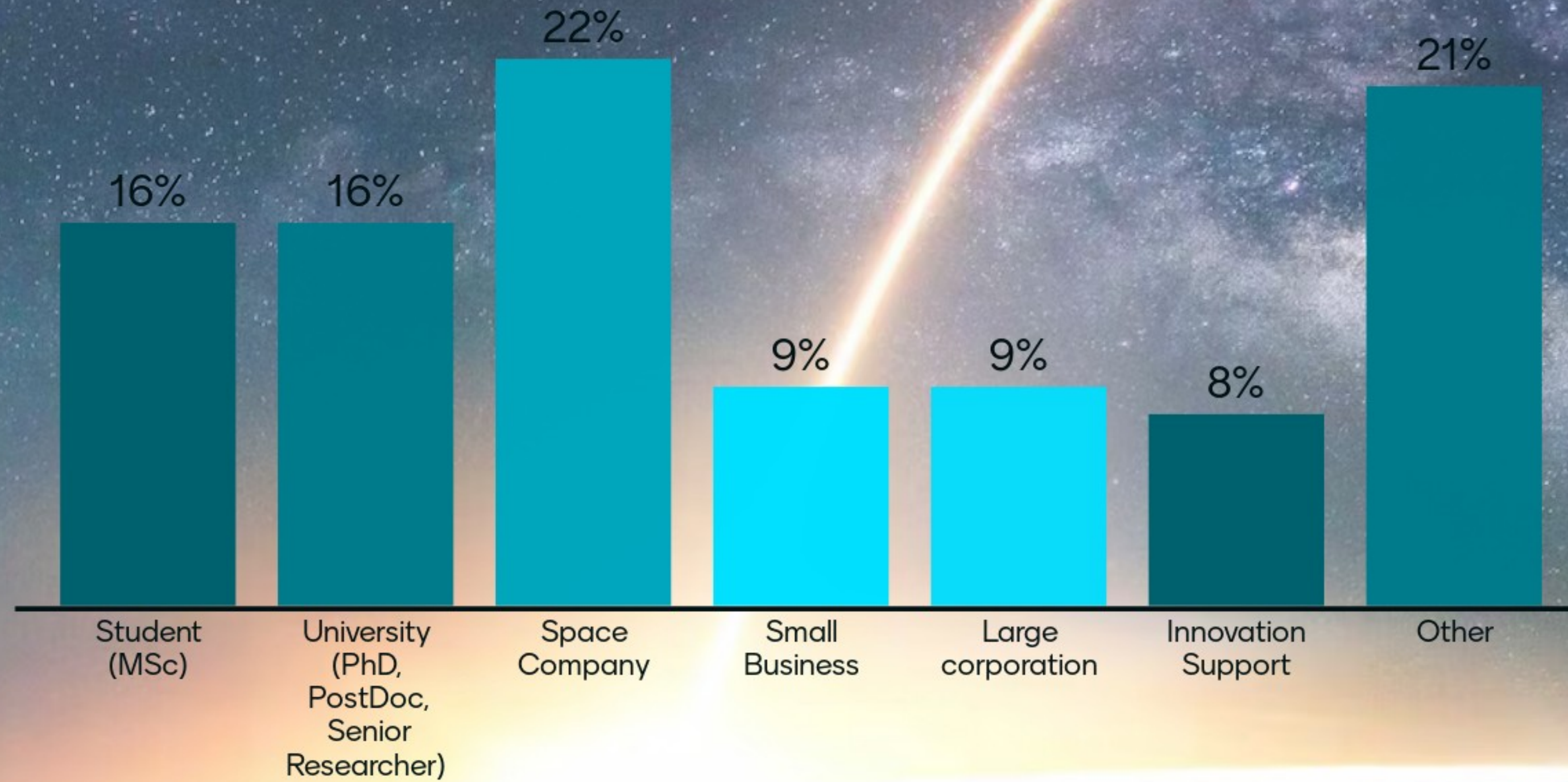


Menti for Space Innovation Forum

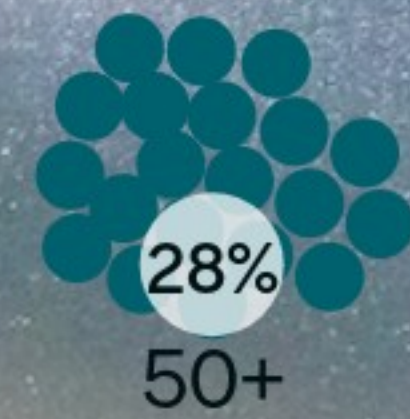
Johanna Bergström-Roos, project manager
RIT2021+

Roe Langaas, Oxford Research
Anna Öhrwall Rönnbäck, product
innovation, LTU

Who are you....?



