

Are multiple layers of governance systems a barrier for sustainable forest bioenergy production?

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&

IEA Bioenergy Task 43 'Biomass feedstocks for energy markets'

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OVERVIEW

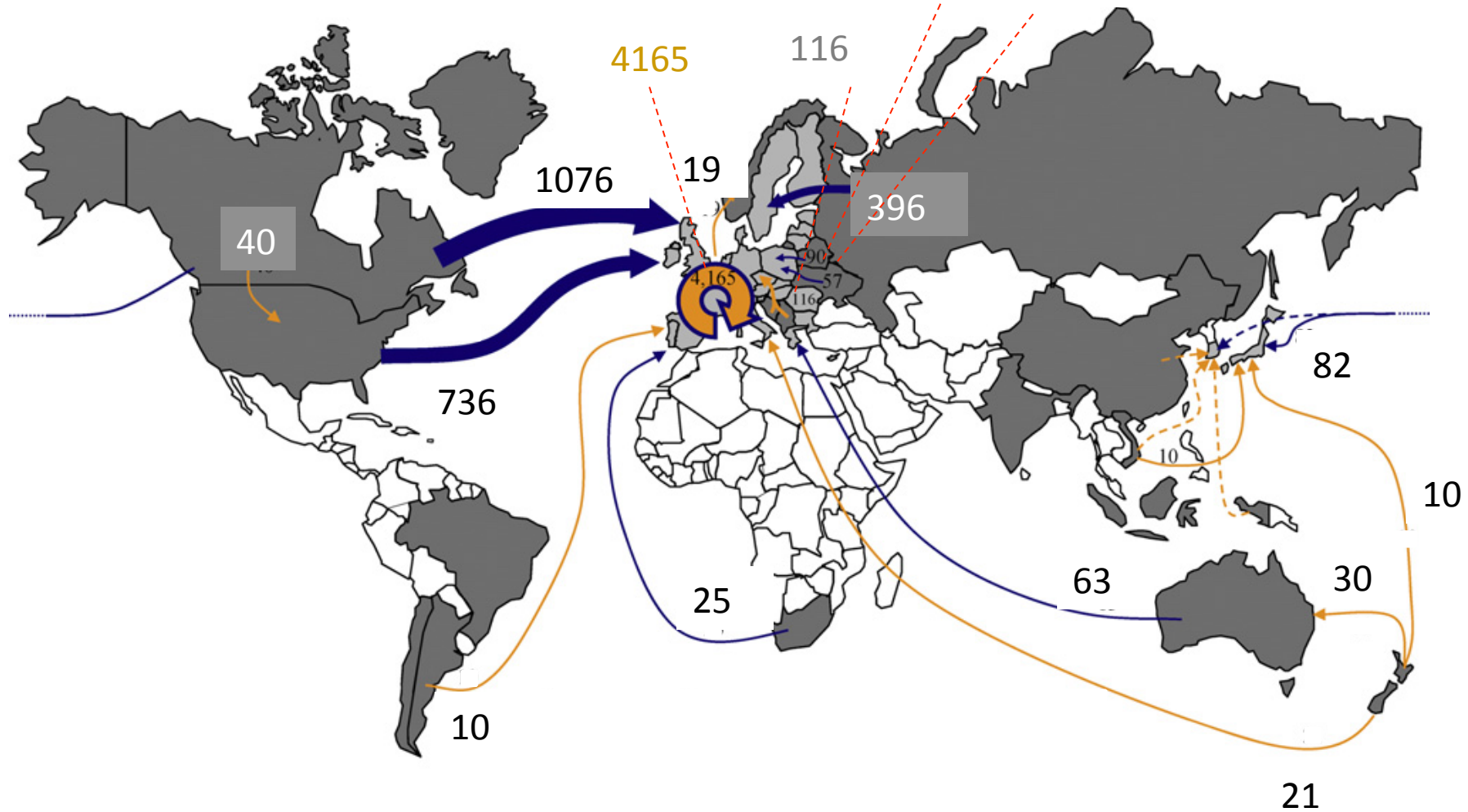
- Trends in global bioenergy deployment
- Multiple level governance
- IEA Bioenergy study on improving the effectiveness of governance and certification systems to benefit sustainable bioenergy deployment
- Some things to consider

GLOBAL BIOENERGY PERSPECTIVES

- *Deployment level of IPCC scenarios by 2050*
 - 440-600 ppm CO₂^{eq} target: 80-150 EJ/year
 - <440 ppm CO₂^{eq} target: 118-190 EJ/year
- *Present bioenergy*
 - Modern bioenergy: 10-15 EJ/year
 - Total bioenergy: 50 EJ/year
- *Present other biomass*
 - Industrial roundwood: around 15 EJ/year
 - Major agricultural crops: about 60 EJ/year.

