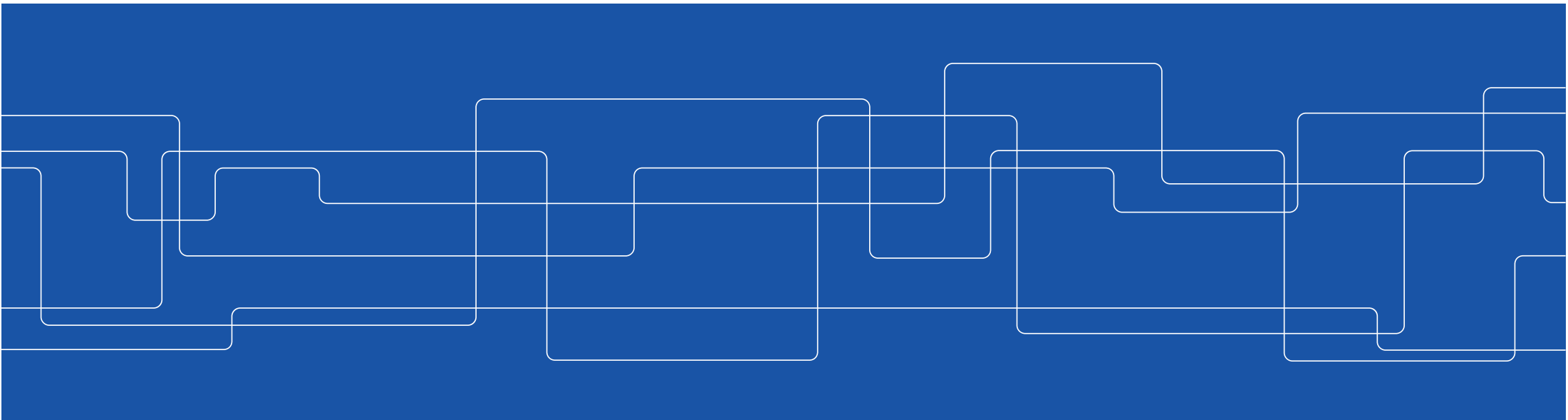




KTH ROYAL INSTITUTE
OF TECHNOLOGY

Sustainable development at KTH

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An Ocean of Opportunities for Academia

- This presentation will share knowledge about the Sustainable development goals (**SDG:s**) and the Agenda 2015-2030.
- How KTH contributes to the sustainable development goals through a systematic work, including measuring and monitoring the impact of our sustainability efforts with a focus on continual improvement.





Balance the tree pillars of sustainable development

The definition of sustainable development includes an ideal location for society where living conditions and resource use meet human needs without endangering the sustainability of ecosystems and the environment, so that future generations can meet their needs.”

Sustainability applies to different pillars that depend on each other:

- Social progress
- Economic growth
- Environmental protection





Millennium Development Goals (MDGs), 2000-2015



Key MDG achievements



- More than 1 billion people have been lifted out of extreme poverty (since 1990)
- Child mortality dropped by more than half (since 1990)
- The number of out of school children has dropped by more than half (since 1990)
- HIV/AIDS infections fell by almost 40 percent (since 2000)



Next steps



- 800 000 000 living on less than 1,25 dollar per day
- 1/9 People are hungry each night
- Deforestations remains high
- Oceans are becoming more acidic
- 1/6 adults is illiterate



The 17 Sustainable Development Goals

Agenda 2015-2030 for Sustainable Development



Targets and 230 global indicators for measuring development

Mål 7: Hållbar energi för alla

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Säkerställ att alla har tillgång till tillförlitlig, hållbar och modern energi till en överkomlig kostnad.

Foto: UN Photo, Oxfam Sverige

Göda tillgång till modern och förnybar energi och särskilt tillgång till förnybar energi är en av de viktigaste utmaningarna för att nå målet till god energi tillgång. Utmaningar inkluderar klimatförändring, naturkatastrofer och tillgången till modern energi i avlägsna områden.