How old are you?





Sustainability

Baseline survey 2019, update 2023 for RIT2021+



Environment

Climate issues and environmental sustainability

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

Yes

Yes

Yes

Yes! Monitoring and transparency!

Yes, Thanks to Satellite data

Yes

Yes

Yes

Very much

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

Yes. It is

Yes

Yes

Yes, space data is crucial

Yes, data provider

Yes, its a growing industry with nog pollution

Perhaps not solve, but to mensure impacts

Yes

I didn't before but my mindset has been shifted

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

Yes

Yes

Yes;)

Hello

Of course!

In order to solve the problem, you shall map it. From space.

Yes I agree

Yes, spacecraft data is the best tool to gain relevant data

Earth observation data

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

100%, without space data there is no way for us to accurately monitor the climate

Sure ;)

Yes

Yes: In part due to pollution from rocket manufacturing and in part thanks to satellite data

Absolutly yes

Yes thanks to all of the datas collected by satellites

Innovation

Yes, global challenges requires global views

Yes more now then before

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

It can help to monitor it

Yes, by measurements

Great for obtaining information and tracking evolution

Yes

Yes

Yes. Remote sensing etc

Yes due to increased understanding

Yes, we give great possibilities to monitor the Earth!

Absolutely. Observations from space, and the innovations from the space industry are crucial for managing the climate.

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

Yes, global coverage

Yes, global overview and perspective

Yes, satelliters monitoring earth

Analysis

Perspective

Space is not a big player in the total picture

No, we just need to slow down our life expectations

Showing climate change

Space data provides essential info

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

Yes, monitoring and infrastructure and new resources

Yes, thanks to the collaboration and innovation!

An important part of the solution.

Yes. Earth observation satellites provided most of the data for monitoring climate change

It can be as long as we continue developing the industry in the right direction

Yes. Both for solving/understanding challenges, but also being aware of its own challenges

Yes! As data provider and monitoring

Indeed There's a lot of space project related to environmental observations and shows a better view of the situation

Yes, space technology can help to monitor Earth and in developing early-warning and detection systems.

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

Yes, Easy to see climate effects from Space.

Hobby rockets not so much

No, a lot of pollution

Yes because space enables a unbiased picture of the world

Resource efficient systems. ISRU

It's the major player for solving global challenges

International collaboration

Collabotation and synergies

Yes. Satellites can be used to see how the global climate changes.

Do you think space industry is particularly important in solving global challenges within environment and climate?

