

# Overview (Preliminary) of results of status and needs survey

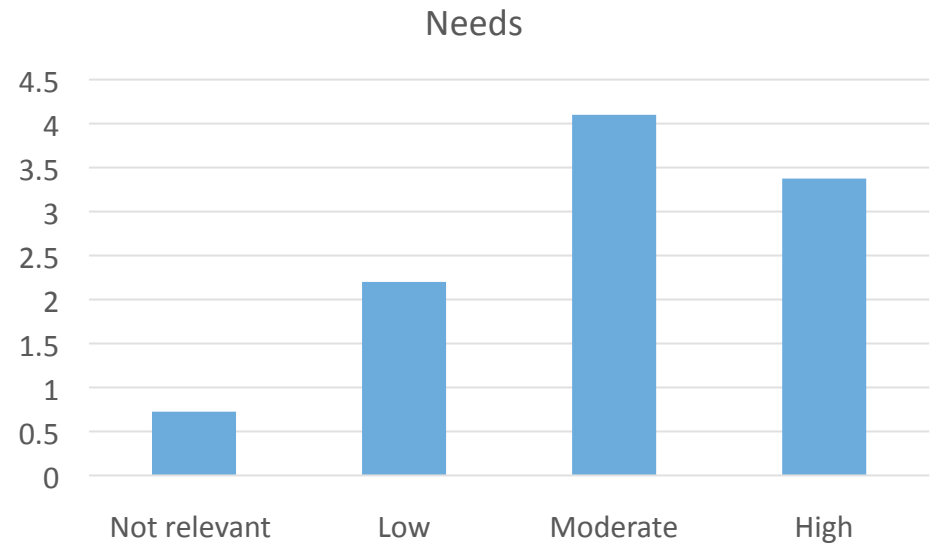
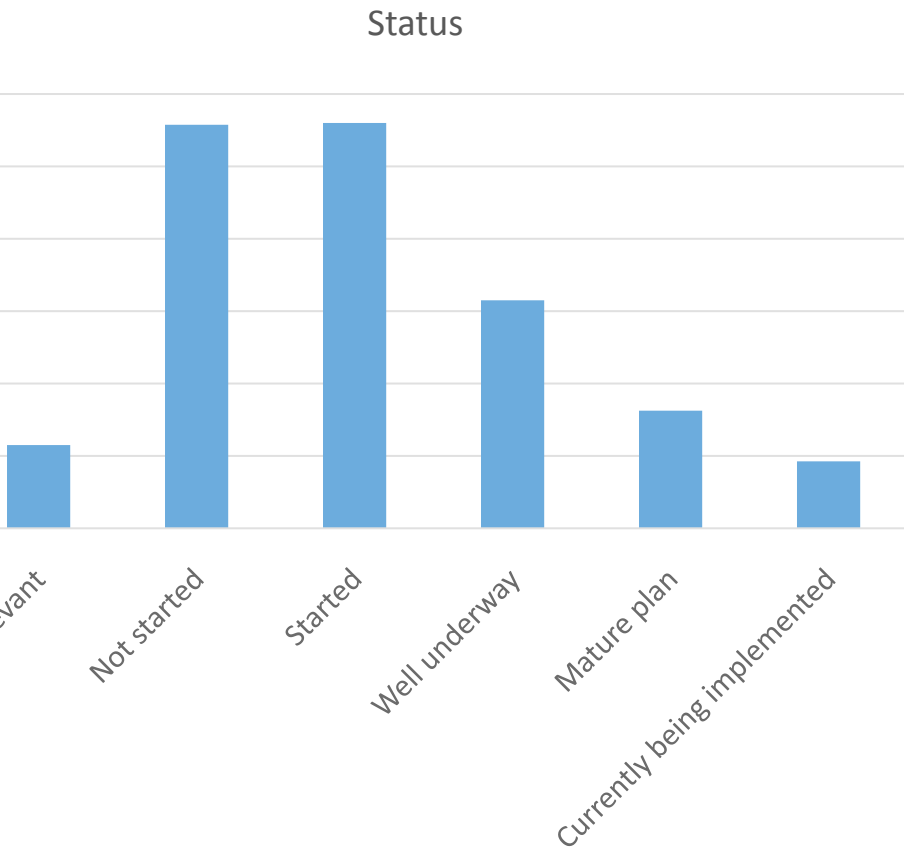
# Scope of Survey

	Status of knowledge and planning in country	Additional information needed to progress toward CCS decision
Capture		
Transportation		
Storage		
Integration		
Policy and regulatory		
Public acceptance		