GLOBAL WOOD PELLET TRADE STREAMS, 2010

10 k tonnes



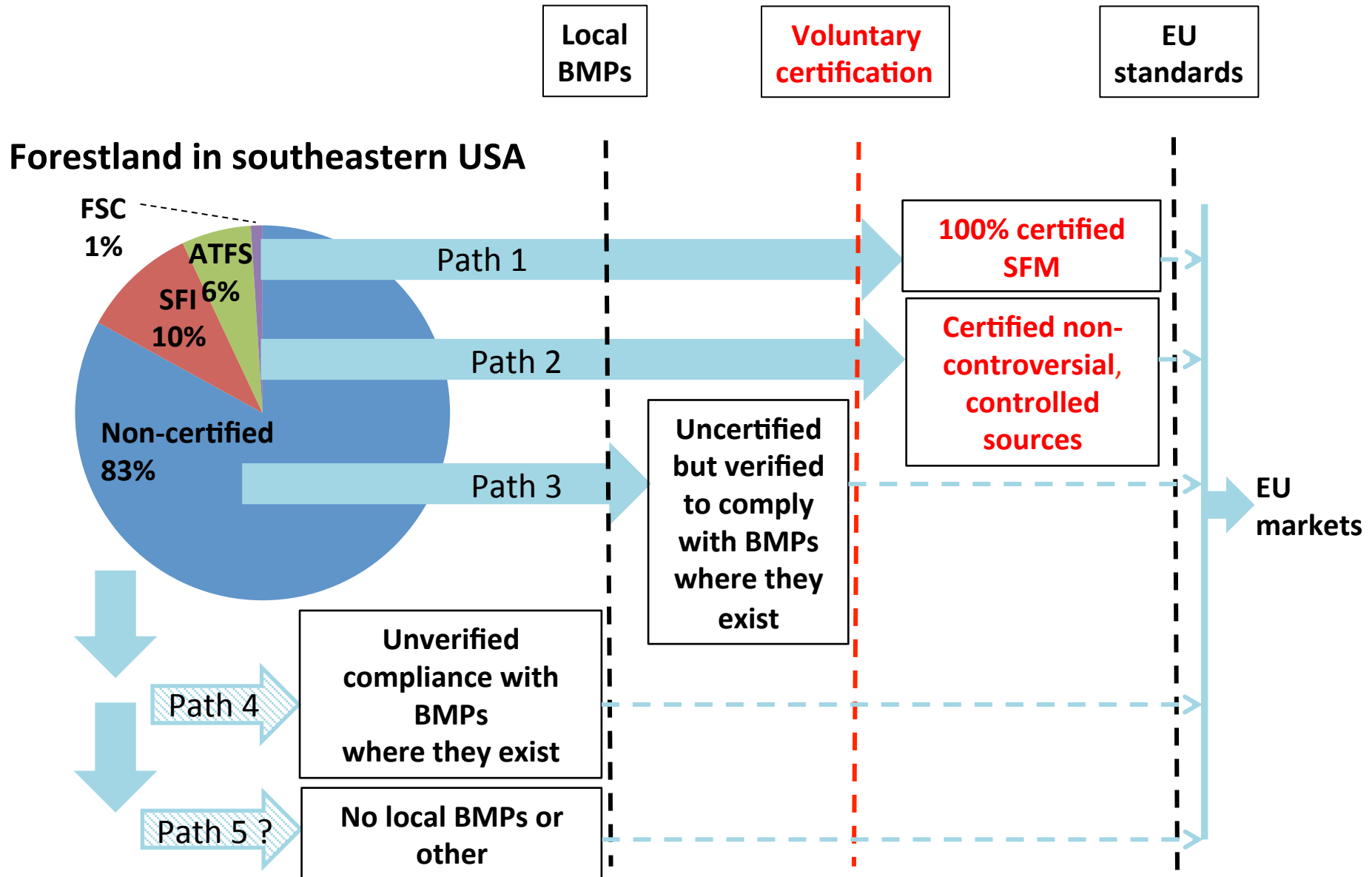
- ➔ Mainly industrial / brown pellets
- ➔ Mainly residential / white pellets

Source: Lamers et al. 2012

Multiple levels of governance

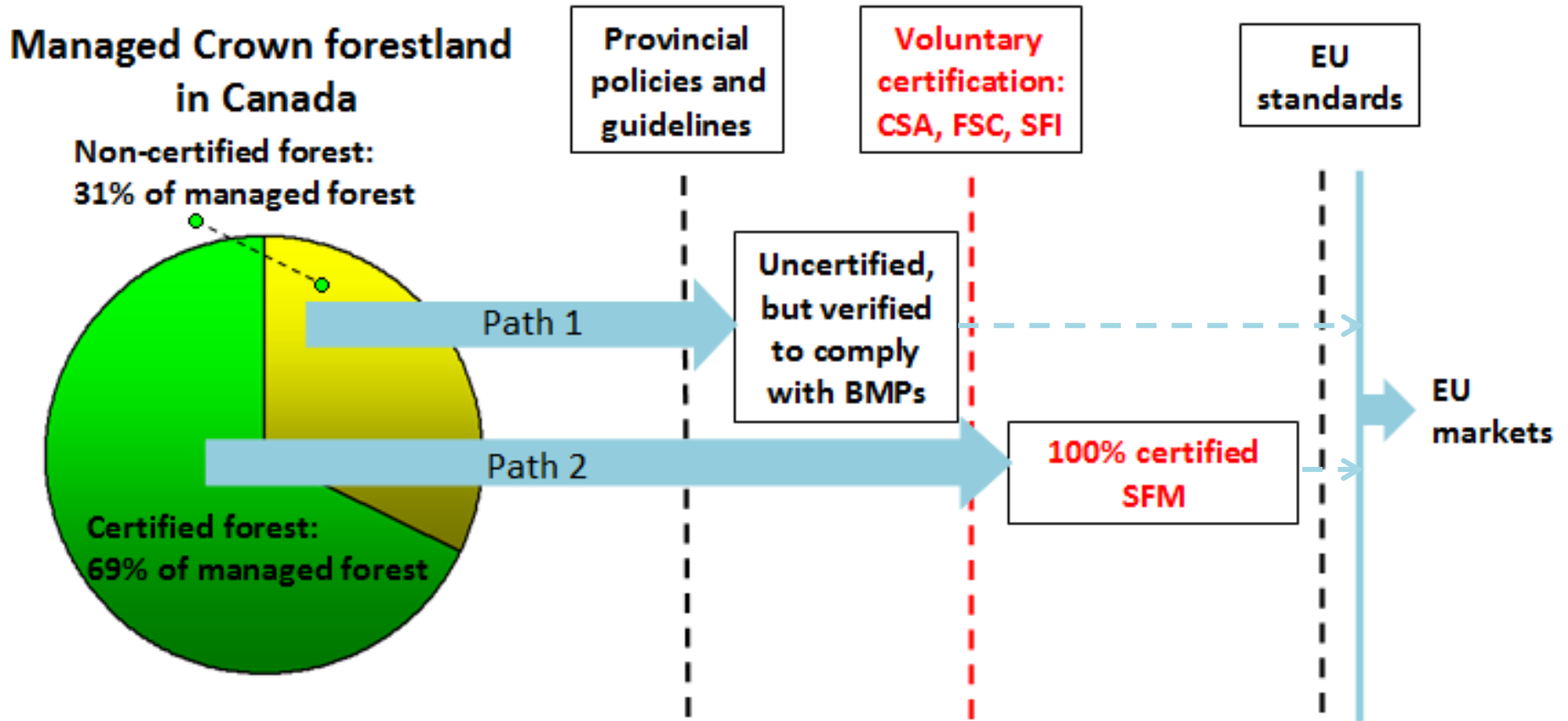
- National or regional legislation and regulation
- International conventions and processes
- Jurisdictional guidelines - mandatory or voluntary
- Certification - mandatory or voluntary
- Business systems - Corporate Social Responsibility & Environmental Impact Assessment