76 responses

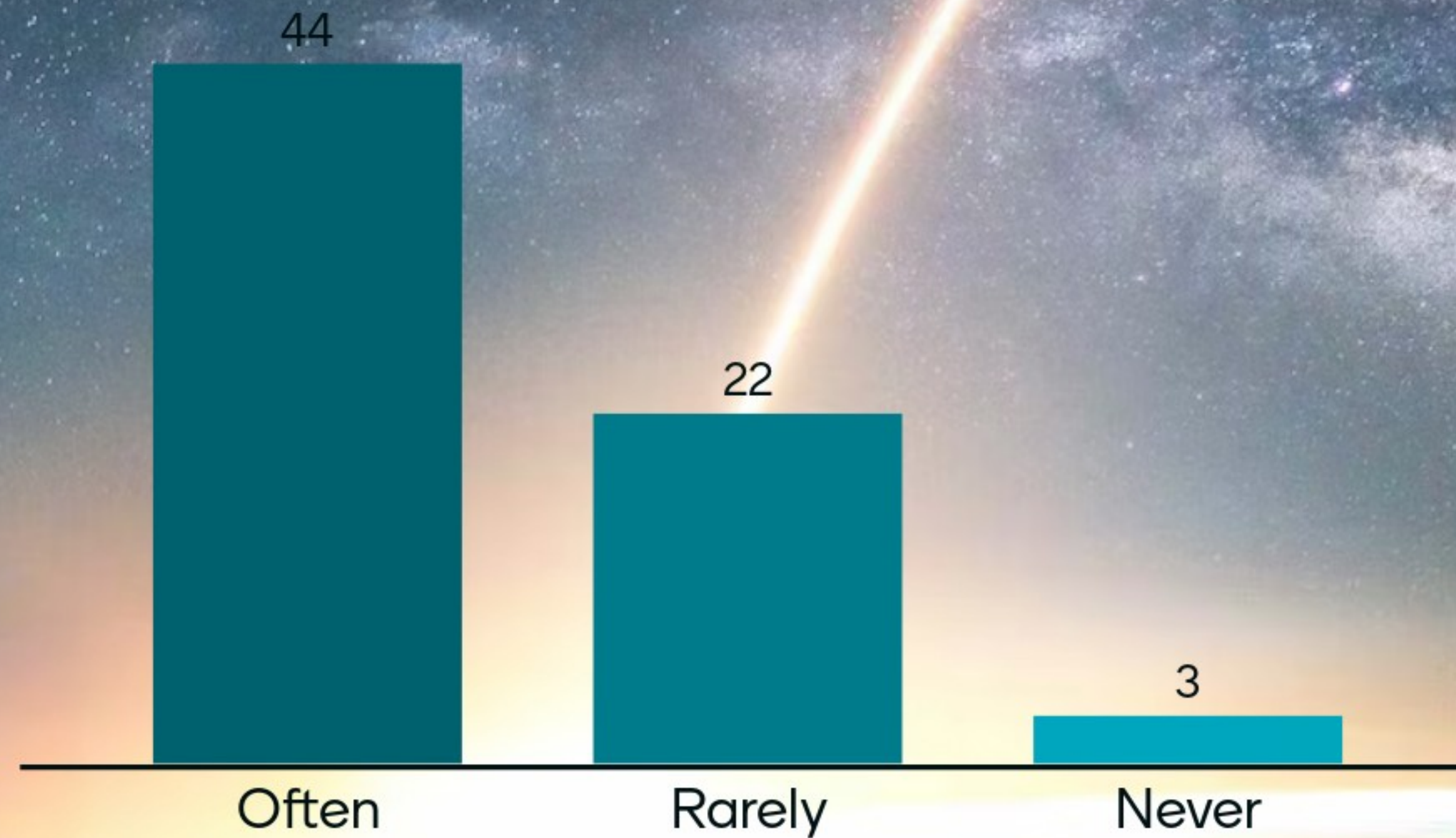
Drives technology development

Yes. Space is useful for observing changes.

Space based science and long term monitoring satellites and ground based stations- otherwise no knowledge!

Time to time

How often do you reflect on environmental sustainability in your work?



List concrete activities in your work that contributes to reducing the climate impact:

62 responses

Monitoring change

Sustainable innovation

Digital meetingd

CSR compliance

Energy optimization

Drive a Tesla

Additive manufacturing

Eliminate hydrocarbons as fuels

Video meetings

List concrete activities in your work that contributes to reducing the climate impact:

62 responses

Ersättningsbuss

Using sustainable materials

Electrification

Electric cars.

Working from home

Working in Hydrogen applications for
aircraft technologies

Solar power.

Work from home, train rides

Digital meeting

List concrete activities in your work that contributes to reducing the climate impact:

62 responses

Research. Improve efficiency.

Simplified and reduced supply chains

Digital meetings

Zoom conferences instead of flying

Innovation strategies

Using public transport

Um, firing rockets

Earth obversbation

Walking to class

List concrete activities in your work that contributes to reducing the climate impact:

62 responses

driving bicycle

Raise awareness of emissions

Investigating reuability of products.

Managing my travelling

Projects working with more
sustainable choices/development

Virtual meeting

Many things

Digital meetings

Prioritize closer companies to get our
ressources

List concrete activities in your work that contributes to reducing the climate impact:

62 responses

Green Rocket fuel

Leased an electric car

Don't buy a plastpåse.