25 respondents

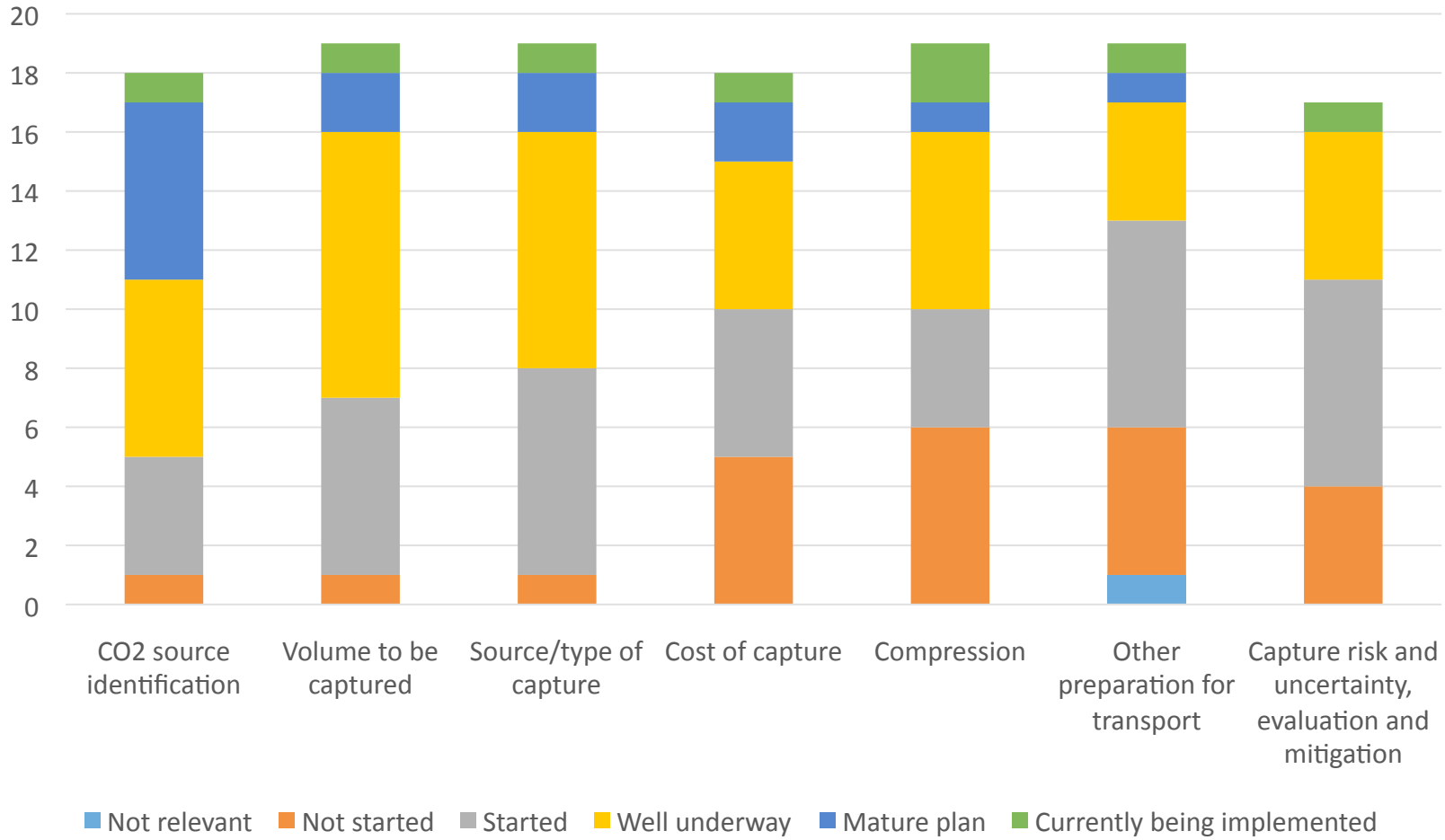
17 countries

# Statistics



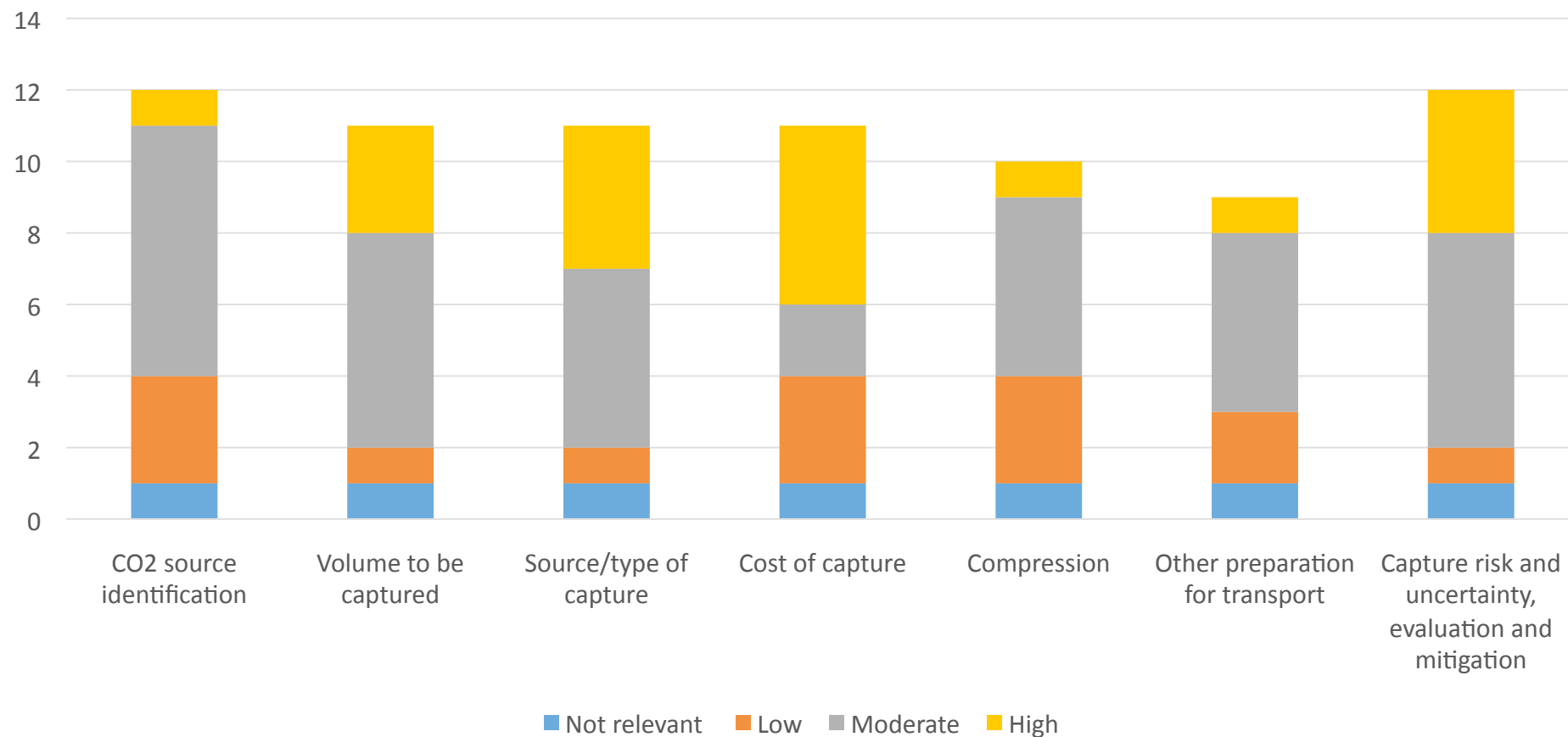