Multiple sustainability claims for SE USA exports to EU markets



Adapted from: Kittler et al. 2012

Multiple sustainability claims for Canadian exports to EU markets



Source: Murray 2012, adapted from Kittler et al. 2012.

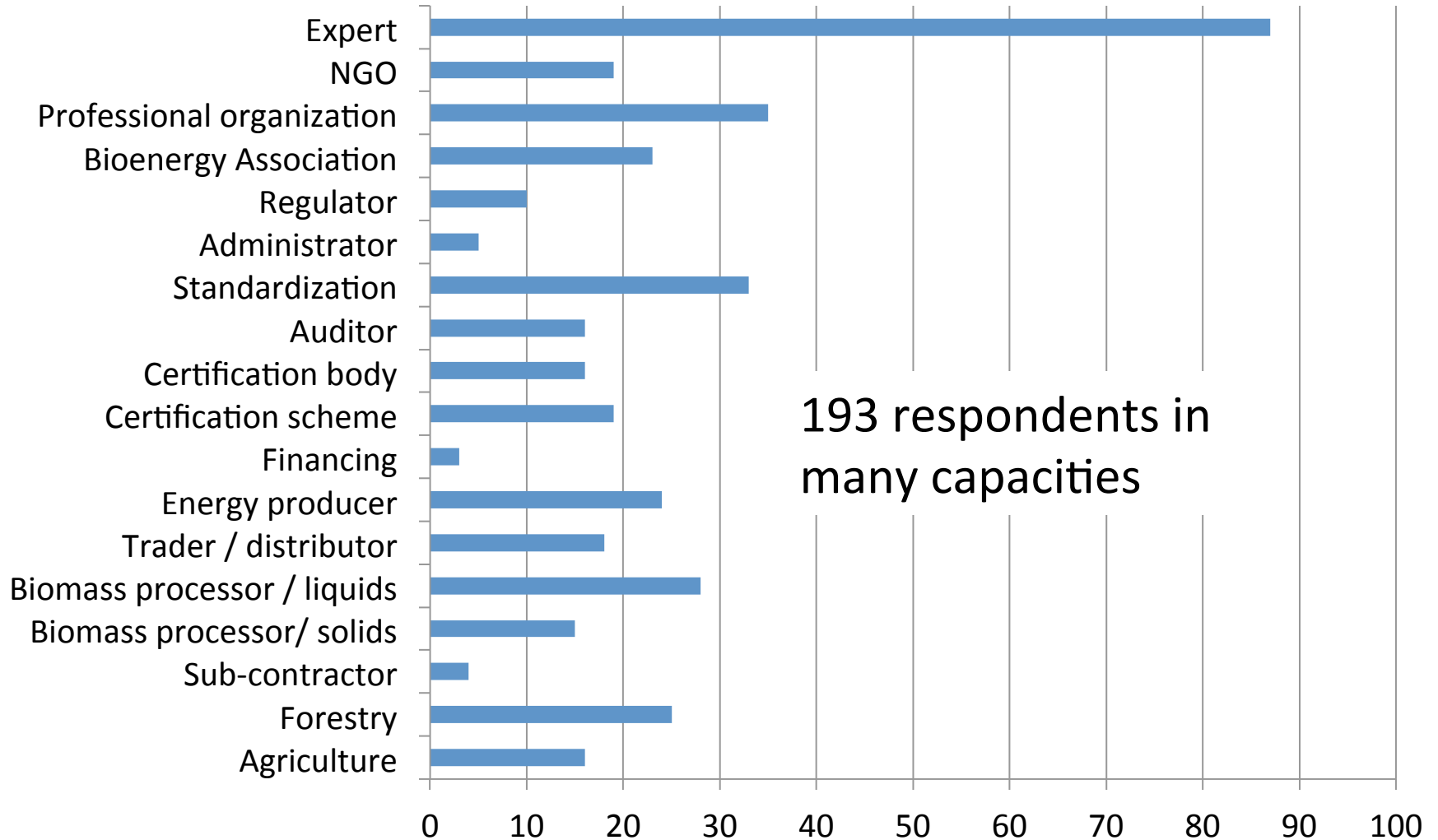
IEA BIOENERGY SURVEY

- Survey to evaluate options for *improving the effectiveness of governance and certification systems* for sustainable bioenergy deployment.
- Determine the *operational experiences* of people involved with all aspects of bioenergy production systems, including:
 - biomass feedstock production, conversion to primary and secondary biofuel and bioenergy products, markets and trade, as well as certifying organizations.
- Evaluate *how these sectors are affected by governance mechanisms*, including:
 - binding and voluntary standards, legislation, regulations and certification schemes.

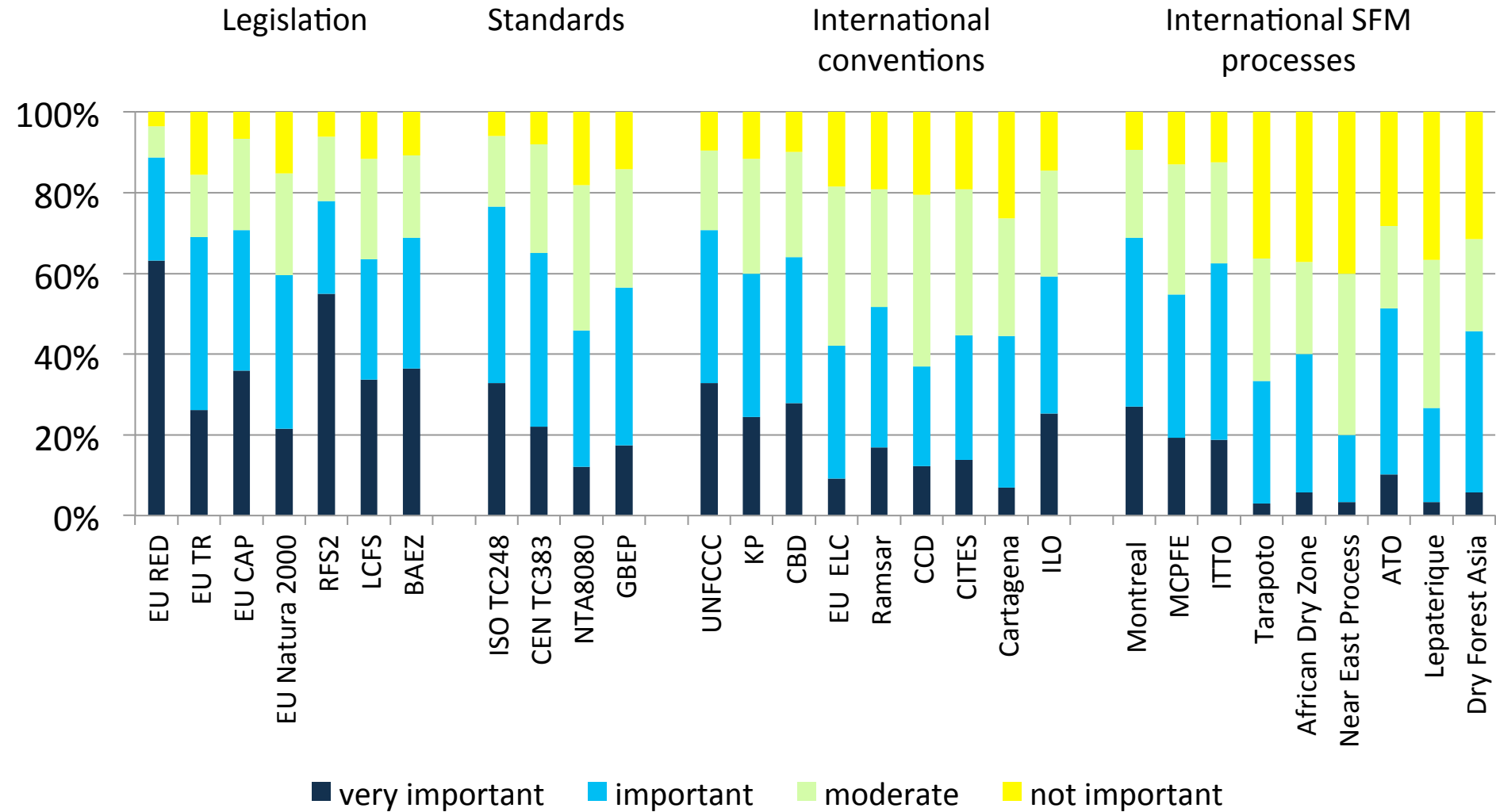
<http://www.surveygizmo.com/s3/936779/IEA-certification>

<http://www.bioenergytrade.org/ongoing-work/monitoring-sust-certification-of-bioenergy.html>

