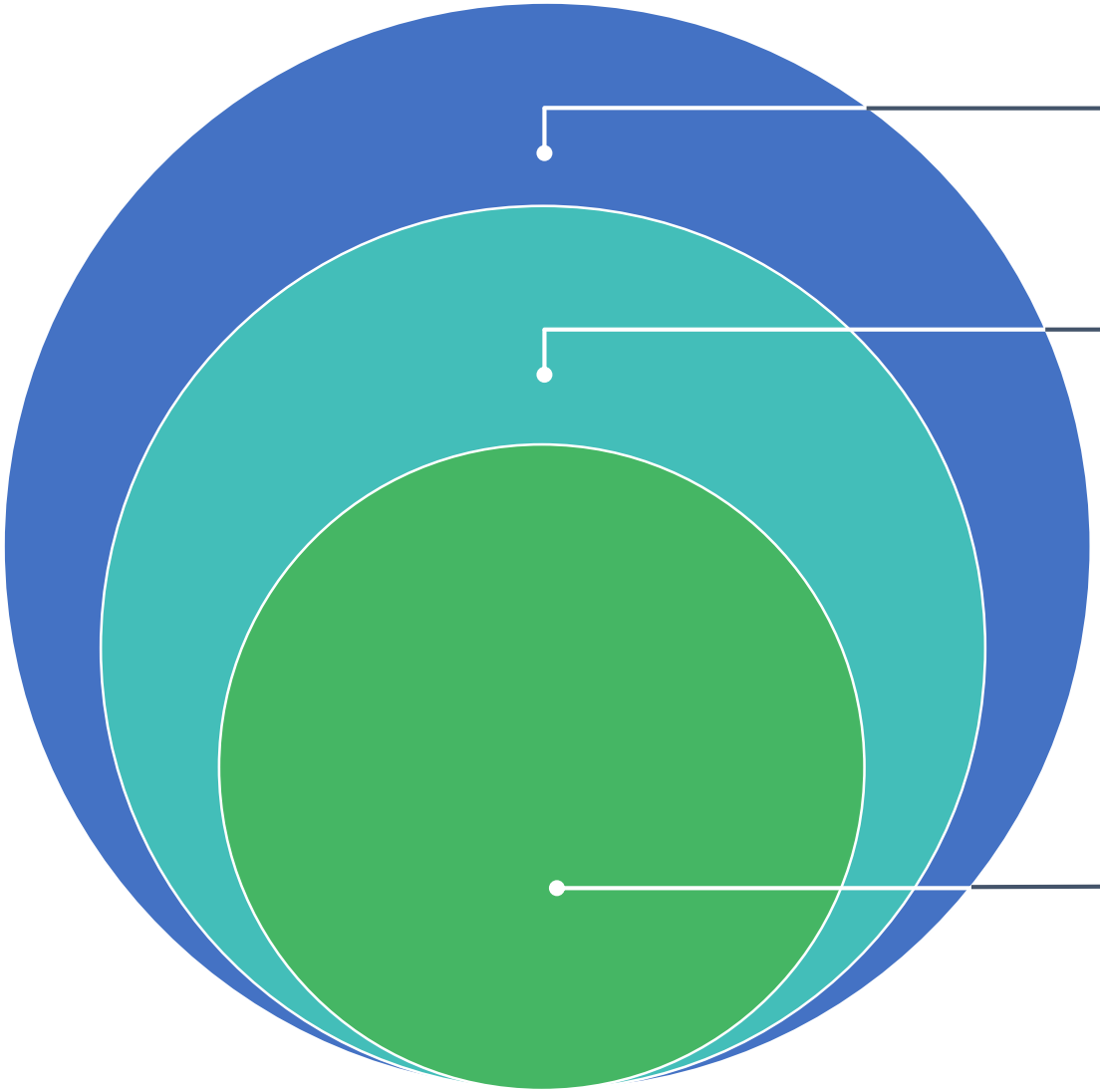
KU LEUVEN

Perceptions



91%
believe in
climate change

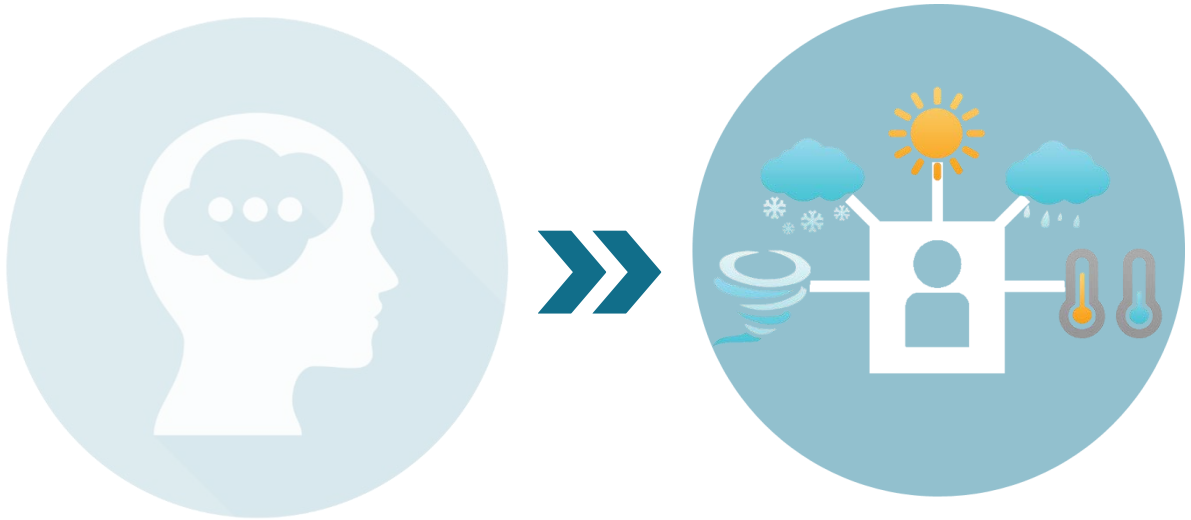

91%
believe in
climate change
74%
human
causation



91%
believe in
climate change

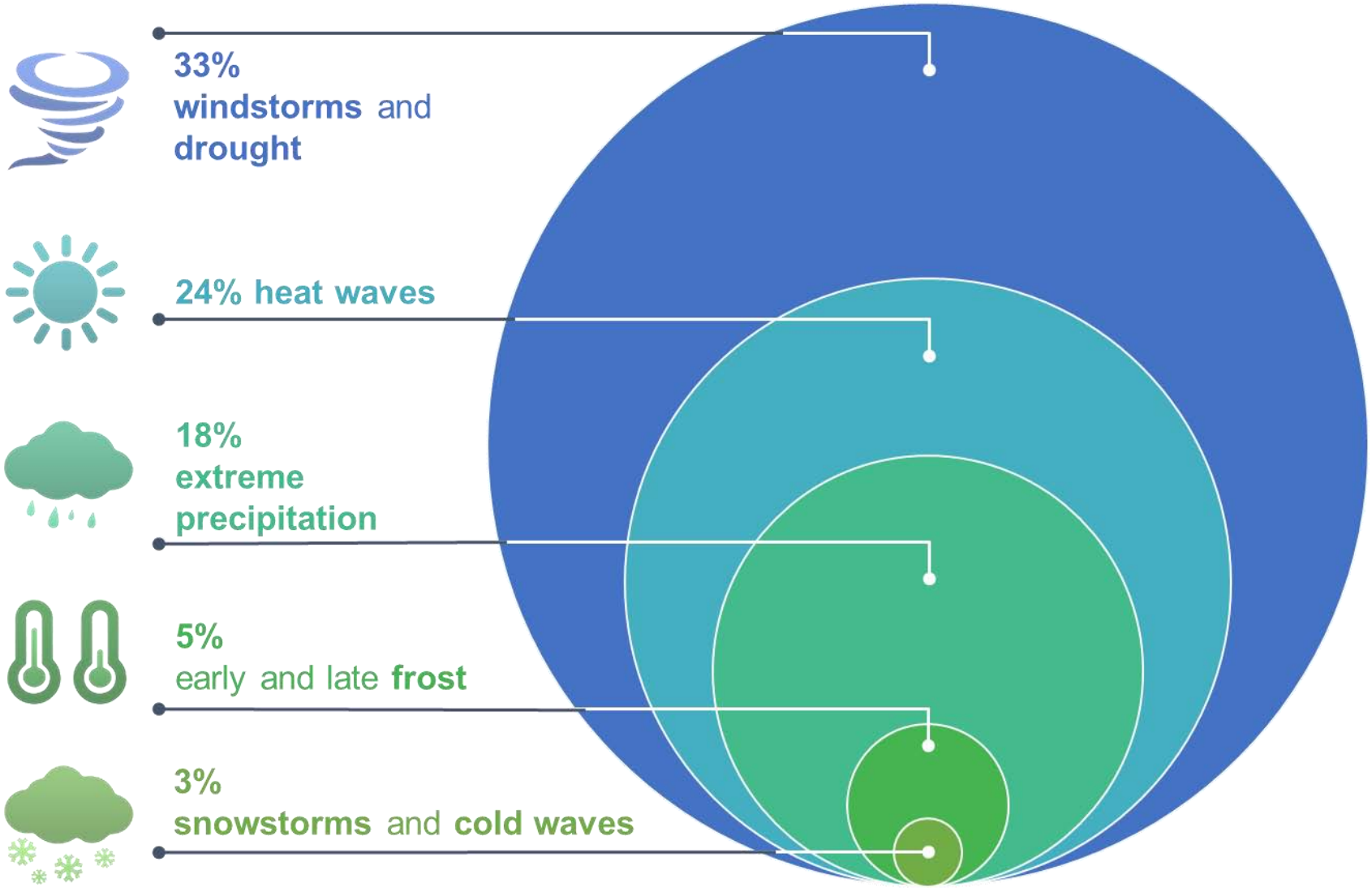