# Status of Knowledge: Capture

Chart Title



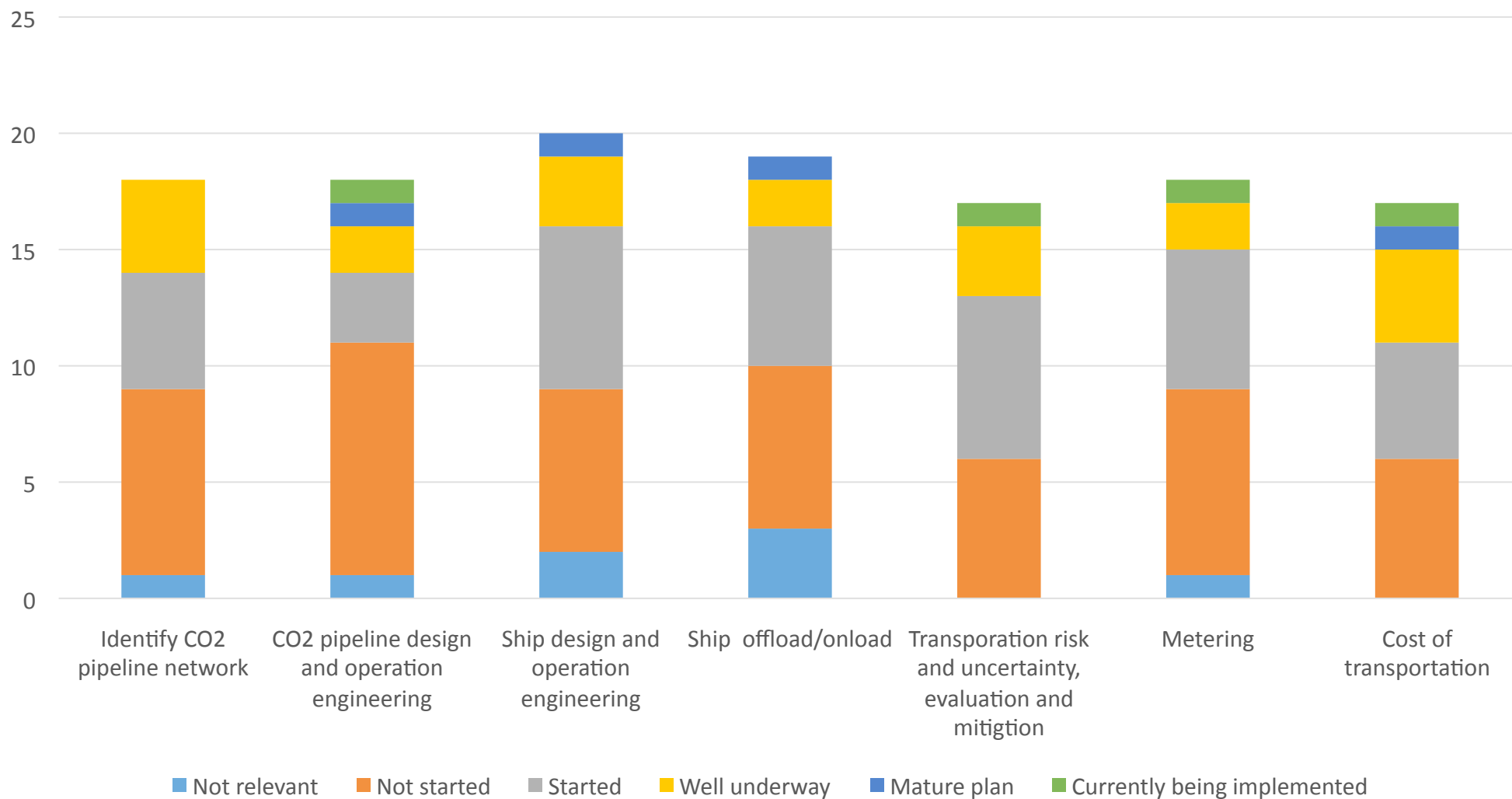
# Capture: Additional information needed to progress toward CCS decision?