Monitoring Junk

Driving an old car, resusing it

I am a student so no idea

Walking to work

Heating from the earth and public transportation

Search for funding

List concrete activities in your work that contributes to reducing the climate impact:

62 responses

Using recycling paper

Working with lightweight

Measuring and trying to focusing on it

My research will hopefully help reduce material waste and increase rocket engine efficiency

Data driven research

Use public transport

Work within Vinnova and LIGHTer projects

Digital meetings, contribute to space debris research

materials research

List concrete activities in your work that contributes to reducing the climate impact:

62 responses

Sustainable propulsion research

Using less energy

Working for small modular nuclear reactors

Reusable rockets (developing)

Cycle

Development of new instruments
being key enabling staff

Climate modeling

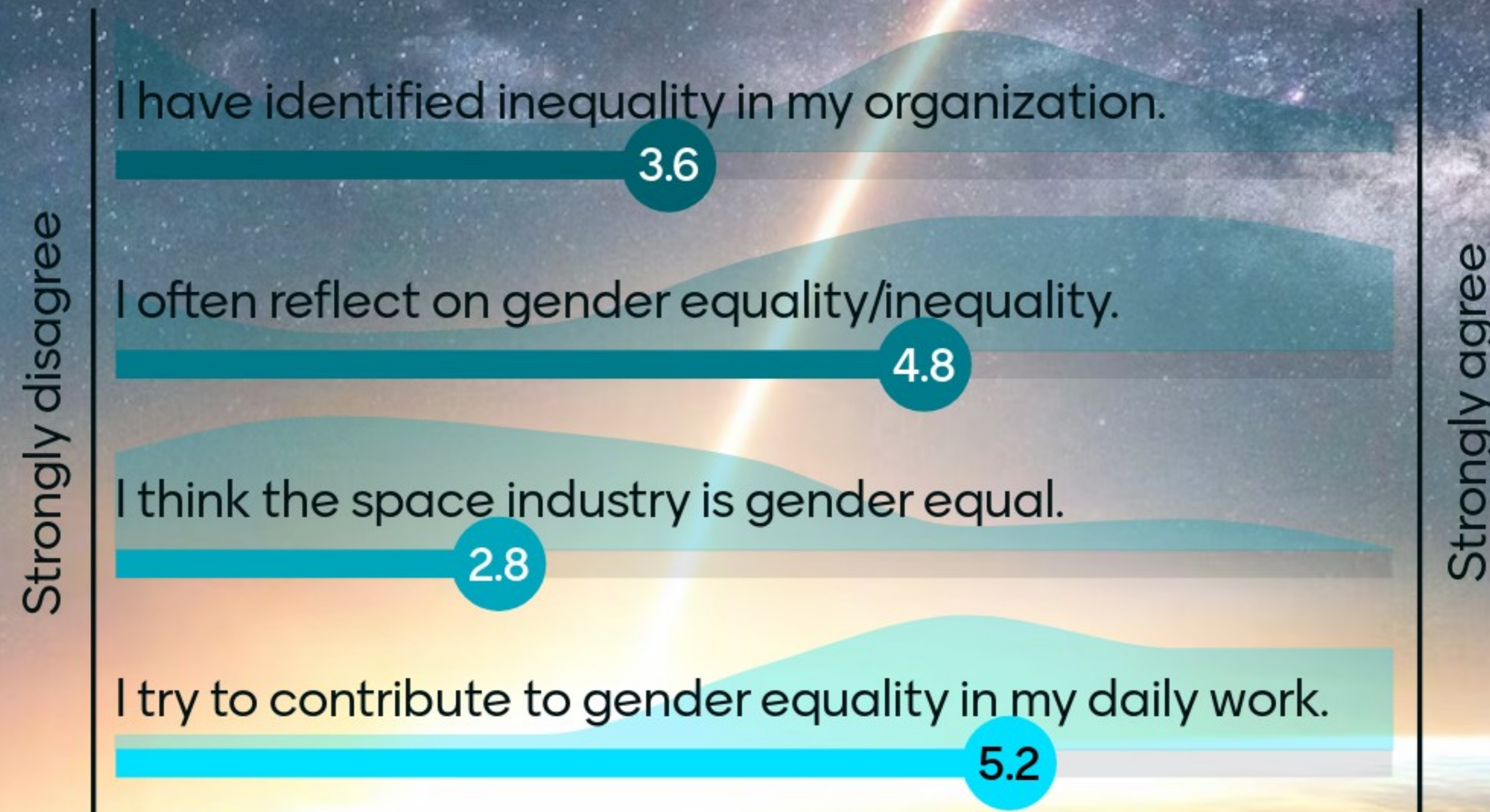
Products with low weight and long life

Gender equality

(Part of social sustainability)



