

# Impact plan 2020-2021

## **We reach impact mainly via four channels:**

- 1) Through people: a) students out; b) people exchange t/fr KTH.
- 2) By bringing technology to use: a) patenting; b) collaborations with stakeholders in industry and society; c) methods and technologies being brought into commercial/societal use; d) the creation of spin-off companies.
- 3) Via participation as experts in society.
- 4) Through Communication of our results to stakeholders and end-users. (potential KPI: average altmetric score per article or per person).

## **SWOT analysis, partly based on the RAE 2020 exercise:**

### **Strengths (EECS internal):**

- We (think we) are overall medium to good within all four channels.
- KTH EE is highly ranked.
- There are a lot of excellent professionals within commercialisation and communication at KTH (e.g. KTH innovation; communicators).
- In the RAE 2020, EEE made a critical assessment of points for improvement wrt impact.

### **Weaknesses (EECS internal):**

- Our impact occurs “ad hoc” but we have no strategic approach to improving our impact to its full potential. We have not decided whether we want this, and there is no anchoring within the organisation for such decisions. For example,
  - 1) we have no KPIs (or no clearly communicated good KPIs),
  - 2) we have no clear targets,
  - 3) there are few incentives on the researcher level to improve impact, and
  - 4) unlike HR and Economy, Samverkan and Communication are not integrated within the division’s daily work (not present at periodic division meetings).
- We have no strategic focus on improving our university ranking.

### **Opportunities (EECS external):**

- Our research aligns with the two main major trends that are expected to drive societal change on the mid-long term: 1) energy solutions that will be crucial in addressing climate change; and 2) research at the forefront in artificial intelligence.

### **Threats (EECS external):**

- A lot of our research is long term, beyond the UN SDGs, which misaligns with external demands on addressing the UN SDGs in our research.
- A top-down organisation is in place at KTH (we have a Vice rektor for samverkan and GVS KTH samverkan), but there is a disconnect with the bottom level (divisions and individual researchers).

### **Actions for 2021**

#### **Strategic support:**

Start a strategic discussion within the school on what we want and where we want to go wrt impact.

#### **Practical support actions to increase awareness and improve communications:**

1. Tour with NLS, RSO, KTH innovation and KTH communication to EECS divisions (Cont).
2. Research communication plan for EECS researchers: cont. plan + implementation.
3. PhD course "From Research to Impact" – next run VT 2021.
4. TED event at skolavslutning (Cont).
5. EECS person of the year (Cont).
6. Increase awareness about outwards mobility (research 2 industry) and review the KTH (EECS) conditions for this.
7. Review master thesis projects and their impact, for instance no of theses performed in industry or with industry, no of patents based on theses, etc.
8. Provide workshops with hints/tips on rapid IMPACT actions.
9. Continue the #290cybersecurity teaching for ages 10-20 and with similar initiatives at KTH (e.g. Road2Science etc) discuss how we can make this type of impact more systematic.
10. Arrange a series of workshops with teachers and PAs at EECS to discuss how we can increase and improve the use of external partners (e.g. industry) in our education.
11. Represent EECS in the KTH working group (PriU-gruppen) for "Arbetslivsanknytning."
12. Represent KTH (EECS) in the Swedish Research Council (VR) working group on impact education activities for PhD students.