Need : capture



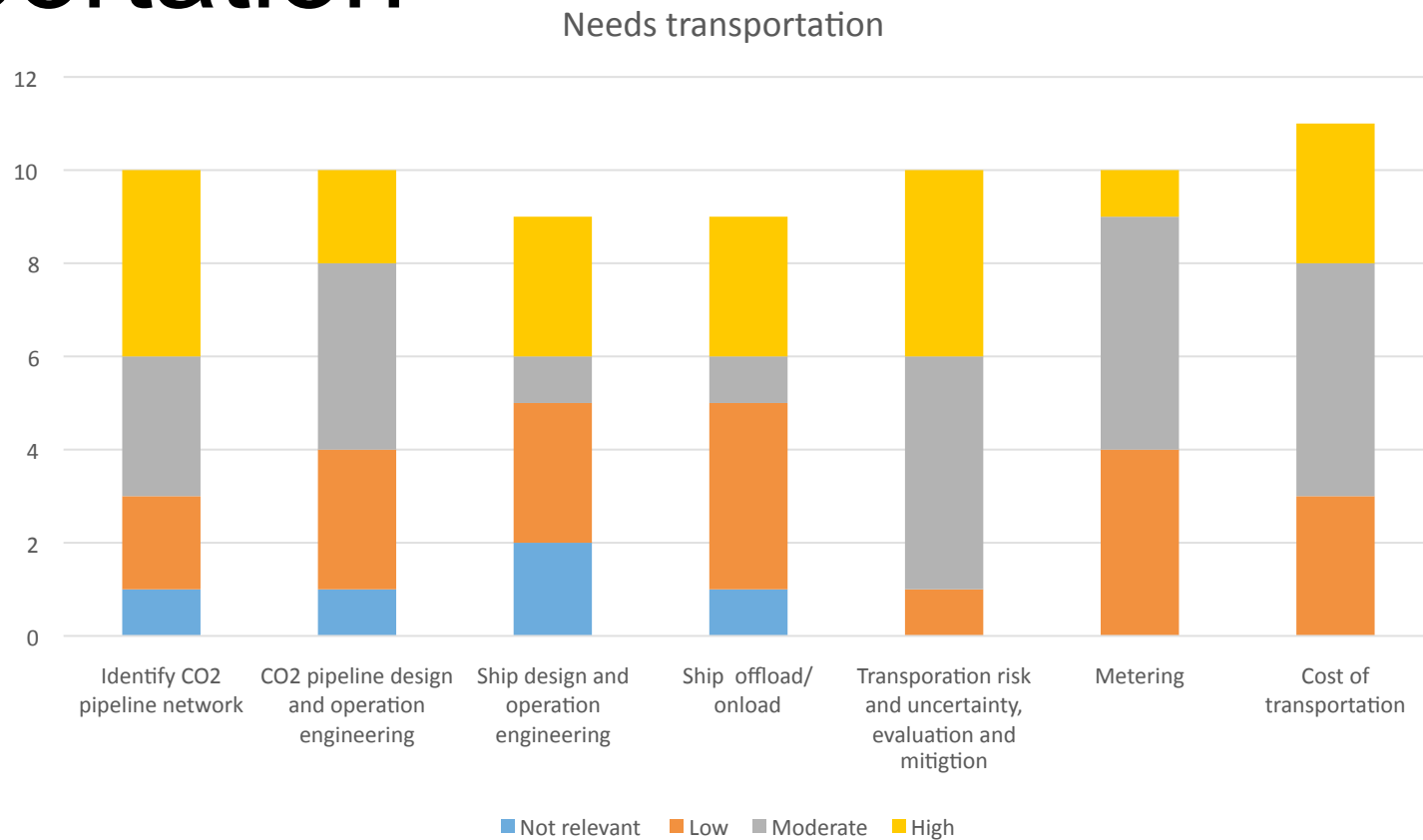
# Status of Knowledge: Transportation

Status transportation



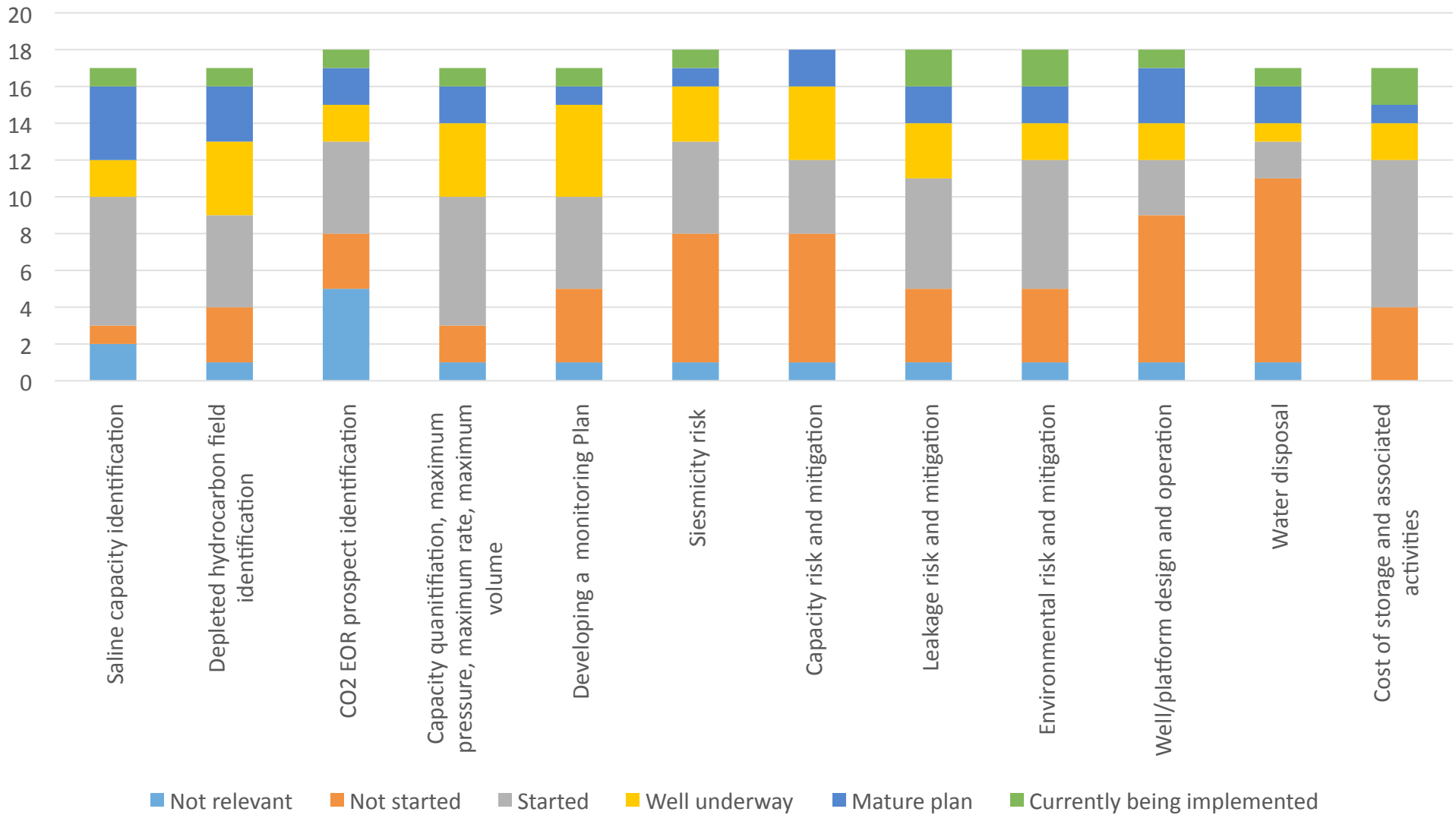
# Additional information needed to progress toward CCS decision?