CAPACITIES OF THE RESPONDENTS



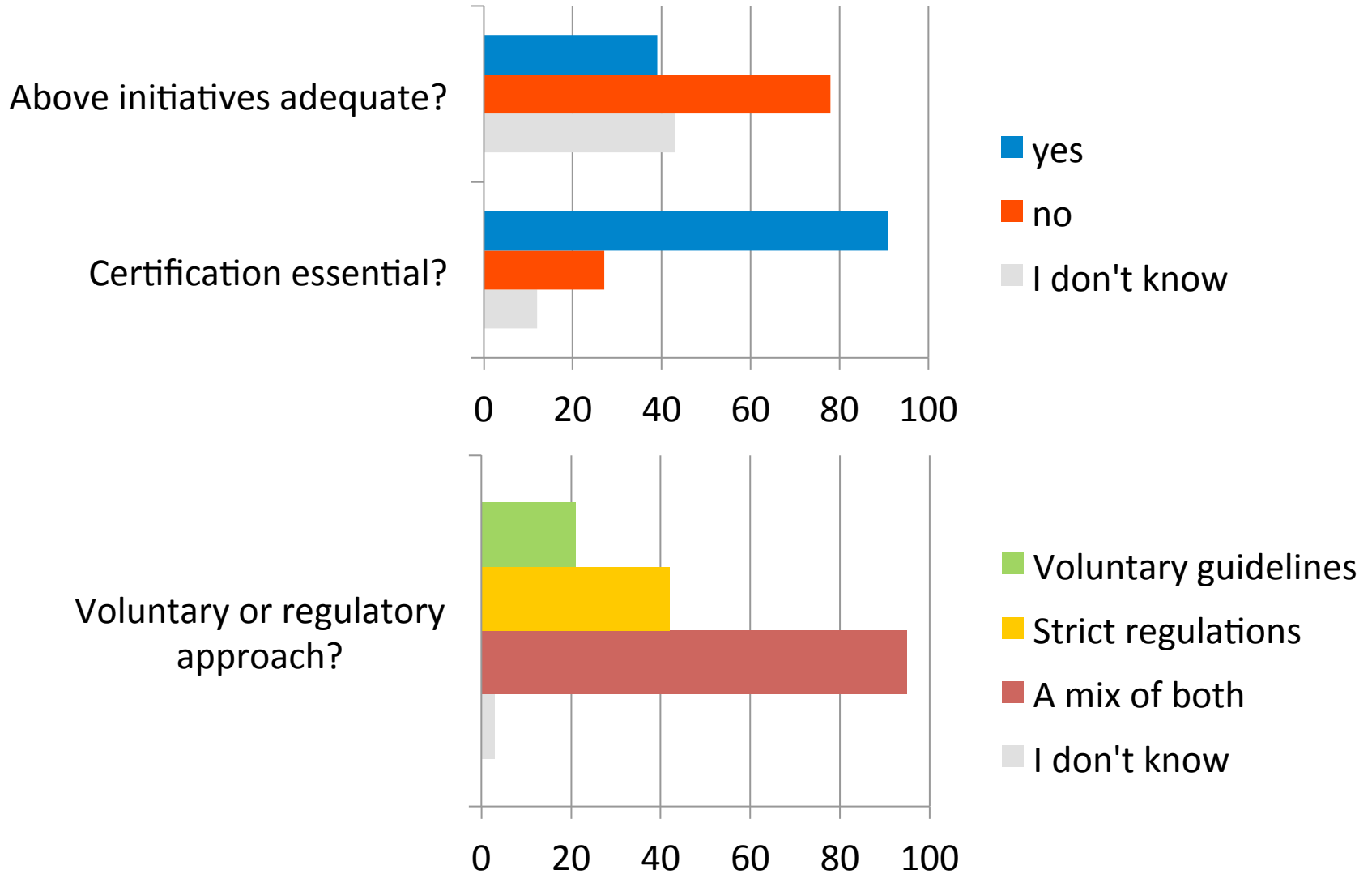
IMPORTANT INITIATIVES?



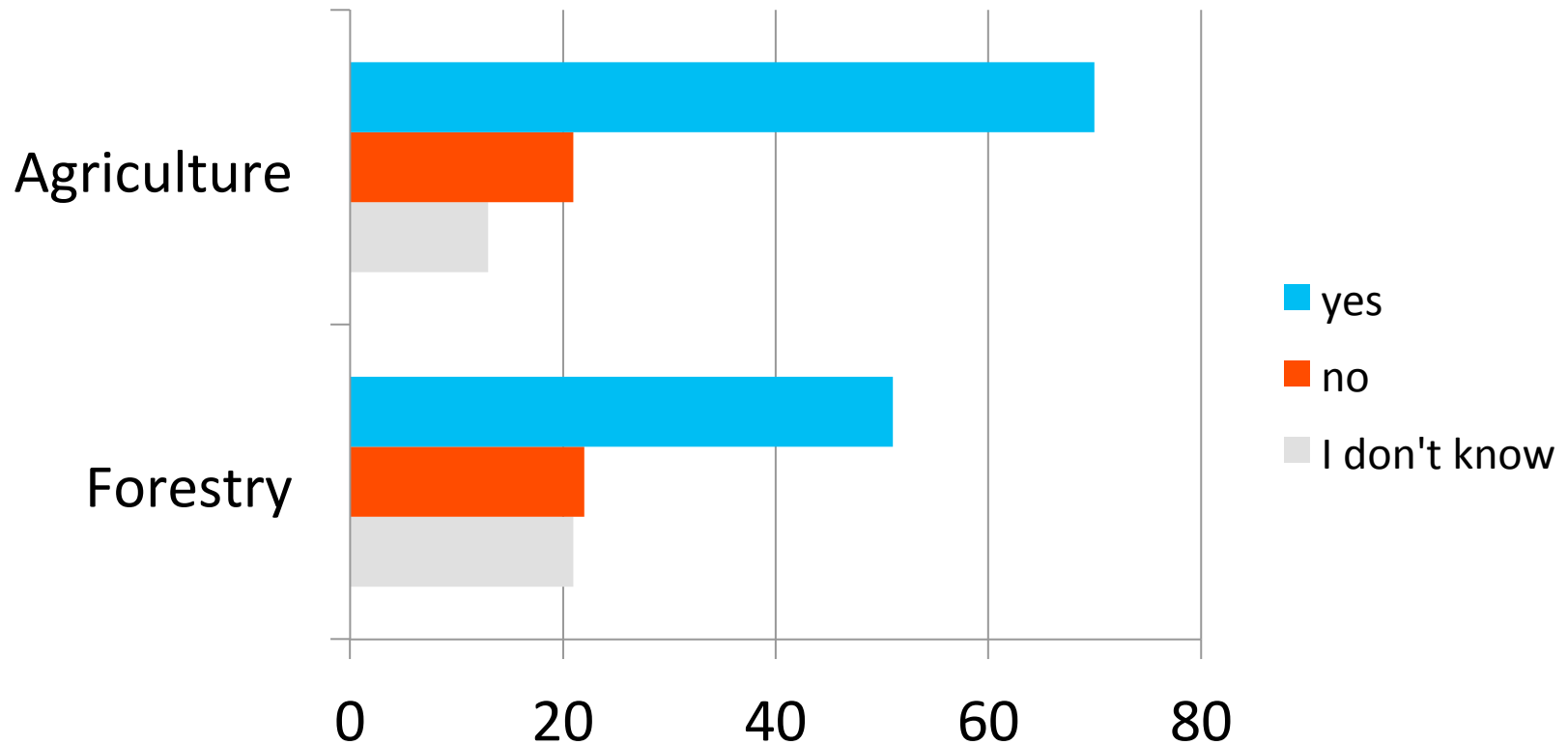
Note of importance:

- Absolute: **EU RED, RFS2, ISO TC 248, UNFCCC, KP**
- Relative: Legislation (**EU RED, RFS2** namely), ISO, CEN, UNFCCC, CBD, Montreal, ITTO

THE ROLE OF CERTIFICATION?

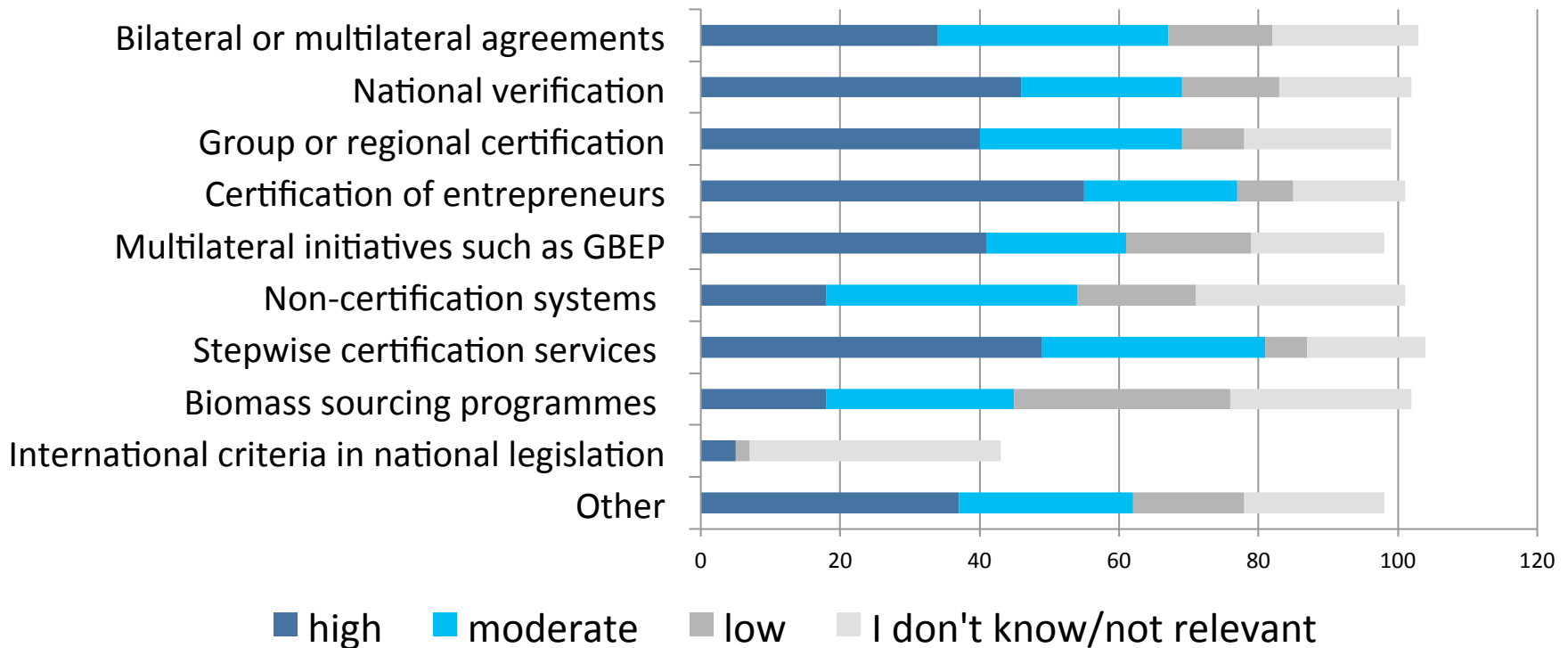


IS NON-CERTIFIED LAND A PROBLEM?