74%
human
causation

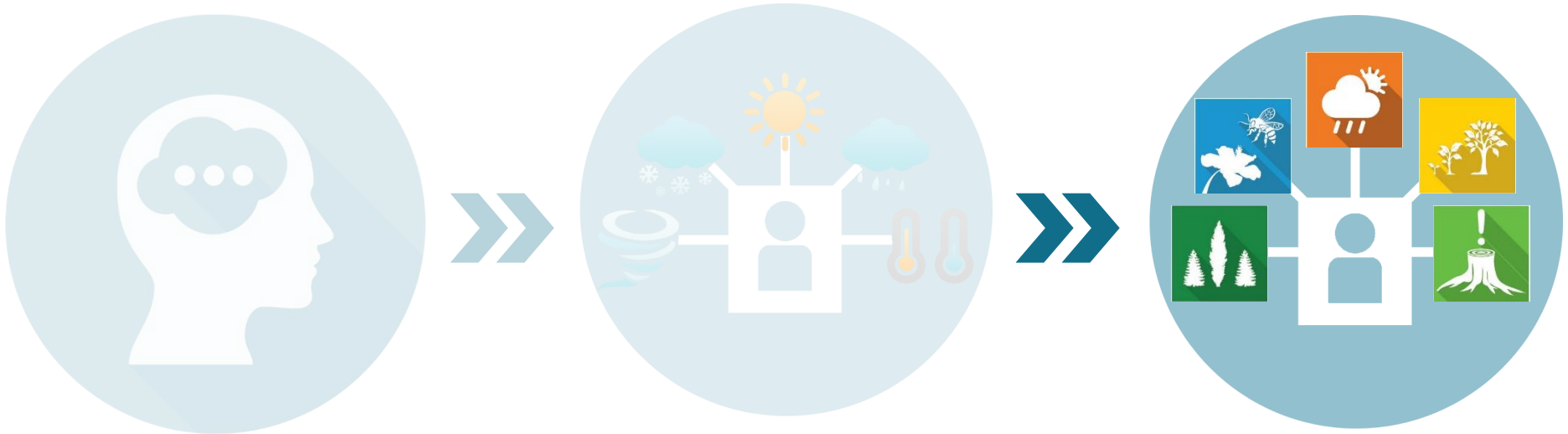
55%
have **experienced**
its impacts



Perceptions

Experiences


33%
windstorms and
drought
24% heat waves
18%
extreme
precipitation
5%
early and late frost
3%
snowstorms and cold waves