## Transportation



# Status of Knowledge: Storage

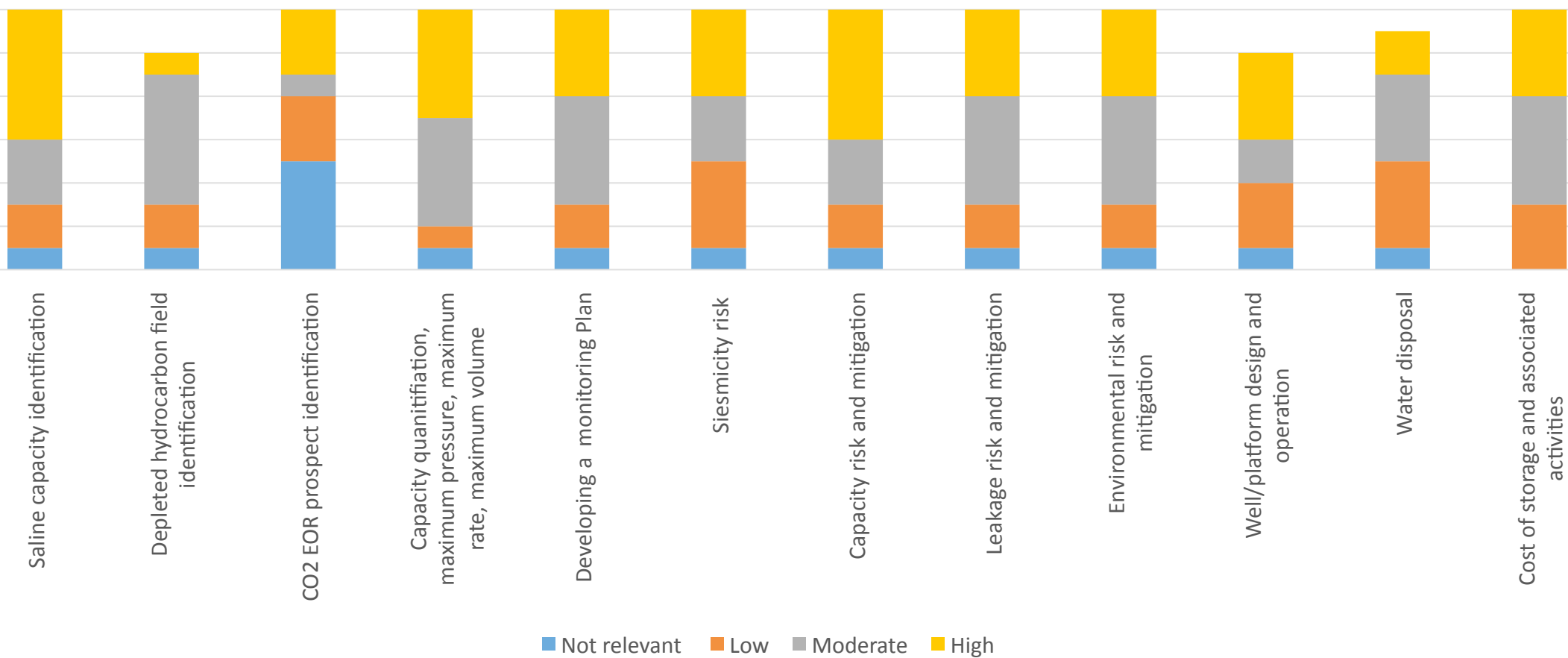
Status Storage



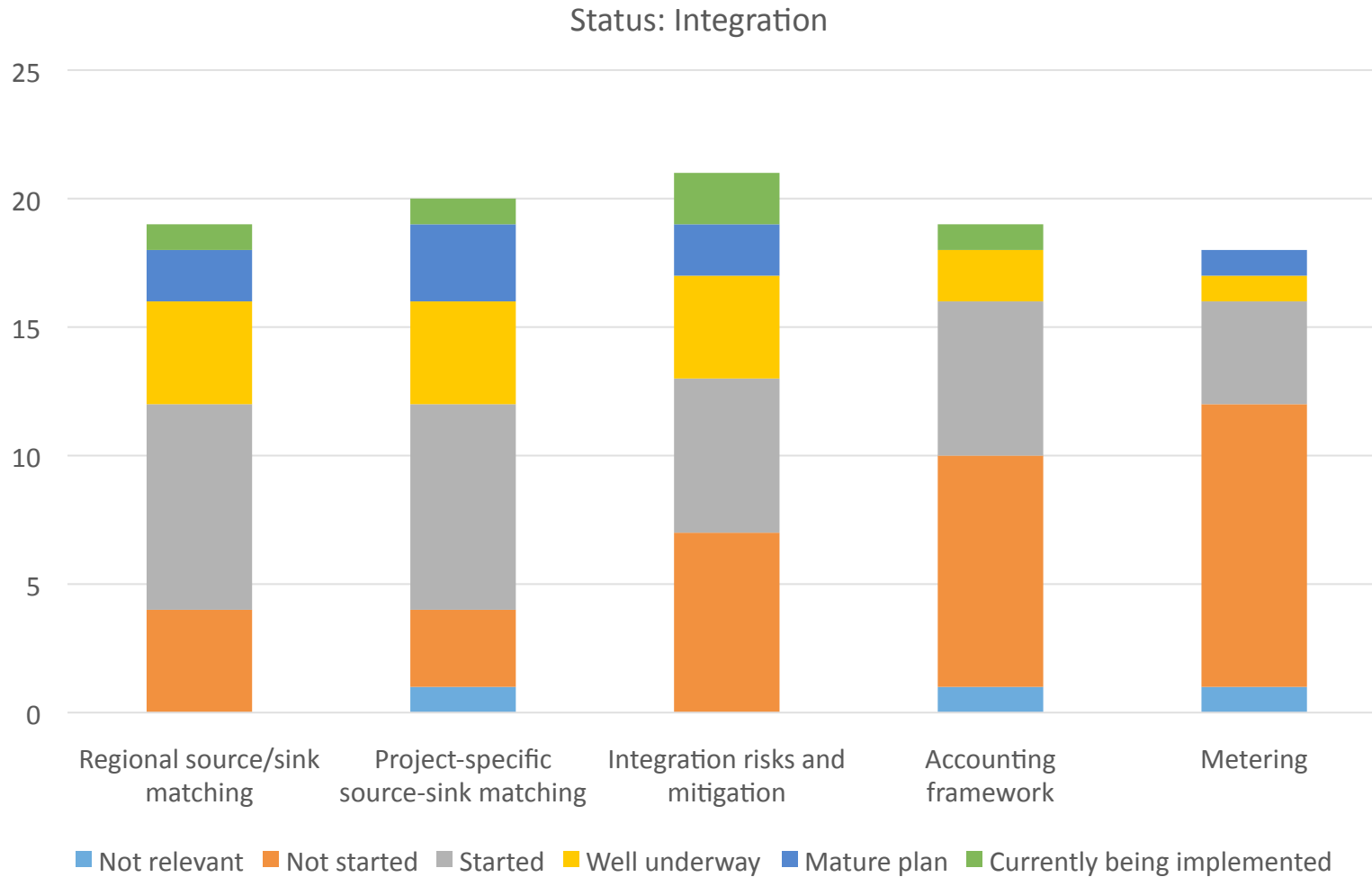


# Additional information needed to progress toward CCS decision? Storage

Needs Storage

