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# FONA FORUM 2019, BERLIN

## SUSTAINABLE SCIENCE, TECHNOLOGY AND INNOVATION POLICY (STI) AND SUSTAINABLE DEVELOPMENT GOALS (SDGS)

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STI for SDGs –  
What can we learn from the evaluation of FONA?

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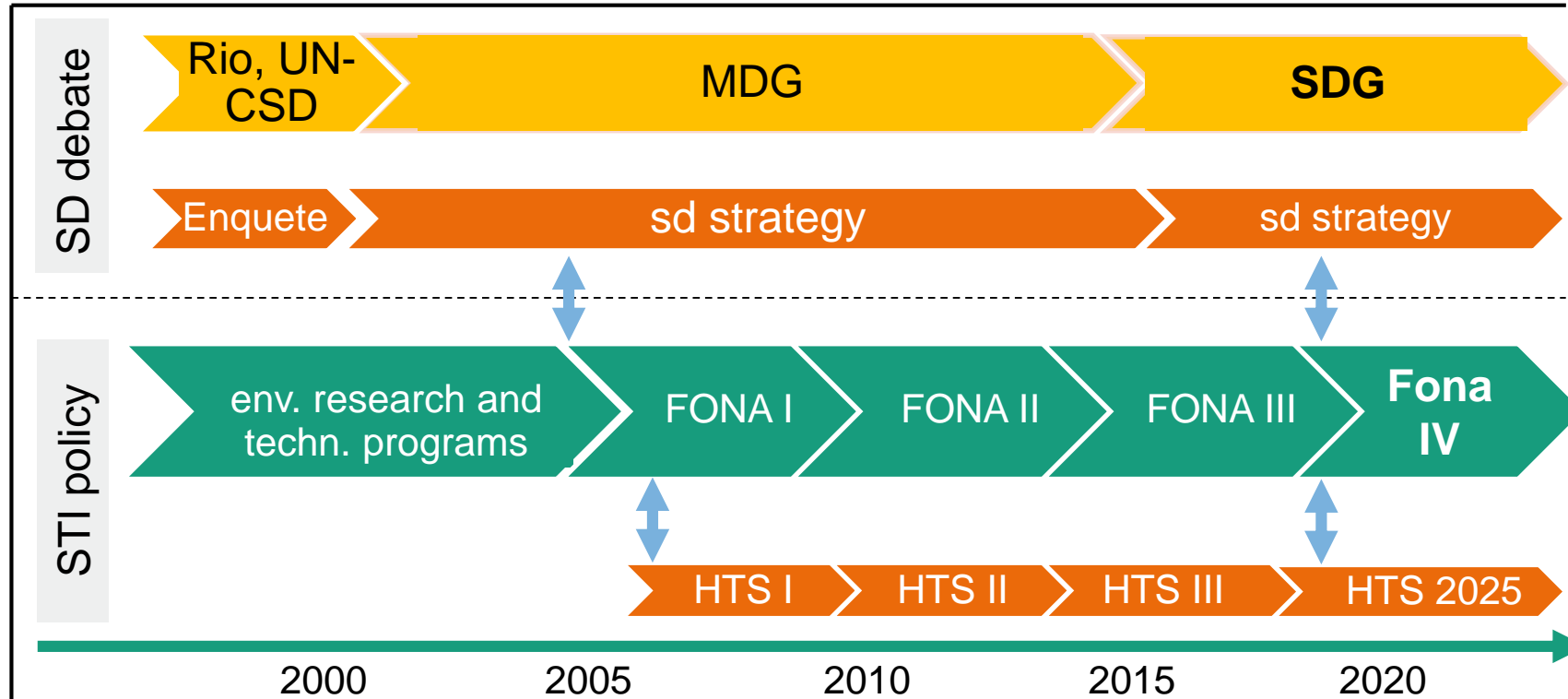
# Content

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- evolution and scope of FONA
- achievements of FONA
- structural characteristics
- future challenges