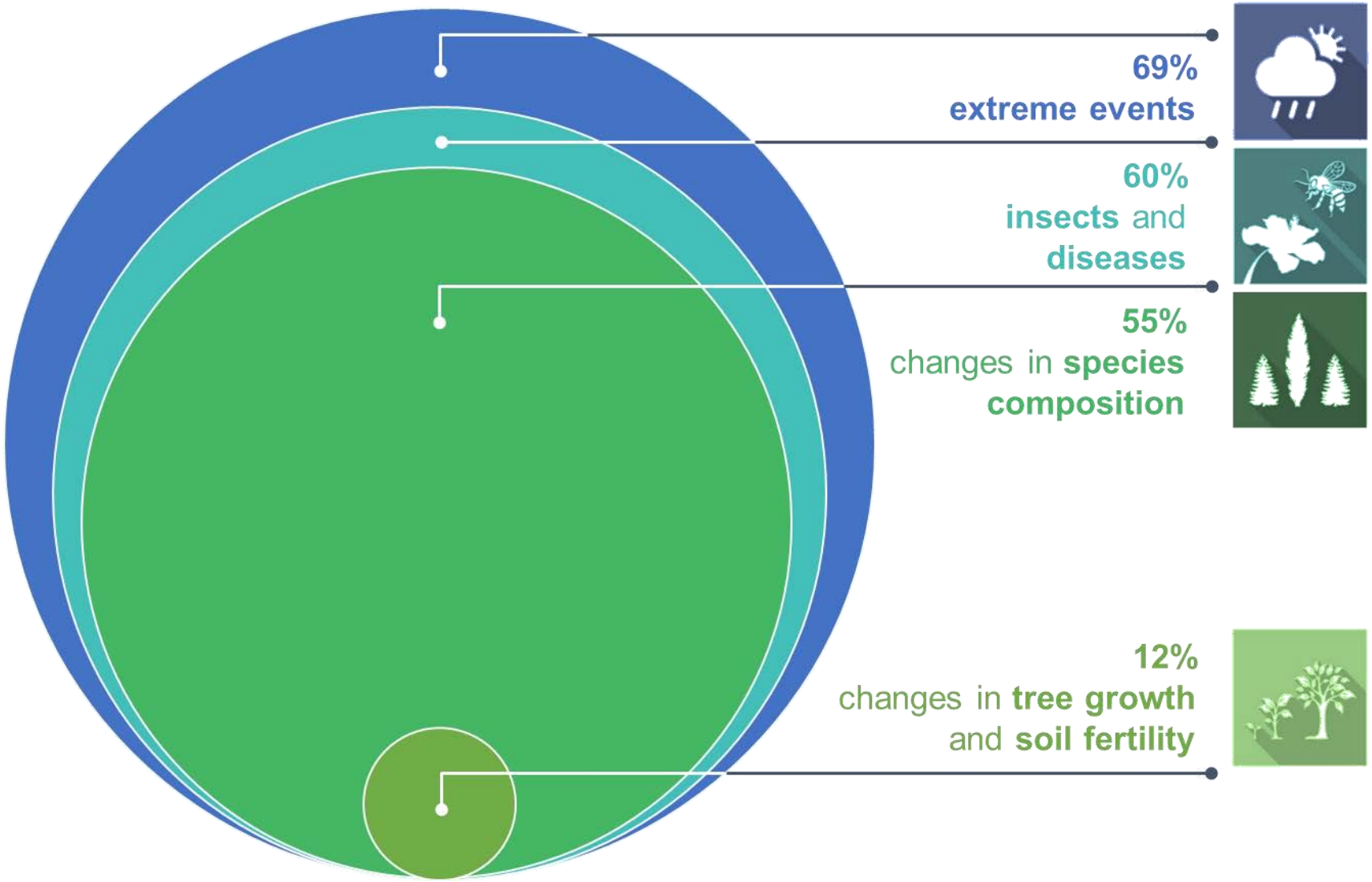


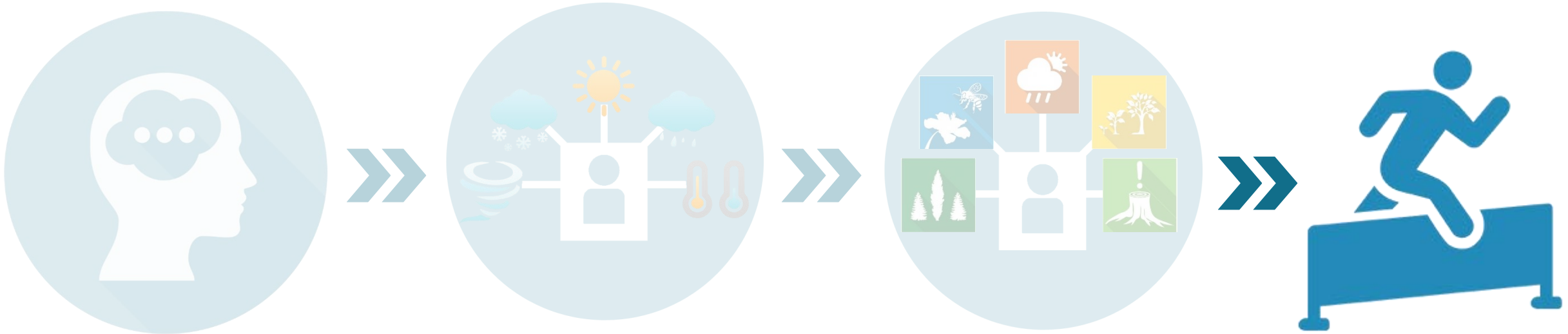
Perceptions

Experiences

Impacts

KU LEUVEN


69%
extreme events
60%
insects and
diseases
55%
changes in species
composition
12%
changes in tree growth
and soil fertility