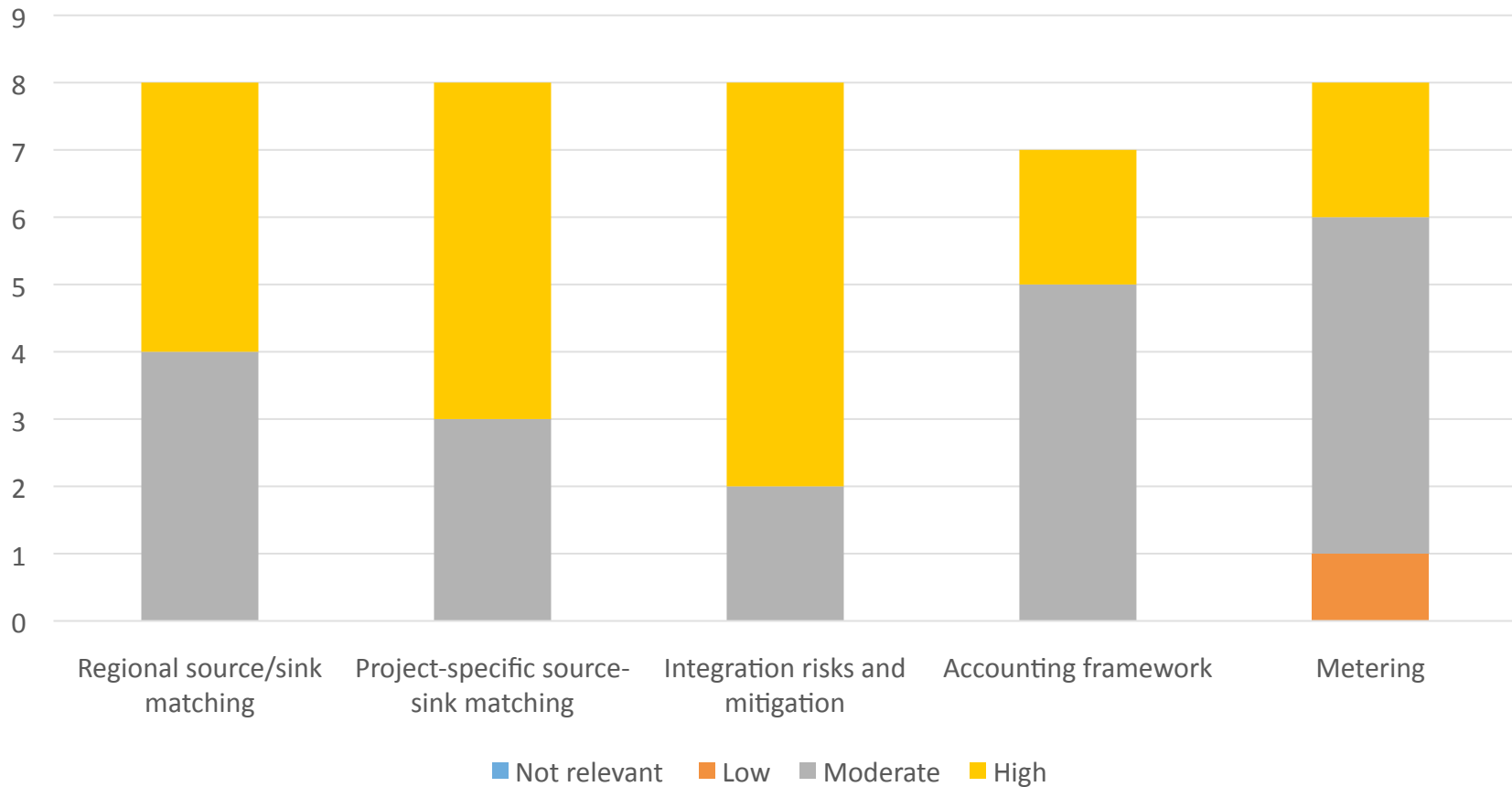


# Status of Knowledge: Integration



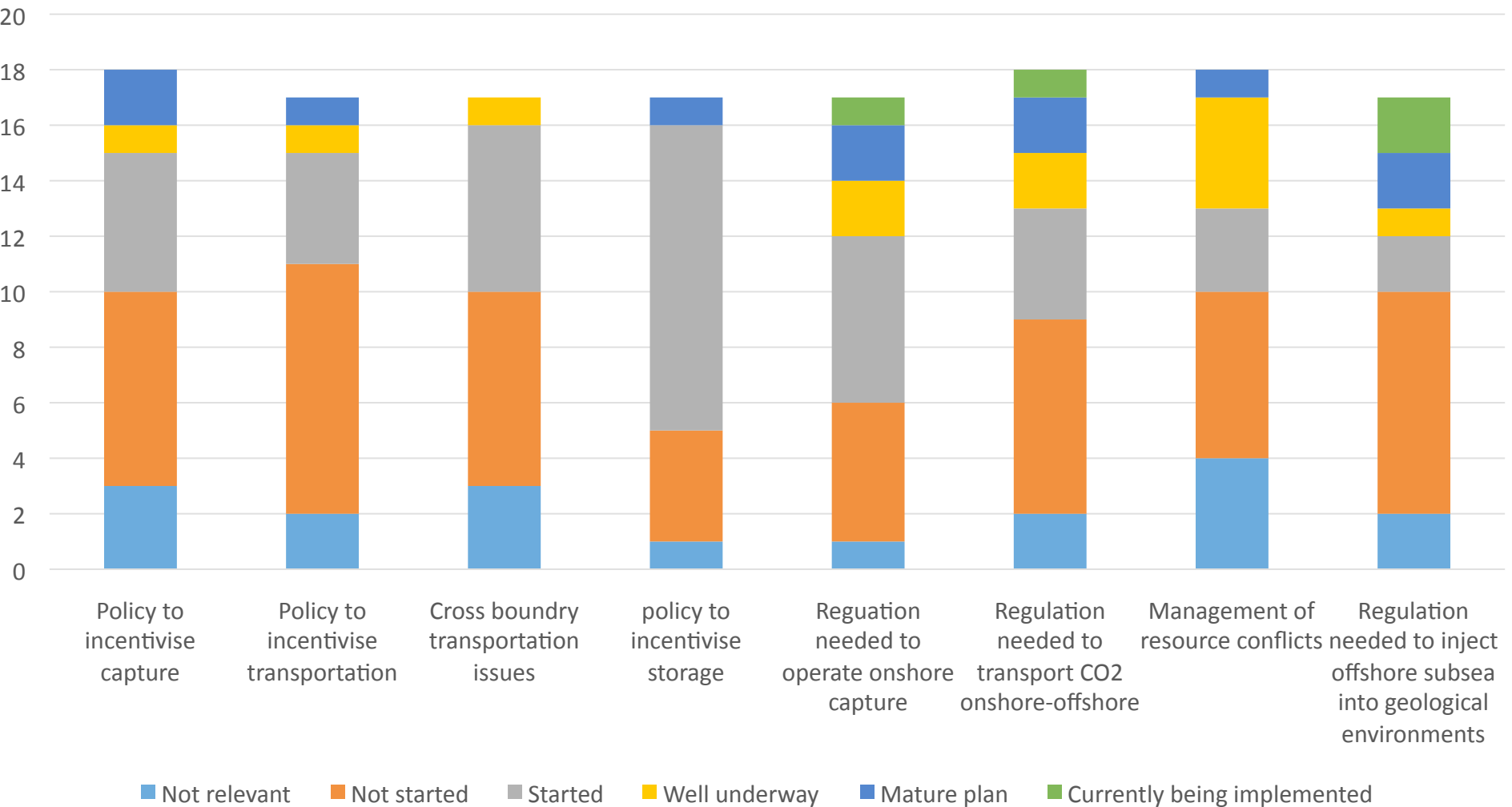
# Additional information needed to progress toward CCS decision? Integration