En av utmaningarna är att säkerställa att energin är tillgänglig för alla, särskilt i avlägsna områden. En annan utmaning är att säkerställa att energin är miljövänlig och inte skadar miljön. En tredje utmaning är att säkerställa att energin är tillgänglig till en överkomlig kostnad.

Enligt FN:s planering för att nå målet till god energi gäller det att säkerställa att alla har tillgång till modern energi till en överkomlig kostnad. Detta innebär att säkerställa att alla har tillgång till modern energi till en överkomlig kostnad. Detta innebär att säkerställa att alla har tillgång till modern energi till en överkomlig kostnad.

Dokument 7

7/12/2015: Sveriges ställning till målet till god energi till en överkomlig kostnad.

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7/12/2015: Sveriges ställning till målet till god energi till en överkomlig kostnad.

Källa: FN:s planering för att nå målet till god energi.

Follow-up and evaluate on international level

230 global indicators for measuring development

Table 1.5 | The SDG Index



Rank	Country	Score	Rank	Country	Score
1	Sweden	85.6	41	Argentina	72.5
2	Denmark	84.2	42	United States	72.4
3	Finland	84.0	43	Armenia	71.7
4	Norway	83.9	44	Chile	71.6
5	Czech Republic	81.9	45	Uzbekistan	71.2
6	Germany	81.7	46	Kazakhstan	71.1
7	Austria	81.4	47	Uruguay	71.0
8	Switzerland	81.2	48	Azerbaijan	70.8
9	Slovenia	80.5	49	Kyrgyz Republic	70.7
10	France	80.3	50	Cyprus	70.6
11	Japan	80.2	51	Suriname	70.4
12	Belgium	80.0	52	Israel	70.1
13	Netherlands	79.9	53	Costa Rica	69.8
14	Iceland	79.3	54	Malaysia	69.7
15	Estonia	78.6	55	Thailand	69.5
16	United Kingdom	78.3	56	Brazil	69.5
17	Canada	78.0	57	Macedonia, FYR	69.4
18	Hungary	78.0	58	Mexico	69.1
19	Ireland	77.9	59	Trinidad and Tobago	69.1
20	New Zealand	77.6	60	Ecuador	69.0
21	Belarus	77.1	61	Sri Lanka	69.0

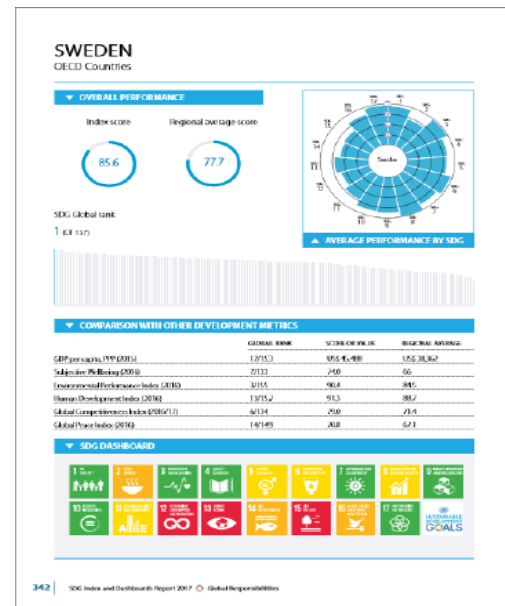


Figure 3 | SDG Dashboard for OECD countries



Follow up and evaluate on a national level

49 of 169 targets are fulfilled

There are six priority areas



1. Gender equality and equal society
2. Sustainable cities
3. Circular economy benefit to society
4. Strong business community with sustainable practices
5. Sustainable and healthy foods
6. Strengthened knowledge and innovation