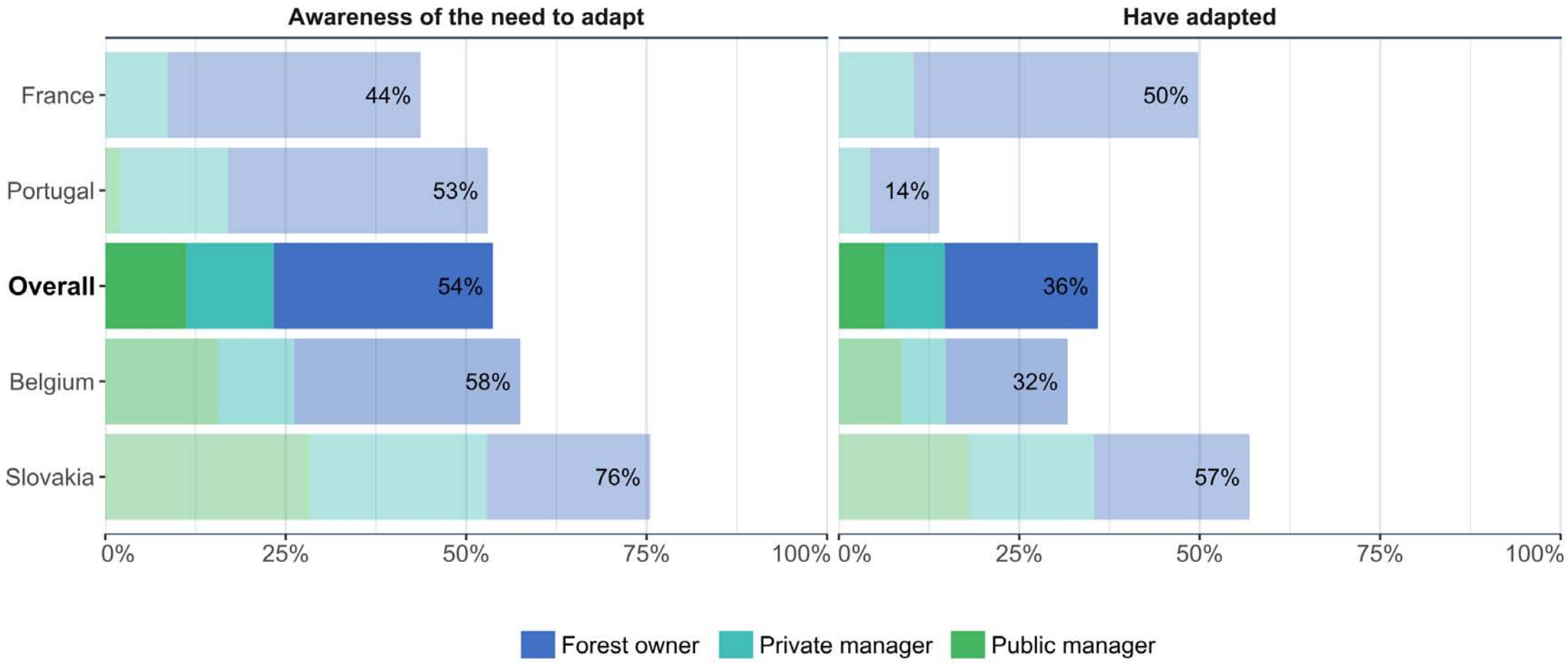
Perceptions

Experiences

Impacts

Adaptation

KU LEUVEN


Awareness of the need to adapt
Have adapted
France
Portugal
Overall
Belgium
Slovakia
44%
53%
54%
58%
76%
50%
14%
36%
32%
57%
0%
25%
50%
75%
100%
Forest owner
Private manager
Public manager

- Choice of species: planting better adapted species and increasing natural regeneration
- Promoting mixed stands
- Monitoring damage
- Changing rotation time and harvesting techniques
- Changing intensity and frequency of thinning
- Changing production goals
- Insurance scheme