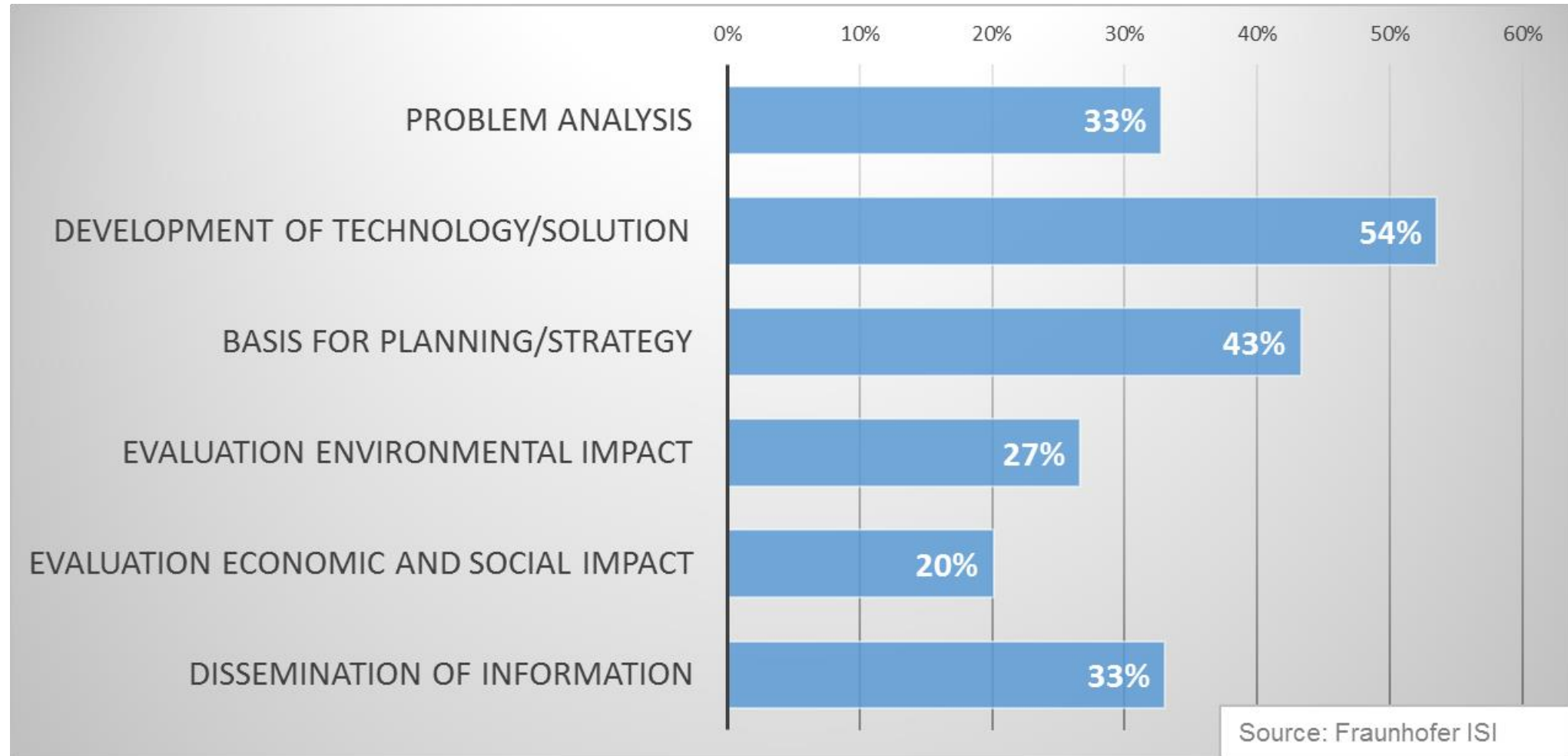
# evolution of FONA and SDG

start: opening up of env. research



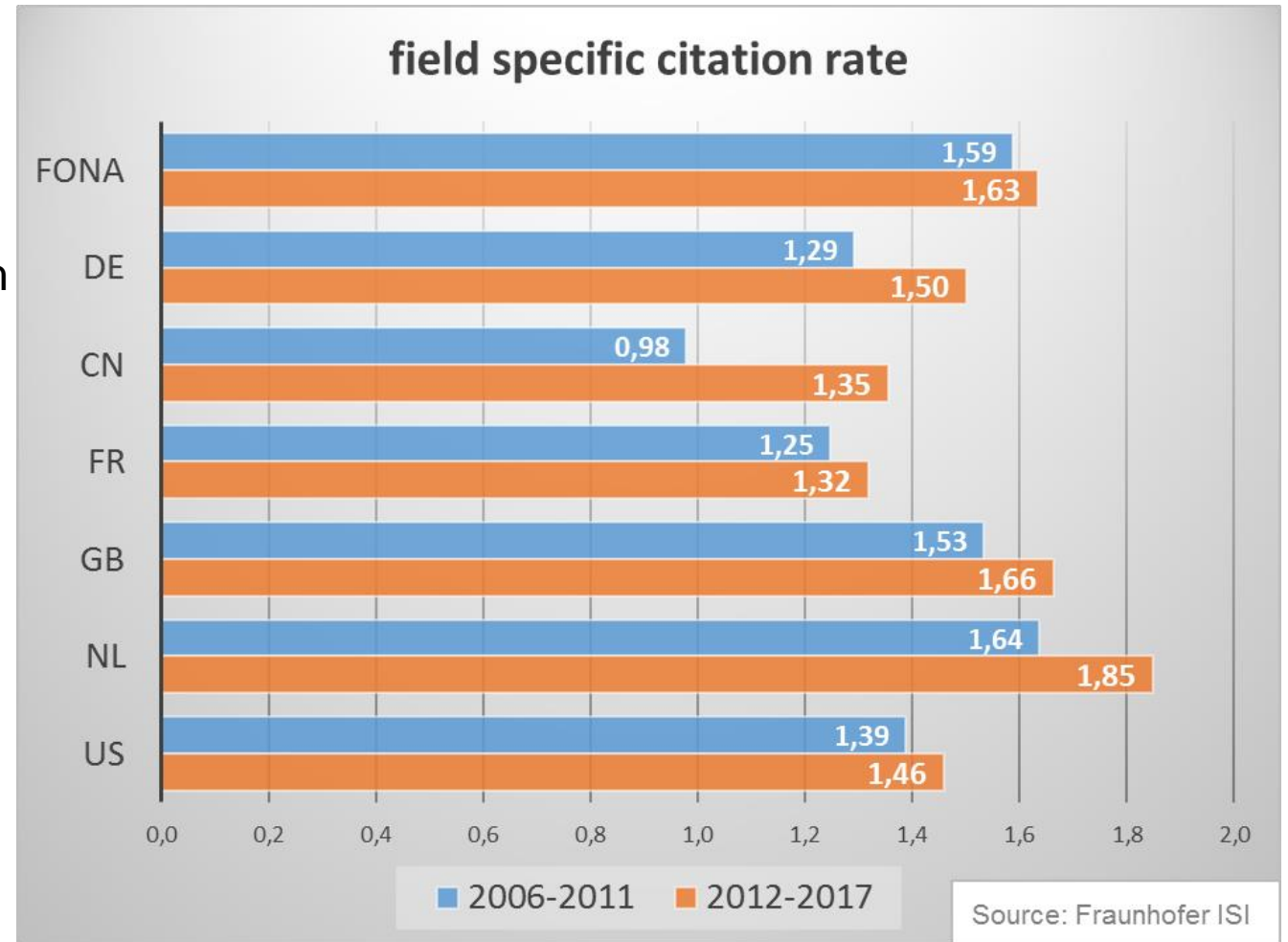
perspective: core of STI policy for SDG

# goals of FONA projects

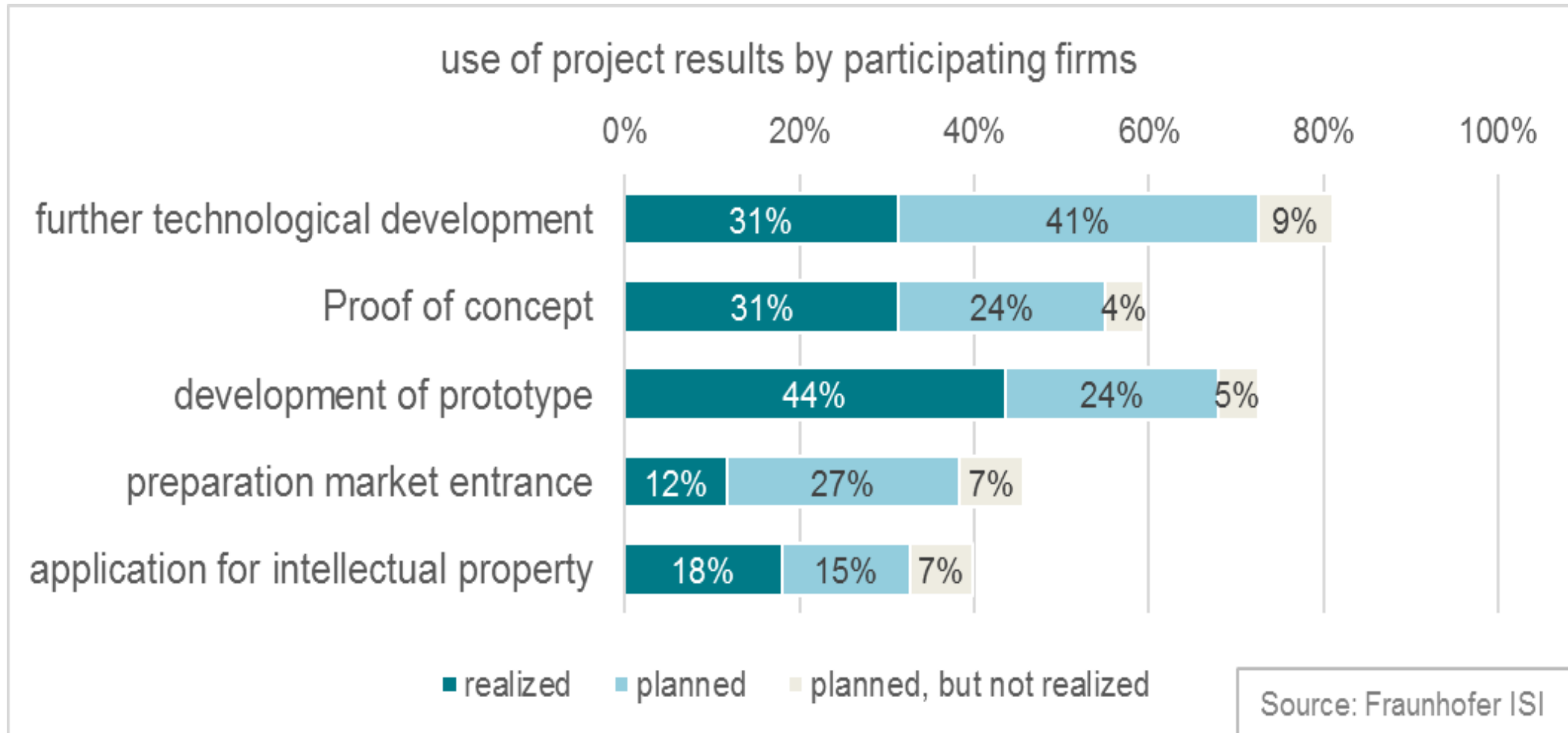


# SDG need new knowledge – scientific achievements of FONA

- high number of scientific publications
- high scientific quality
- strengthening of existing and establishing of new fields of research
- enabling young researchers
- competence building in project management



# SDG need new solutions – achievements of FONA



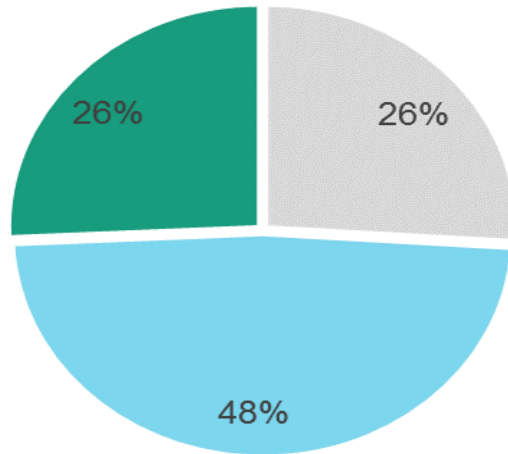
# STI for SDGs need specific structure – characteristics of FONA

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- interdisciplinarity
- transdisciplinarity
- international focus
- embedding solutions into an innovation system perspective
- learning program