Sex prioriterade områden

1 Ett jämlikt och jämställt samhälle

2 Hållbara städer

3 En samhällsnyttig och cirkulär ekonomi

4 Ett starkt näringsliv med hållbara affärsmodeller

5 Hållbara och hälsosamma livsmedel

6 Stärkt kunskap och innovation



KTH- Sustainable development

Expectations of internal and external interested parties

Common
value base for
government
employees

The Swedish
Constitution

Regulation
for higher
education

Swedish
Environmental
Code

Private and
public
sector

17 Sustainable
development
goals

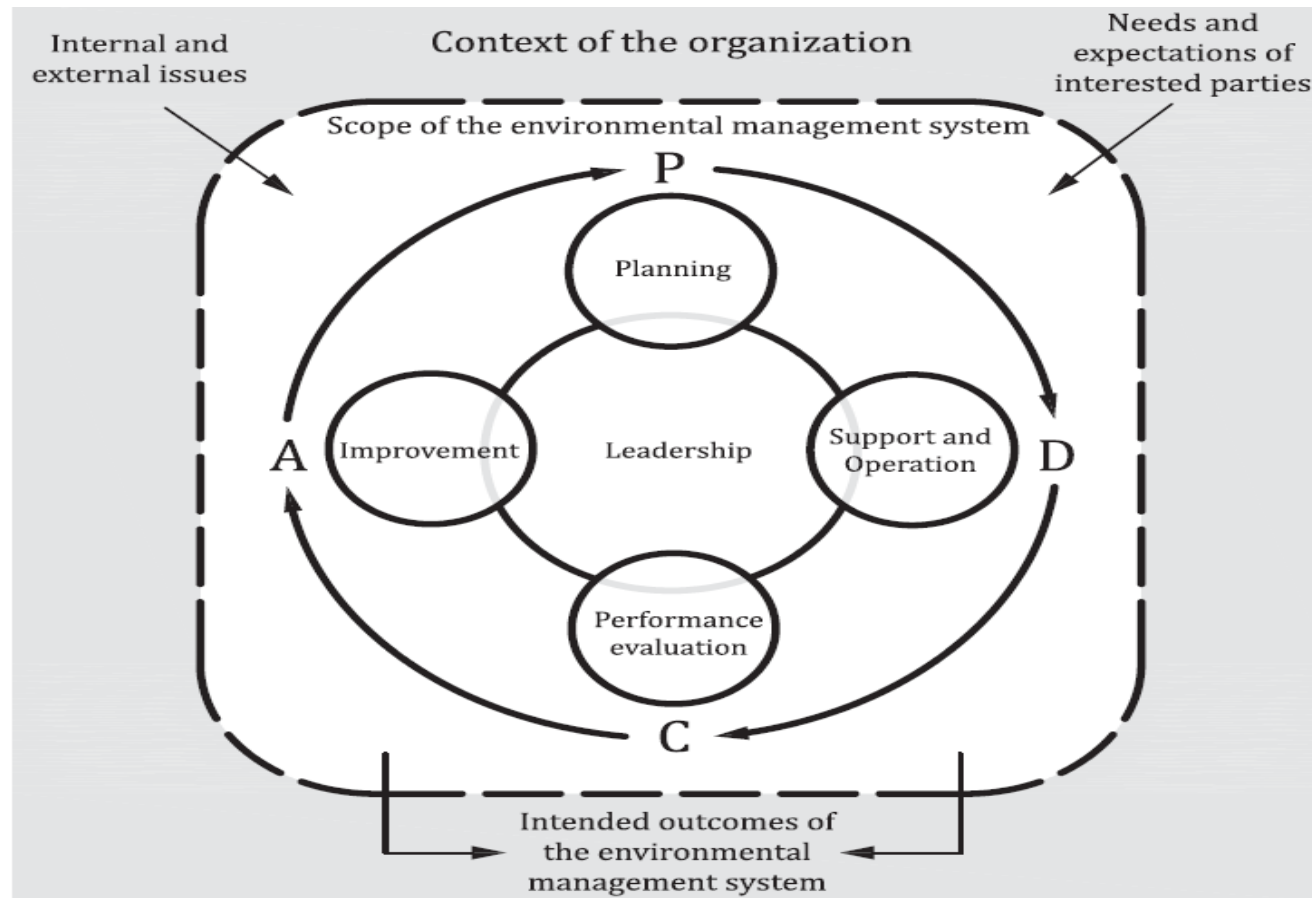
Staff and
students

ISO 14001
Environmental
management system

Swedish Regulation
on Environmental
Management system



ISO 14001- KTH Systematic work with continuous improvements





KTH- Plan-Do-Check-Act (PDCA)

Plan: establish objectives and processes necessary to deliver results in accordance with the organization's policy.