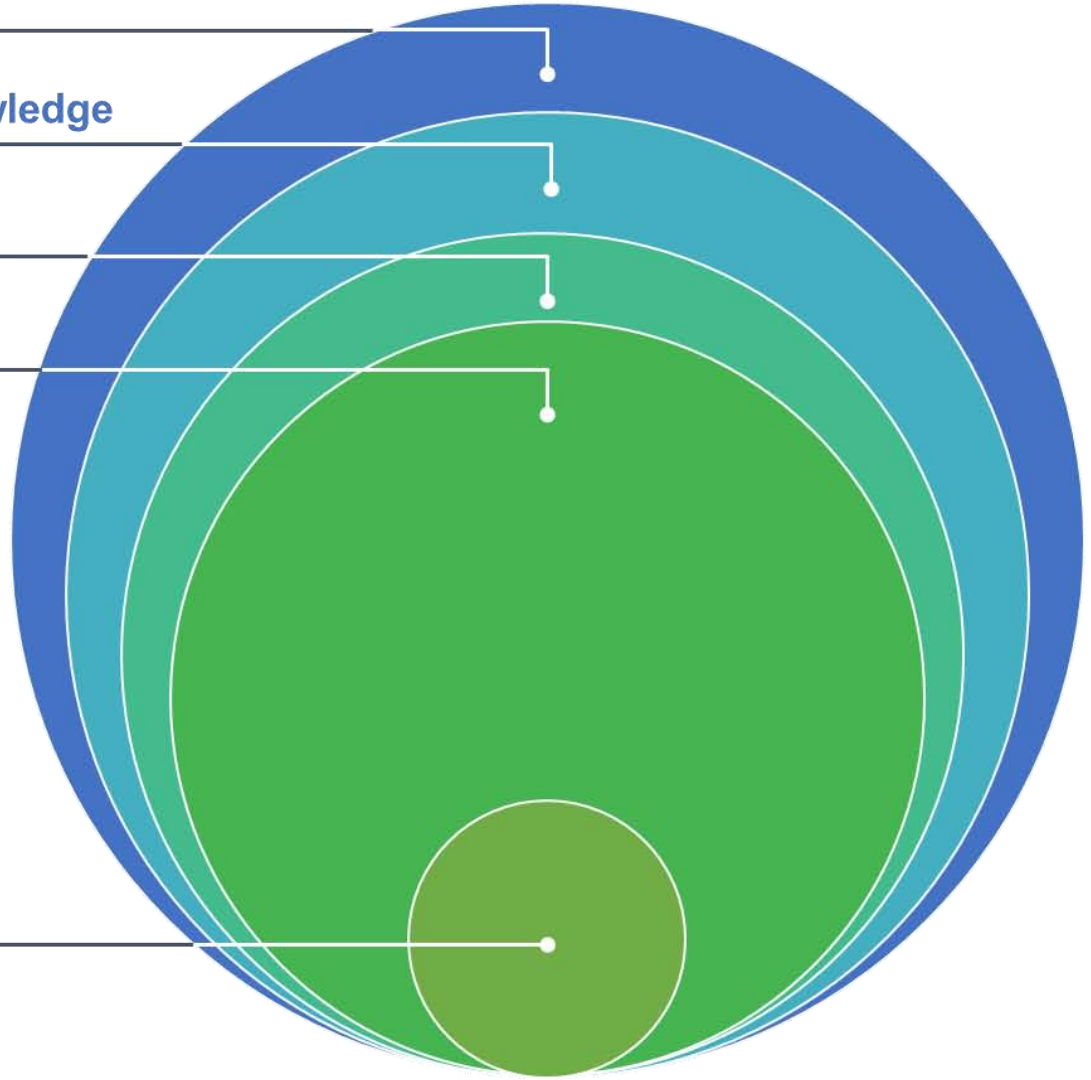
19%
lack of technical **knowledge**

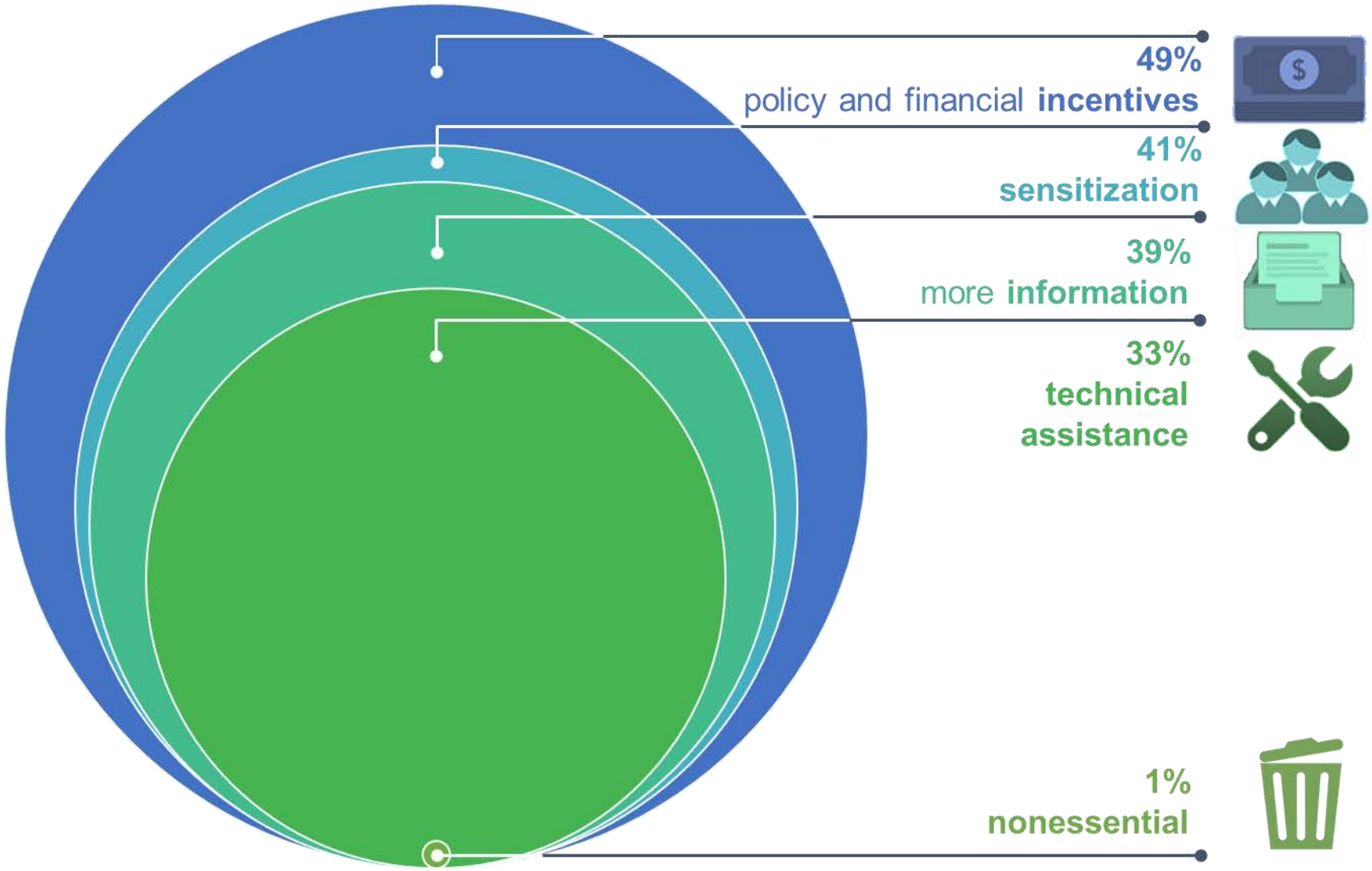
17%
lack of **information**

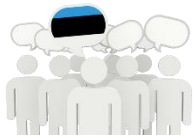
15%
lack of **conviction**