What do you think...? (about gender equality in the space sector)



List concrete activities in your work that contribute to improve gender equality:

65 responses

Mentoring

Mindset

School outreach

Wiman in space

Mentoring

Giving equal opportunities

None that I can think of right now

Role models

Always think 50/50

List concrete activities in your work that contribute to improve gender equality:

65 responses

Integral part of our projects

Employ competent women in my group

Initiate diversity training

Equal opportunities!

My boss is a woman

My boss is a woman

Recruitment criterias

Wiman on the speakers list

Teaching young people

List concrete activities in your work that contribute to improve gender equality:

65 responses

Making sure women are being heard
and that we don't have prejudice

Protesting

Attending women in space and
include(activities for women in STEM)



None

Promote STEM careers for girls and
young women

Trying to be a good role model for
other women in business and
engineering

supervising and helping

Creating a level-playing field

List concrete activities in your work that contribute to improve gender equality:

65 responses

Support minority genders

On the agenda for the meetings

Reflecting

?

Inclusion



Supporting women associations

Highlighting the issue

Need to create interest early in low
ages

List concrete activities in your work that contribute to improve gender equality:

65 responses

Mindset

Women astronaut

Talking about it

Interest in STEM topics among girls

Educate people

Thinking of behavior

I am not sure about anything.

Parity

Already in place

List concrete activities in your work that contribute to improve gender equality:

65 responses

Science popularisation among the younger people

Inclusive mentality

Create space for diverse ownership and corporate leadership

Actively portraying and representing women

Outreach to young people, get everyone interested

Mentoring young women (students and new colleagues)

Support women's networks through administration work

We try but its hard to get

Accept people as they are and value them for what they bring.

List concrete activities in your work that contribute to improve gender equality:

65 responses

Activities for female students

Diversity, not only gendre

We don't care

Question homogenic panels

Encouraging people

try to have balance with women and men as speakers

Go into schools to talk about it

Internships to provide opportunities

Provide a work environment without inequalities in treatment and social interaction

List concrete activities in your work that contribute to improve gender equality:

65 responses

Visit from Jessica Meir

.

Diversity

(Part of social sustainability)



Diversity and inclusion in the space sector means ...

50 responses

Not to discriminate anyone

Export control

Different cultures

Equal opportunities to roles.

Equality

Age OK Nationality Not so much Gender OK

Diversity thought

Better collaboration and more creativity

No bias in social environment

Diversity and inclusion in the space sector means ...

50 responses

Need to exclude nationality when it comes to hiring engineers

Respect

More Role models!

It's not important

No discrimination

Equal opportunities for everyone

LGBT+ representation

Having same possibilities

No discrimination, equal opportunities

Diversity and inclusion in the space sector means ...

50 responses

Means that everyone is provided with the opportunity AND the support they need to excel!. Some need more support than others.

New ways of thinking

impacting the future of humanity

Always think 50/50

All sorts of people and ideas

It means the same as everywhere else!

More perspectives

It's inclusive. But it can be better.

Be open minded to collaborating with new partners

Diversity and inclusion in the space sector means ...

50 responses

Accept everyone

No discrimination

Diverse ideas and perspectives about the space

Making it easier to spread ideas. Giving everyone the same chance to contribute

More female engineers needed

Combining cultures and different thinking into our daily work

Value everybody for what they can bring to the organization

The obvious way forward

It feels like its an open enviroment with a spread thats healthy

Diversity and inclusion in the space sector means ...

50 responses

We need everything to make a word
Differences are opportunities

At most we were 14 nationalities with 50
employees, making a interesting enviroment

Not only space geeks

Gender/gender identity (not many queer
genders represented), neurodiversity,
nationality, ethnicity

that everyone is accepted in the space
sector regardless of gender, gender
presentation, ethnicity etc

Fruitful

cross-country collaboration.

Think about cultural differences

Everyone is evaluated upon their
competences regardless anyother reason

Diversity and inclusion in the space sector means ...