Do: implement the processes as planned.

Check: monitor and measure processes against the policy, including its commitments, objectives and operating criteria, and report the results to the top management.

Act: take actions to continually improve your sustainability work.





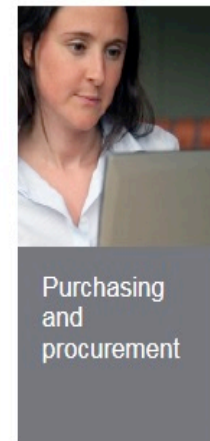
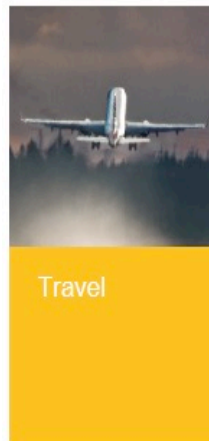
KTH- Environment and sustainable development

- Vision 2027 - for a brighter tomorrow
- Policy for sustainable development at KTH
- Sustainable development objectives 2016-2020 and action-plans
- Governance structure (roles, responsibilities and functions)
- Environmental representatives on each schools and the administration.
- The environmental work is described at the Universitys internal and external webbsites.
- Procedures for follow up and report on the fulfillment of the sustainable objectives
- Procedures for the management review to evaluate the effectiveness of the environmental management system and the environmental performance.





Sustainable development objectives 2016-2020





Sustainable development objectives



- **Education** – we shall increase all employees' and students' knowledge about sustainable development and it shall be integrated into all educational programs.
- **Research**- research base for sustainable development shall increase.
- **Collaboration**- With new and existing stakeholders, KTH shall work to contribute to sustainable development. Stronger picture of KTH as a leading technical university in sustainable development.
- **Travel** - Achieve a 20% percent reduction in carbon emissions resulting from business travel and increase the use of IT solutions for travel free meetings.
- **Management of Chemicals**- create conditions for an effective management of chemicals.



Sustainable development objectives



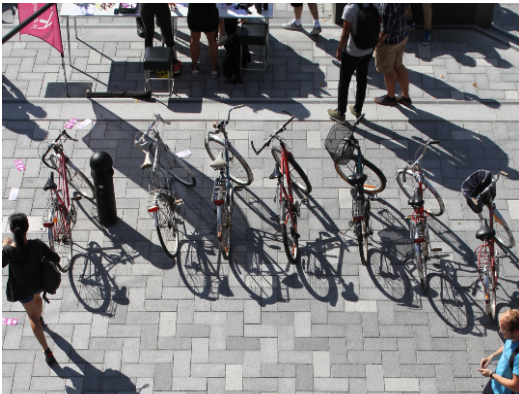
Campuses

- The highest environmental performance when constructing or renovating facilities and buildings should be used.
- Energy consumption shall be reduced by 10 %.
- The use of sustainable means of travel and transport to, from and between our campuses shall increase.
- Have a safe and effective management of hazardous waste.
- Appropriate conditions for sorting all relevant waste fractions.
- **Purchasing and Procurement** - Sustainability requirements shall be made in all procurements and purchases, where possible.
- **Organisation**- integration of environment and sustainable development into KTH:s business processes, strategic direction and decision making.



Examples of activities

Biking-days



Beehives



Cultivation boxes



Everybody needs to contribute



- What does the SDG:s and Agenda 2030 mean to us?
- How do we implement the SDG:s into strategies, business goals and processes?