Chart Title

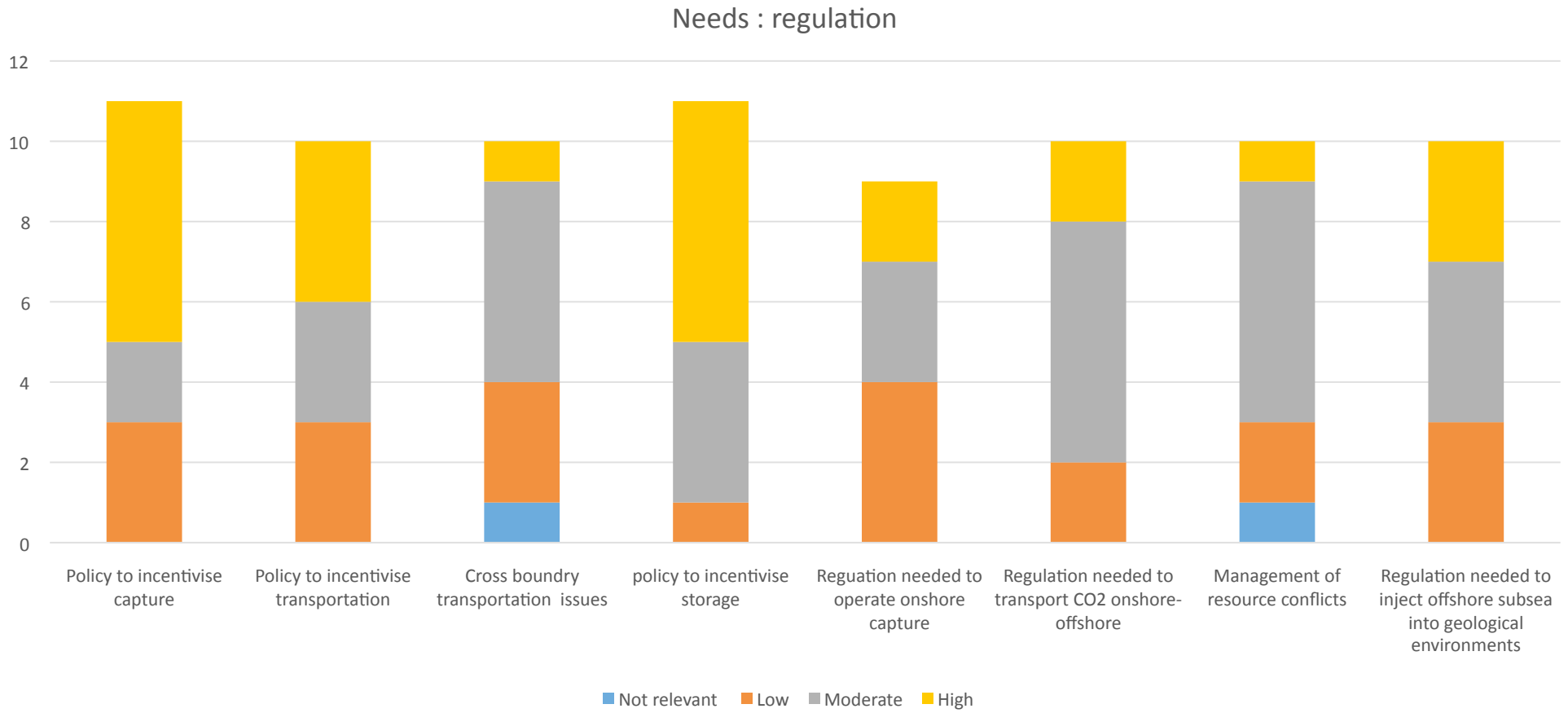


# Status of Knowledge: Policy and Regulatory

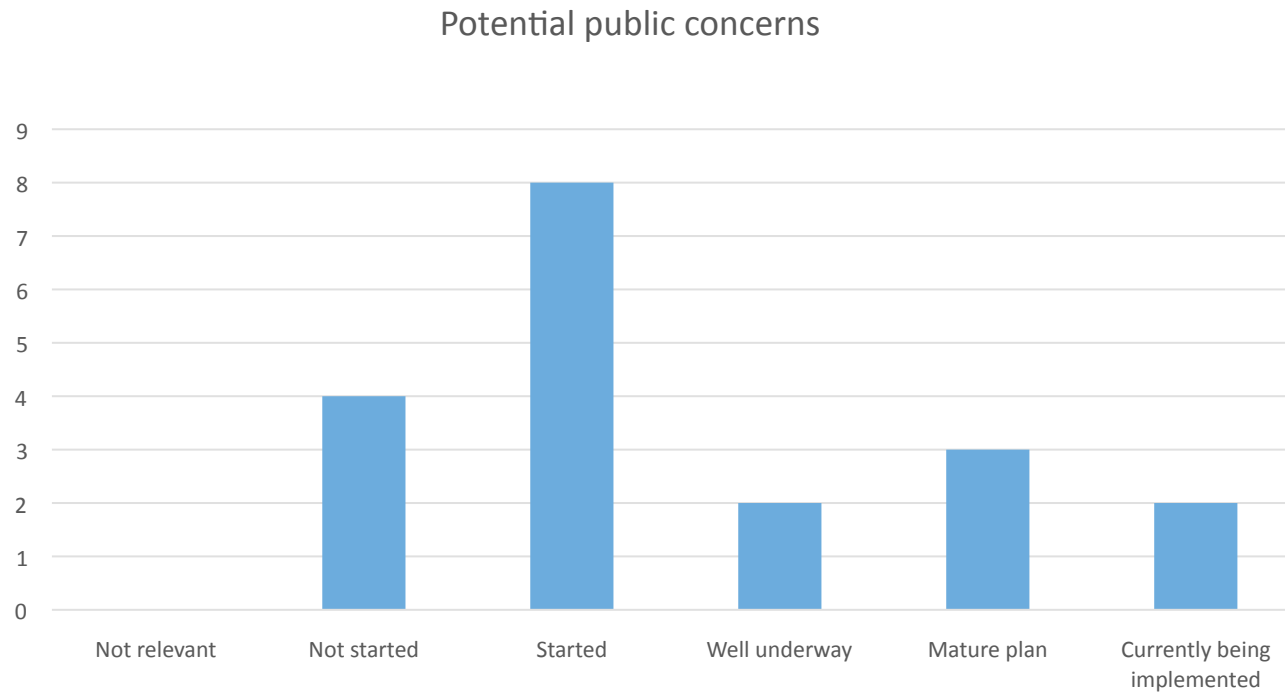
Status Policy and regulatory



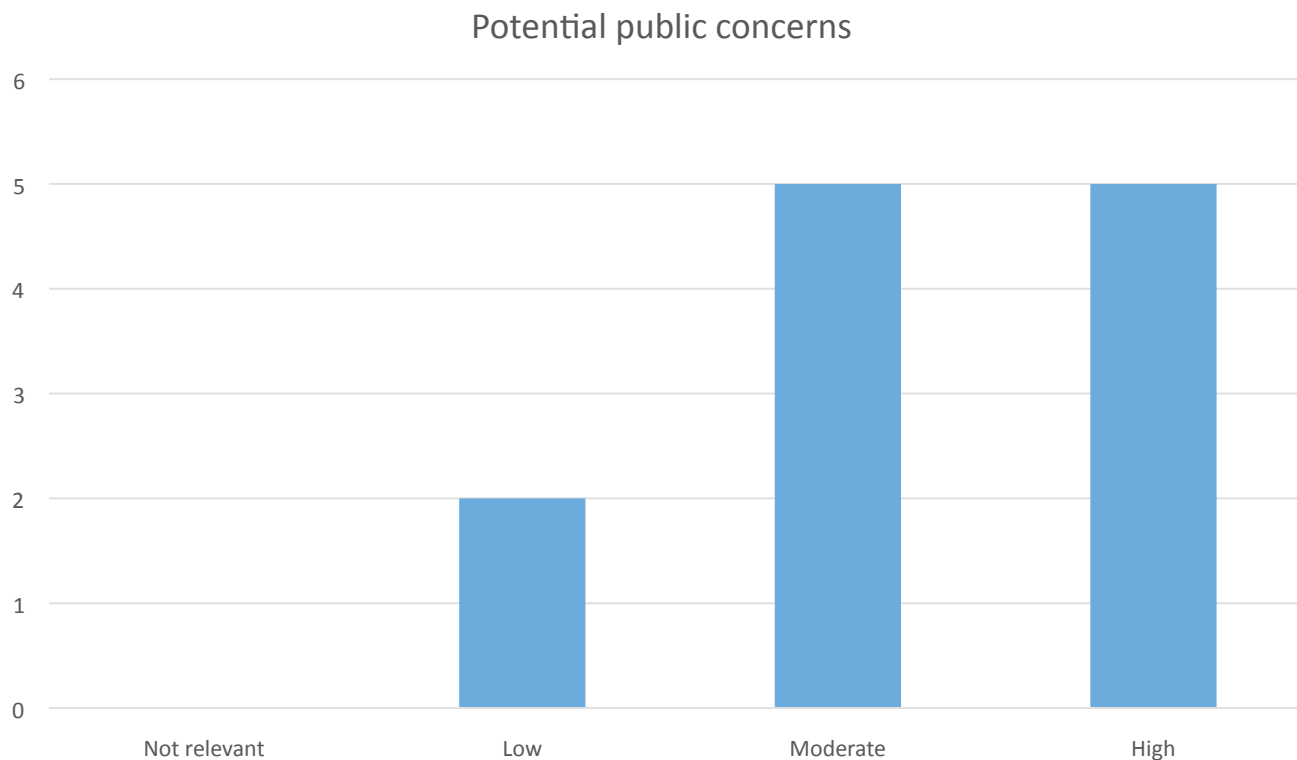
# Additional information needed to progress toward CCS decision? Policy and Regulatory



# Status of Knowledge: Public Accepta



# Additional information needed to progress toward CCS decision?



# Representative comments Capture

Currently, capture technology and CCS storage are not considered as priority . (Our) govt is focused on operational efficiency of existing power plants, which are identified as main source of CO<sub>2</sub>.

There are some potential projects identified for capture in power generation plants and petrochemical centers.

Potential exist and people talking about it but no study is under way.



# Representative comments transportation

Transportation details have been considered for the CO<sub>2</sub>-EOR project in (one area). The construction of a pipeline has been considered for connecting/matching all the CO<sub>2</sub> sources with the sinks (mature fields or saline aquifers).

Different scenarios of transport were explored in the NORDICCS project. Transportation by ship showed to be most cost effective.

Ship design has been studied, but further detailed design work is needed.

Blank rows are outside my area of expertise

Two scores given to contrast operational projects with new/emerging projects

# Representative comments Storage

Risk, mitigation, and monitoring data and information comes from global research projects. (we)have knowledge of this research, but have not conducted (our)own research offshore.

For the well/platform design and operation and water disposal - assuming this infrastructure will be the same/similar to current oil and gas industry infrastructure. Design of CO2 compression technology on the platform and designing wells specifically for CO2 injection still needs to be done.

(we ) are among the member country actively participating in the CCS-M Program (CO2 geological storage mapping) of CCOP.

# Representative comments Storage

Storage sites have been characterized for many years, to various degrees of detail and more is being done as part of the ongoing feasibility studies for the three sources.

...cost estimates, monitoring, risk and environmental assessments, water disposal and mitigation will be part of the feasibility studies.