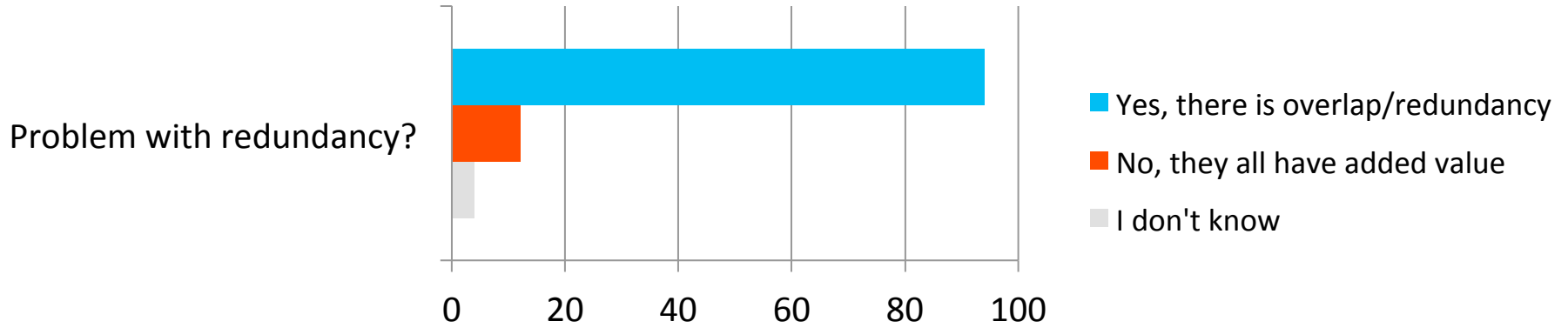
This question addresses the 'other 90%' issue

EFFECTIVENESS OF ALTERNATIVES TO CERTIFICATION?

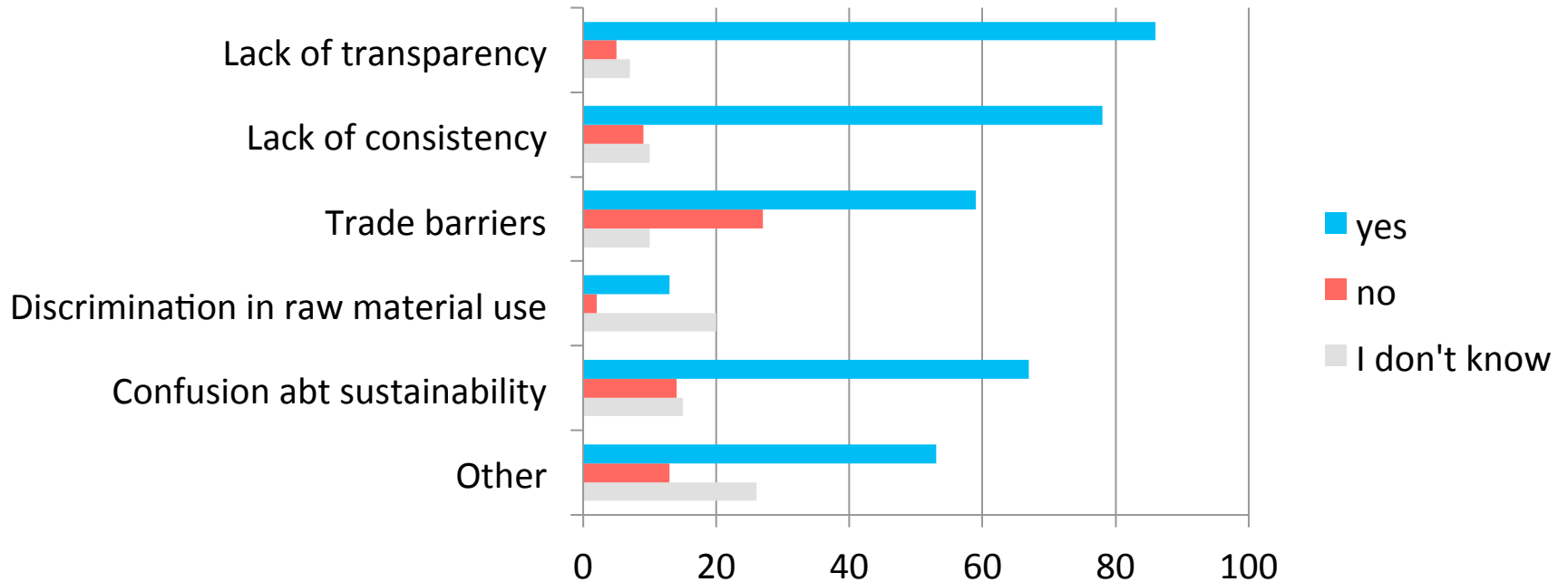


Note a mix of system approaches are considered effective

HARMONIZATION AND INTEGRATION?