# FONA project structure

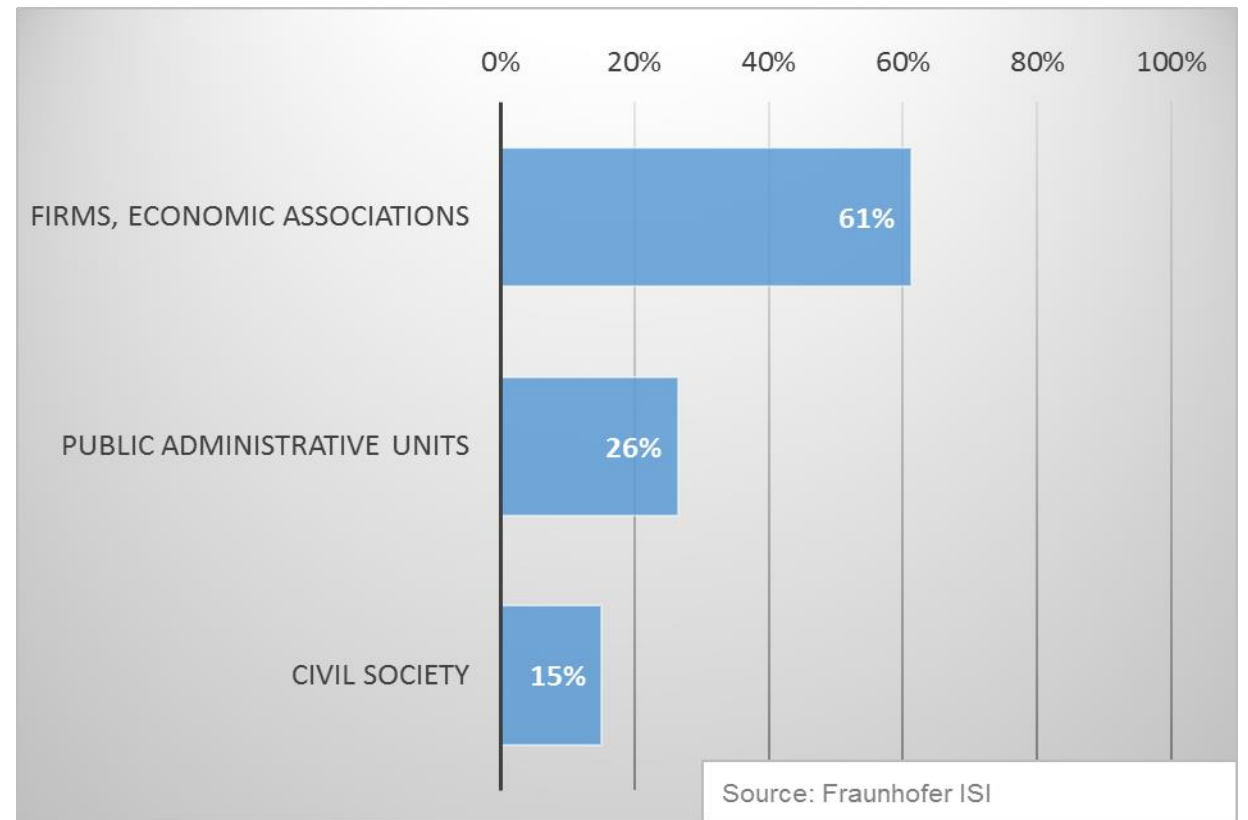
## Interdisciplinarity



- monodisciplinary
- weak interdisciplinary (within natural/eng. or social science)
- strong interdisciplinary (nat./eng with social science)

Source: Fraunhofer ISI

## Transdisciplinarity: non-academic partners in projects



Source: Fraunhofer ISI



# STI for SDGs need a mission oriented approach

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- FONA addresses directionality of innovation....  
....but mission oriented is more than directionality
  
- mission oriented innovation policy is process in the making....  
....but the following prerequisites emerge
  - spelling out mission on intermediate granularity
  - policy integration across ministries
  - stakeholder involvement
  - (measurable) targets and indicators for mission fulfilment
  - defining bottlenecks to be addressed
  - targeting research and demand side of innovations
  - measuring of impacts of STI
  - adjustment of STI towards mission fulfilment

# STI for SDG need adaptation of science system on all levels

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- reflection processes of researchers
- commitment of institutions
- selection criteria for research projects
- implementation in STI programs
- inter- and transdisciplinarity as criteria of excellent science

# Conclusions

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- FONA is the core of German STI for SDG – but not the only program
- FONA has already provided significant impulses towards SDG
- FONA employs already characteristics necessary for STI for SDGs
  - inter- and transdisciplinarity
  - systemic approach and learning program
- Targeting SDGs requires
  - mission oriented approach
  - adaptation of research system on all levels
- Implementing mission orientation and strengthening impulses for adaptation of research system can make FONA a role model for STI for SDGs