13%
lack of **finances**

5%
lack of **autonomy**

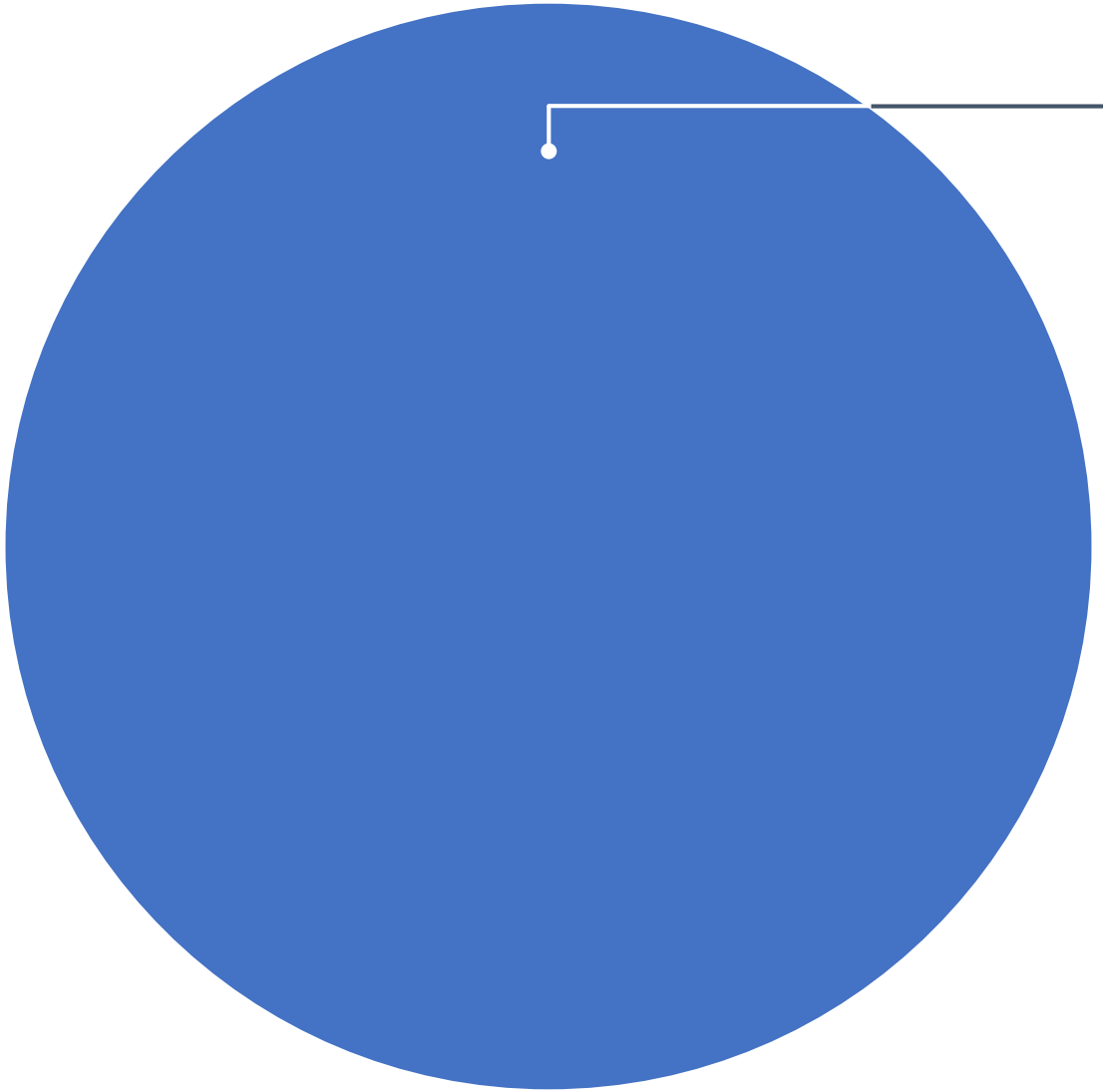



49%
policy and financial incentives
41%
sensitization
39%
more information
33%
technical
assistance
1%
nonessential