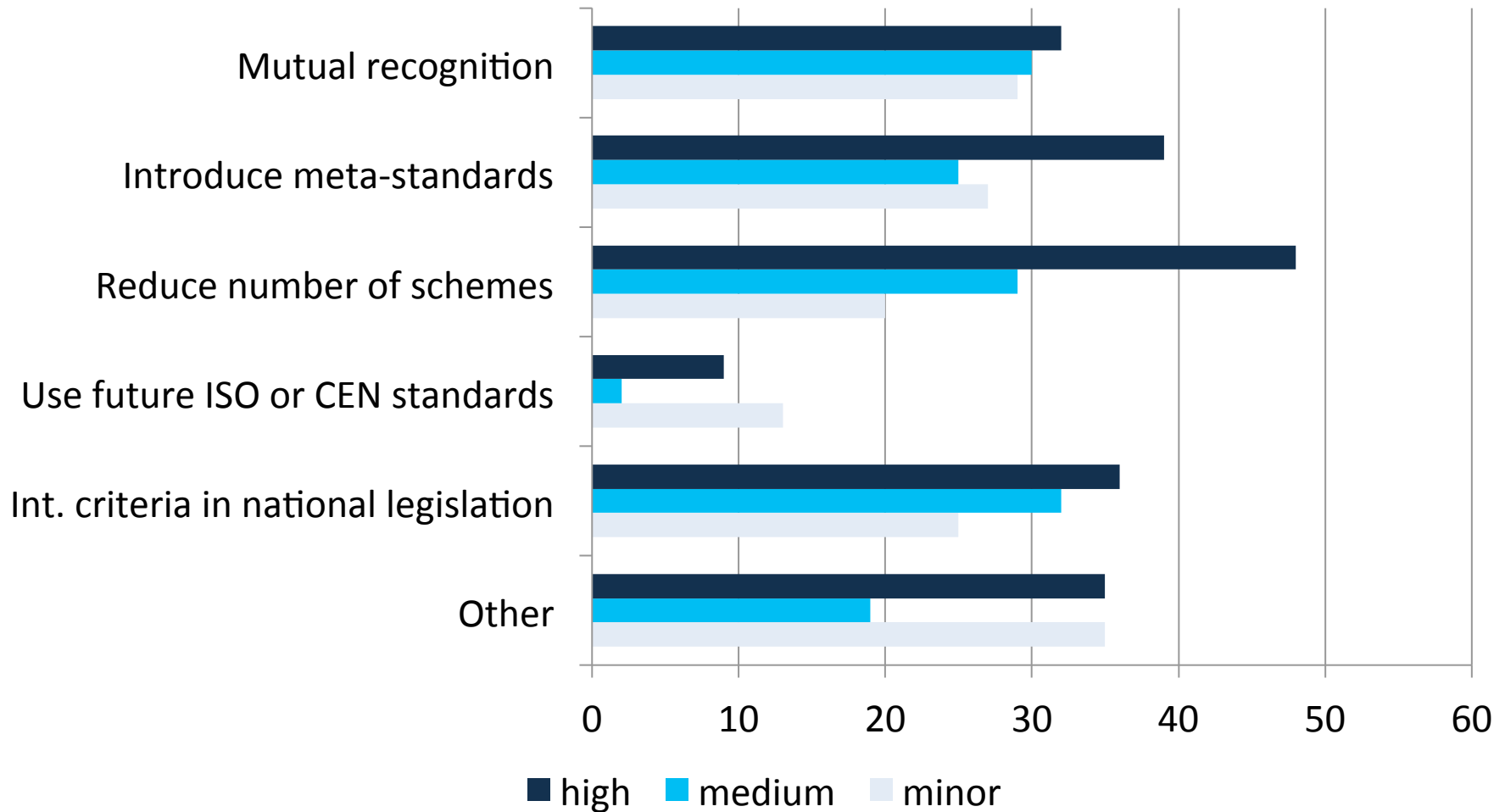


If yes, which problems....?



HARMONIZATION AND INTEGRATION

Solutions to redundancy?



DIVERGENT OPINIONS

The mix of mechanisms

Certification is important worldwide

versus

‘Certification is only needed in some regions’; use of risk evaluations to separate where needed

Certification is the most effective tool (FMU)

versus

Large scale governance systems as governmental regulation is the most effective and efficient tool (area and costs); certification is important as a ‘soft’ tool to gain experiences in the short term

National legislation & monitoring and political commitment

versus

‘Governments should not be involved’

DIVERGENT OPINIONS

Standards

One or a few international standards are needed

versus

A diversity of standards are needed; choice in the market, regional differences

Criteria are inadequate; more focus on food security, iLUC, landscape level, social aspects, trade-off between energy demand and environmental values versus, GHG consensus (depending on scheme)

versus

Stick to simple criteria - we have enough in Europe and Northern America; focus on deforestation

DIVERGENT OPINIONS

Challenges within certification

We feel adequately involved as stakeholders

versus

We do not feel adequately involved

(relates to expectations?)

Certification is very costly

versus

Certification is affordable

(relates among other things to the size of the business, cost-benefit, views?)

Our scheme is effective, most criteria are easy to audit and there is no need for more verification tools

versus

Some criteria are difficult to audit and there is a need to develop verification tools; different results can be achieved when using different tools

POSSIBILITIES FOR FINDING 'COMMON GROUND'?

The Quebec example

- EU sustainability criterion on primary forests
 - Designed to prevent tropical deforestation
- Formal protection of vast primary forests in Canada
- Two decades of SFM system development in Canada
- Significant certified Canadian pellet export to the EU

- Anticipation that finding 'common ground' through communication and open, earnest discussion among the parties will lead to an outcome that fosters sustainable trade of forest-based bioenergy feedstocks

SOME THINGS TO CONSIDER

- How to get people engaged and committed to designing the best possible systems and minimize falsification risks?
- How to achieve scale, be effective and yet cost-efficient; what is the appropriate application of certification and other governance systems?
- Can we decide when and where voluntary certification is needed, and when it is not effective?
- Is a harmonized international standard possible at some level? When is a diversity of schemes desirable?
- Should different schemes cover verification of different criteria, and how might this be coordinated?

Thanks!

Questions?

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