50 responses

Competences from all disciplines, including for example social sciences and law competence

Grabbing the best parts of different people to create something amazing

Equal funding

More input and better development

More quality to to potential of diversity on the background

What do you think...? (about diversity)



List concrete activities in your work that contribute to diversity and inclusion:

83 responses

None

Higher on our agenda

Not specific ones

No activity

None

Surveys like this one

Mentor programme

Listening

Open minds

List concrete activities in your work that contribute to diversity and inclusion:

53 responses

Accept visiting researchers and students

Speaking english and write in english

None

Always think 50/50.

I'm queer and neurodivergent but that's it from my side

Open communication,

.

Talking about it

Swedish language courses

List concrete activities in your work that contribute to diversity and inclusion:

53 responses

Fortunately; not much is needed

Adapt team activities to different people

Eating food from different countries.

Hiring people from a broad range of nationalities.

Using English instead of local language in everyday activities

Teach students of diverse backgrounds

Provide open social entertainment without discrimination

Mix of people from different cultures in working groups/tasks

Think inclusion

List concrete activities in your work that contribute to diversity and inclusion:

83 responses

Actively point it out

Being more open to hiring all nationalities

Collaboration

Have a lot of nationalities at the company.

Leadership coaching for female engineers/researchers

Being in a "diverse" group, lgbt

Tolerance and understanding, no acceptance of discrimination

We are in an international university open to everyone

Language

List concrete activities in your work that contribute to diversity and inclusion:

53 responses

Adapting language

Not in our daily routine

Try to be representative of the nation,
provide people who would not have
otherwise with the tools they need

Being mindful of norms

Idk im just a student

Ensure space for new perspectives, keep an
open mind

Is more less provide by the diverse
environment

Just to be inclusiv

Mindset

List concrete activities in your work that contribute to diversity and inclusion:

53 responses

Seek out diversity while hiring and looking for partners

Anonymous job applications

Curiosity

Diverse project

Trying to get to know the person

Regular activities such as seminars, courses

Fight prejudices by speaking up

Competence first, the rest later

punish the ones disrespecting people

List concrete activities in your work that contribute to diversity and inclusion:

53 responses

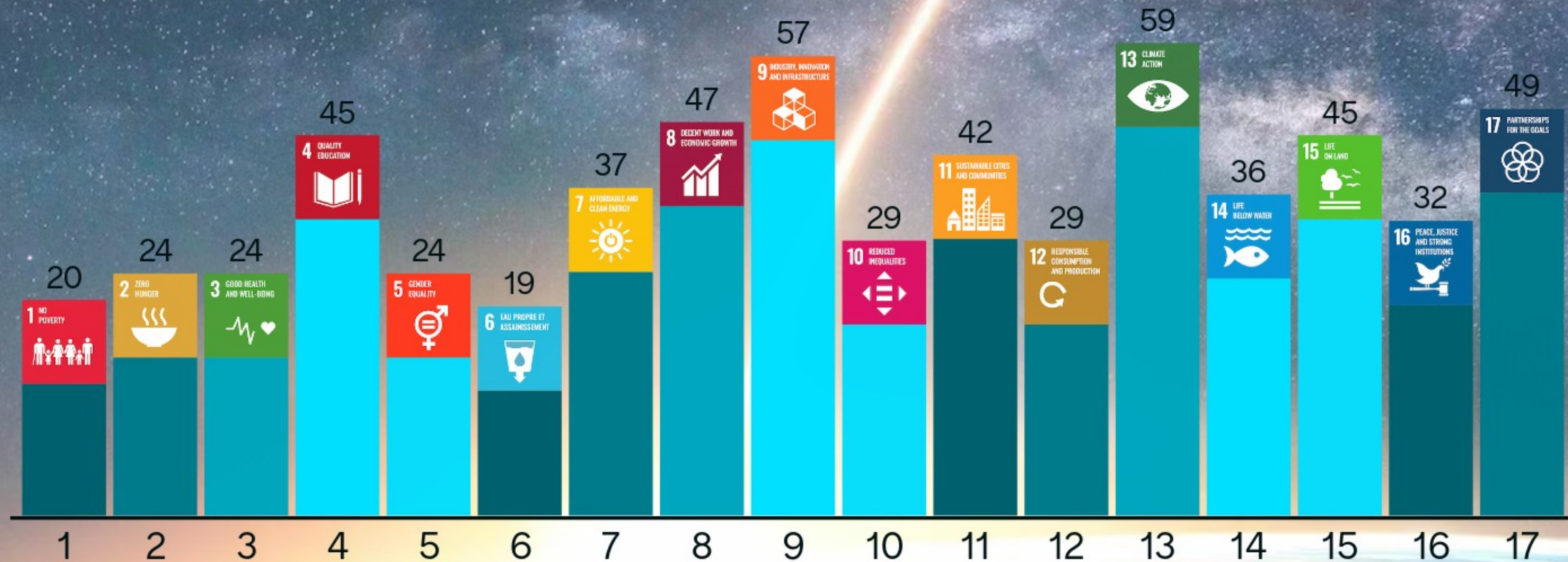
More social activities

Collaboration

Make sure to understand what export control rules actually says, i.e. what can be an issue and what cannot

LGBT but not open about it really in the work place

Which of Sustainable Development Goals (SDGs) can the space sector contribute to?



Evaluation: I like... I wish...

about this Space Innovation Forum (SIF15)

10



4



10



I like...
84 responses

- | | | |
|--------------------------------|--------------|---------------------------|
| Free food | The people | to mest people |
| The growth since the last SIF! | SSC speaches | Networking, Collaboration |
| Speed networking | Fika | Stefan Gardefjords story |

I like...

84 responses

Interesting possible connections and motivations

Cool engineers

Many companies

Meeting the people

Meeting ambitious people

The venue is great

Opportunity to explore

space and getting more information about the work people do with it

Relevant topics, networking



I like...

84 responses

The talk about equality.

Good summary of a successful project

Everybody in the ecosystem being at one place

New Ideas

Networking

The breaks to talk to people

Meeting people

Interesting ideas and speakers!

Space people



I like...

84 responses

Good networking. Welcoming atmosphere.

The networking

Relevant problems discussed



Networking possibilities

Space

A great way to connect and meet others.
Get an understanding of the industry and
innovation taking place in Kiruna.

Pitches

The people participating and contributing



I like...

84 responses

To meet people in the space business

Inspirational companies and storys

Great place to meet

SNOW

Johanna has done a fabulous job!

Good arrangements

Meeting

Great athmosphere

The dissociation about including different types of people

I like...

84 responses

Nice weather

Erik ptich about phinder

Meeting people with different stories in space

International outlooks!

The setting and people

A continuation

I loved the last panel where both space students and high ranking space industry people could share a stage

Lots of time for networking - beehives

A bigger diversity in the people who get to speak and attend

I wish...

40 responses

The room was warmer

Speed networking events

The RIT report should include how the phd results are simulated after phd students have graduated

We want more

Housing solutions for newcomers

Lunch

student housing

A job or thesis pls

Continuation

I wish...

40 responses

The RIT or something similar should continue

Continuation

More sound view of Esa and how they could improve innovation in europe

More technical presentations

Speed networking

Rocket conference here every year!

For future SIFs

To stay connected with key stakeholders to continue this journey of growth in Kiruna.

More startups were here

I wish...

40 responses

More companies and less PhD on the stage

more "omvärldsbevakning" and
inspirational talks

Smaller seminars to develop and work on
ideas

Shorter speeches and more frequent
breaks

Prolong activities

More activities

More time for networking

I was apart of this sooner!

Conference every year at least

I wish...

40 responses

To see more collaboration

Continuation of RIT

More national and international outlook

i wish there was more talk about sexualities and genders. you talk about equality but only mention men and women.

More nerdy project presentations

More contact time with professionals.
Actually discussing solutions to issues facing all of us

Breakout groups for discussion

That more concrete solutions to problems, like inequality and housing, were discussed

For a concrete plan to coordinate the voice of the industry to deliver a common message

I wish...

40 responses

More timme for beehives

A system for speed dating.

More technical presentations

More genders would be included in the
discuttion, attend not only to binary
genders but also non-binary.

Thank you all for your contributions!

Contact:

Johanna Bergström-Roos (project
manager)

johanna.b.roos@ltubusiness.se



Where, in the space community, do you see yourself working in the future (5+ years)?

0

Academia/University

0

Research Institute

0

Large company (industry)

0

Small or Medium-sized company

0

Start-up company

0

I can't say!