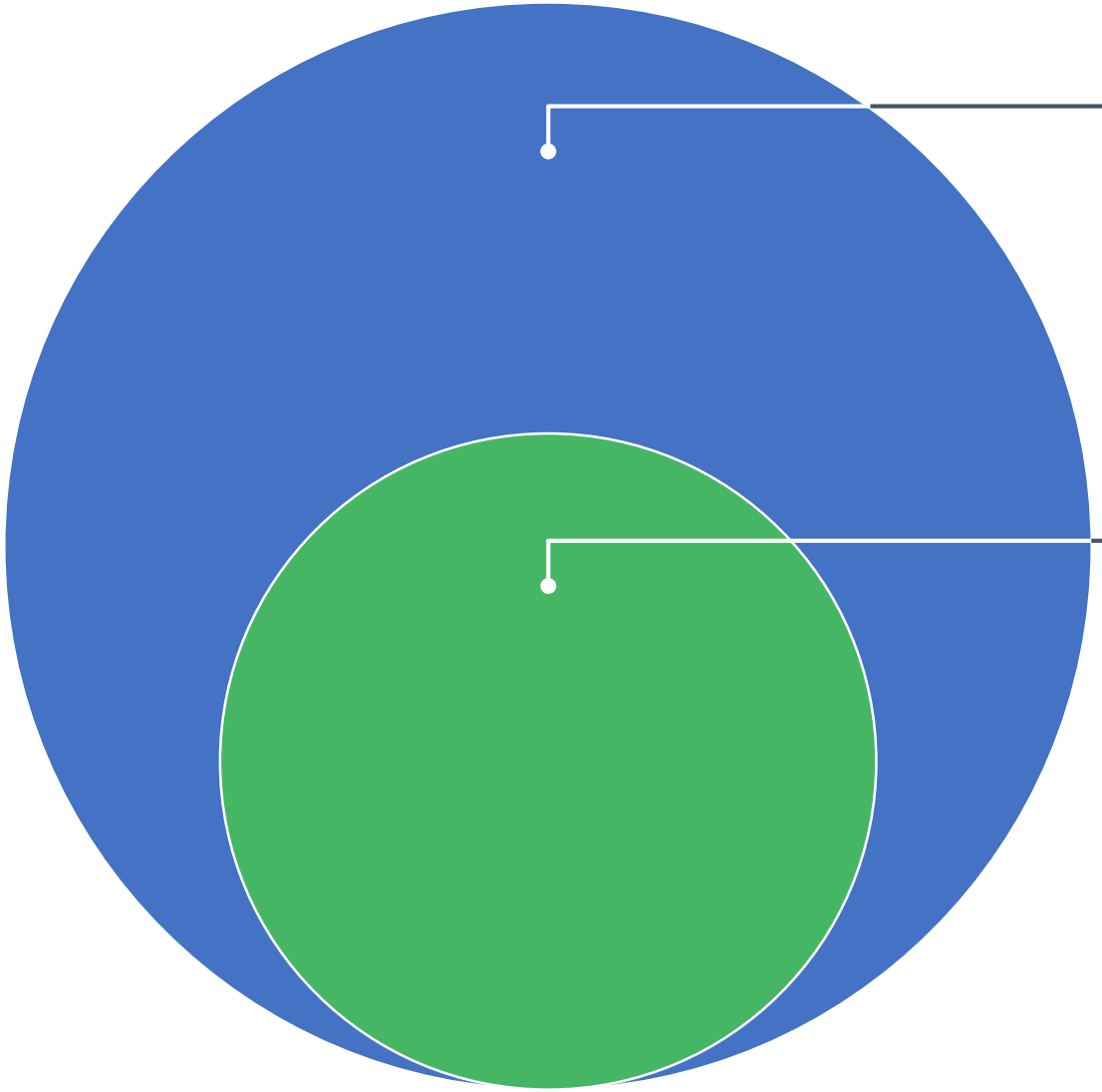
	Belgium	Estonia	France	Netherlands	Portugal	Romania	Slovakia
General beliefs	95%	75%	82%	75%	93%	91%	98%
General experiences	50%	35%	55%	55%	55%	61%	80%
Beliefs of potential impacts	71%	68%	64%	45%	82%	81%	83%
Implementation of adaptation actions	32%	15%	50%	25%	14%	-	57%
Number of responses	391	40	203	20	115	246	116