CO2 EOR prospects have been identified and studied to some extent but the industry has shown only modest interest. There is, fortunately, increasing focus on the issue. Platform design in connection with EOR is ongoing

# Representative comments Storage

The storage assessment for deep saline aquifers and mature fields is done for regional and local scale.

# Representative comments Integration

Studied fairly extensively, but not implemented in any actual projects.

I would have marked many of these categories 'Mature Plan' in 2015: there were clear roll out plans available, based on (our commercialization).

There remains much activity now, but has taken a step backwards...

Regional hubs attempting source-sink matching.

Integration of source/sink matching has been undertaken in the techno-economic study.

The source-sink matching is generally poor in (our country)

Strong source-sink matching exists at regional and project-specific scale. New build power generation plant, if any, will be CCS-ready.

# Representative comments Policy

Draft policy and/or regulation has partially been at the level of research. But this draft version has not been adopted by the government.

(We) have gone backwards on incentivization policy

No specific policy and regulatory program for CO<sub>2</sub> storage. The oil and gas exploration/production and environmental laws are generally referred to when it comes to CO<sub>2</sub> storage discussions

there is good experience around public acceptance at a local level for the specific competition project, but little progress on the wider issue of acceptance of CCS.

There isn't a specific regulation for CCUS in the country, however, we have done a regulatory framework analysis that let us identify the key issues to be attended.

CCS is more or less an political non-issue in (our country), although the need for CCS in climate mitigation is acknowledged. When discussed, opinions are spreaded and doubtful. To my knowledge, no regulations except allowing CO<sub>2</sub> storage offshore, have been determined.

# Representative comments Public Acceptance

The is likely to be the main issue, at least for one of the sites. Offshore storage does not appear to be an issue in (our area).

This is a major issue, and politically contentious

Public awareness is almost non-existing.

Yes, there is much concern, mainly due to ignorance. Politically it is also correct to be hesitant, which underscores public concerns, i.e. political leaders do not take the lead.