KU LEUVEN



91%
believe in
climate change

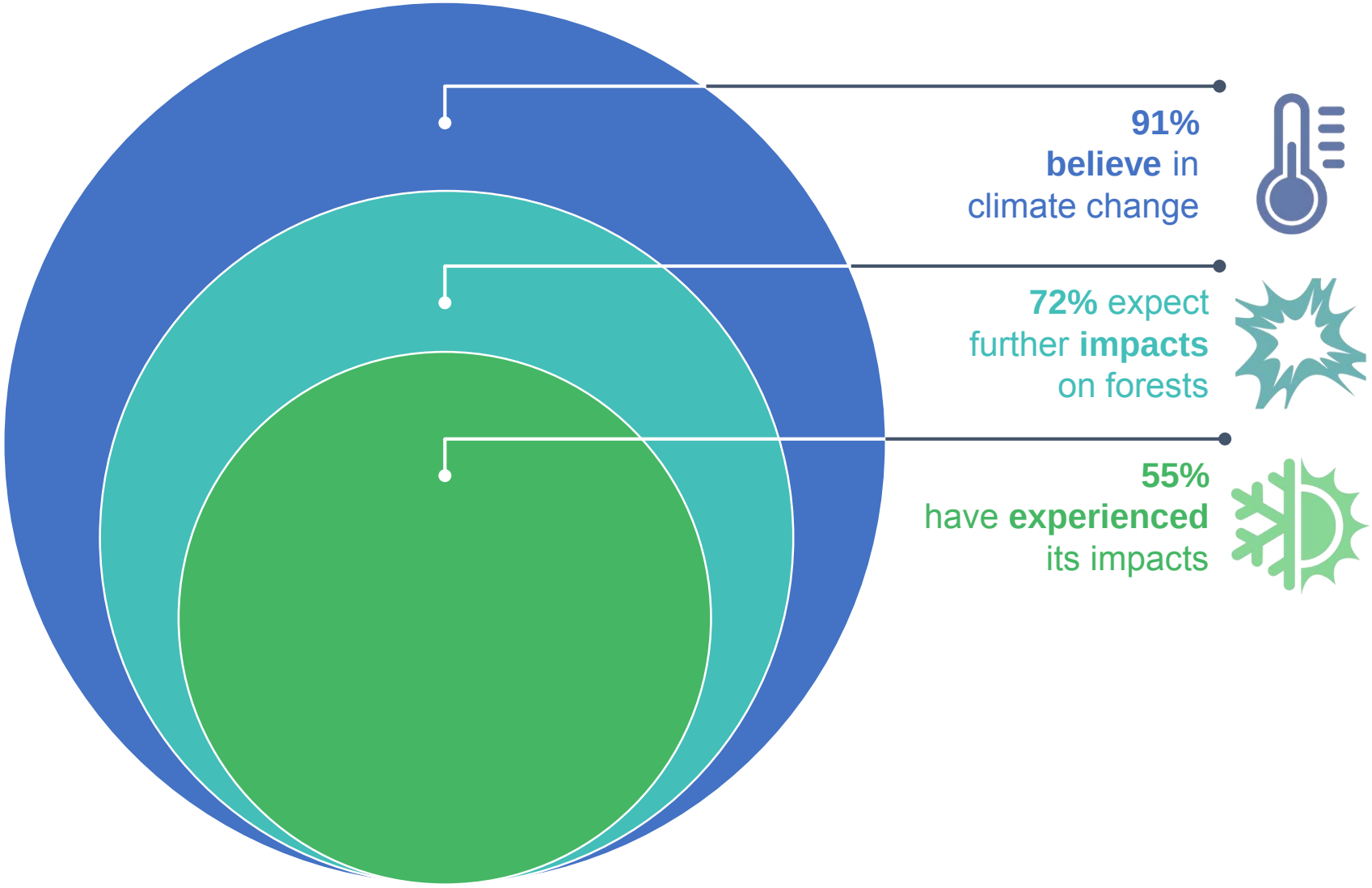
KU LEUVEN

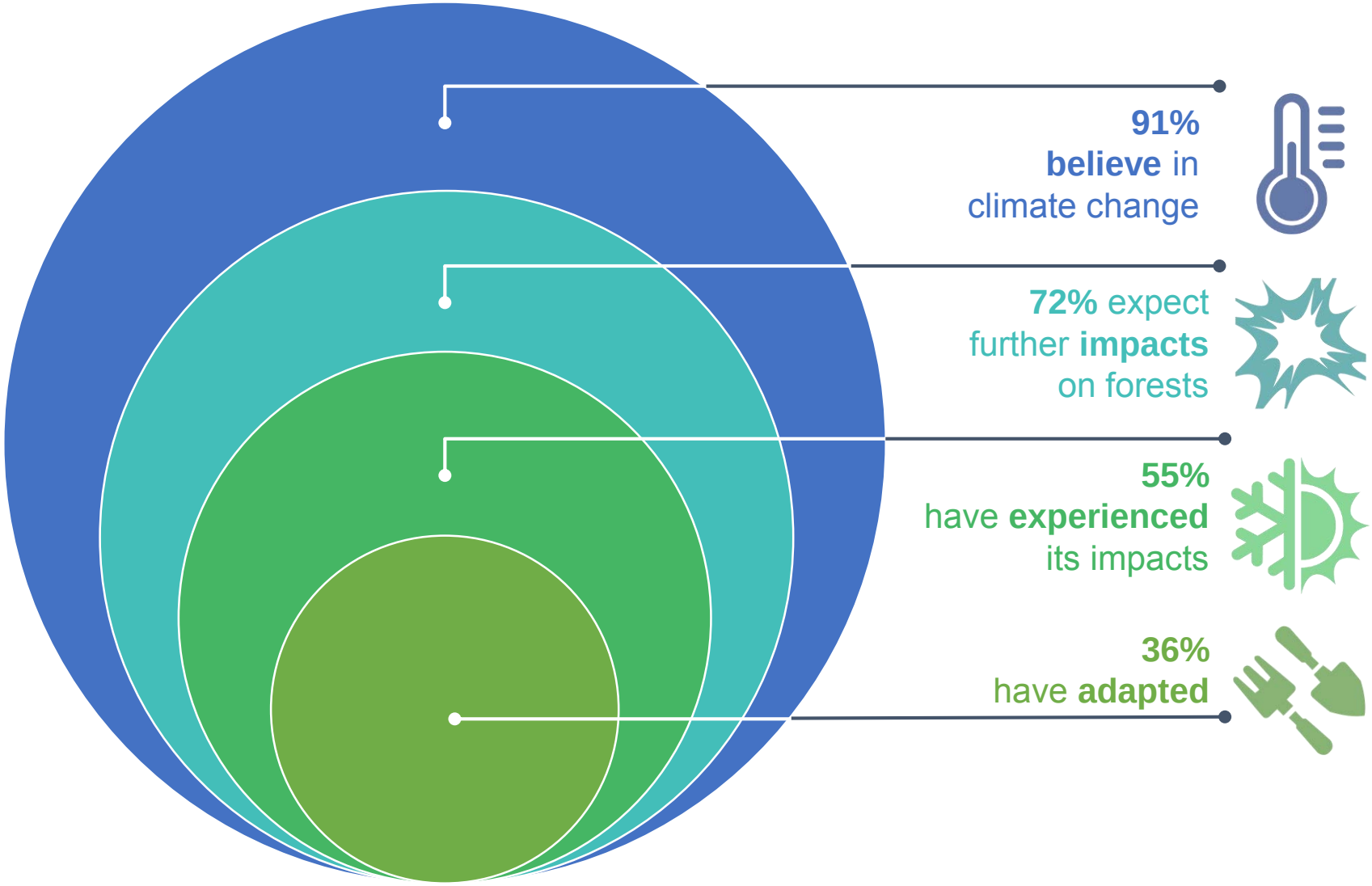


91%
believe in
climate change

55%
have **experienced**
its impacts

KU LEUVEN


91%
believe in
climate change
72% expect
further impacts
on forests
55%
have experienced
its impacts


91%
believe in
climate change
72% expect
further impacts
on forests
55%
have experienced
its impacts
36%
have adapted

KU LEUVEN

Take-Home Message:

- High awareness about climate change (91%) and its impacts (72%),
  - But has little influence on the adaptive responses of forest owners and managers (36%).
- Respondents are concerned but not well informed.
- Need to adapt forest management to climate change, and methodologies for achieving this, must be stressed in future communication.
  - Need for a clear and sufficiently detailed message, presented in a geographically-explicit context, in order to foster adaptation.

anarita.silva@kuleuven.be

KU LEUVEN