



**UiO** : **Centre for Technology, Innovation and Culture**  
University of Oslo

# ANNUAL REPORT 2017



# TIK Centre for Technology – annual report 2017

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## Letter from the Director

The TIK Centre for Technology, Innovation and Culture has during the year 2017 continued the phase of marked positive development that was initiated a few years before. New externally funded projects were acquired and initiated during the year.

The large pool of new projects substantially increased the Centre's external funding, thus making it possible to consolidate its financial situation and enabling the recruitment of several new senior and junior researchers during the year. These newly hired researchers, along with others that are currently being recruited, represent an important consolidation and extension of TIK's staff and scientific competence base.

The Centre's Doctoral program is also experiencing a phase of marked positive development. The number of enrolled PhD students is currently approaching 30 candidates, and the level of annual activities (PhD defences, seminars and courses) has been high throughout the year.

TIK's Master level education has also a high level of activities and several positive developments. The Centre's Master programs have in the last few years experienced a steady growth in the number of applicants they attract (nearly 500 total applicants in the last recruitment round), as well as an increase in the quality of these.

TIK has in principle the possibility to enrol a greater number of these Master-level applicants, and improve the pedagogical offer we provide them with (e.g. by updating some of the existing courses, creating new courses, and establishing new international collaborations and exchange programmes). The Centre has also expressed several times its interest to develop a new interdisciplinary Bachelor program.

TIK's staff has at the moment a favourable demographic structure, characterized by a large number of junior researchers as well as a majority of relatively young and middle-aged senior researchers, which will represent the future of the Centre. TIK also has a quite balanced gender composition and an increasing share of international employees.

A major structural challenge for the Centre continues to be the limited available capacity and human resources at the senior researcher level. A crucial challenge ahead for TIK is therefore to develop a strategy for a long-term consolidation and capacity expansion for this group of scientific staff.

This long-term sustainable strategy cannot be based only on external funding acquisition, but it will also have to take into account the possibility to expand the Centre's educational activities.



Fulvio Castellacci, Director

## TIK – Facts and figures

The TIK Centre at the University of Oslo was established by the senate (now the University Board) as an independent unit organised under the Faculty of Social Sciences in 1999. This unit was a merge of the former Centre for Technology and Human Values (TMV), the interdisciplinary “European master program in Society, Science and Technology” (ESST) and the *Prosjektforum* (project forum, which is no longer a part of the Centre).

The TIK Centre carries out high quality research, education and research communication in the cross-disciplinary fields of innovation and science and technology studies.

### Overview of TIK:

|   |                  |
|---|------------------|
| Scientific publications per year (2007-2017)                              | 25               |
| Master programmes   | 2                |
| Courses (Masters and Ph. D. courses)                                      | 12               |
| PhD-students (per 31.12.2017)   | 29               |
| Scientific man years (2017 - numbers from DBH, including Centre Director) | 30,75            |
| Administrative man years (2017 - numbers from DBH)                        | 4,55             |
| Total number of employees (2017 - numbers from DBH)                       | 35,30            |
| Budget (2018)   | 42,7 Million NOK |
| Percent of the budget that is financed by external grants (2018)          | 68 %             |
| Research projects with external financing (2017)                          | 22               |

## Staff – new faces at TIK

Ana Delgado and Tone Druglitrø joined the senior researcher staff as associate professors from May and November 2017.

Monica Guillen-Royo joined TIK as an externally funded researcher for three years from January 2017, Jens Hanson started in a similar position for four years in August 2017 and Clara Vinas Bardolet joined TIK for a one year position as externally funded researcher from October 2017.

TIK welcomed two new PhD candidates in 2017; both employed at TIK: Elisabeth C. Svennevik and Tommas Måløy. The complete list of candidates in the program is listed under “PhD – Doctoral degree” below.

TIK also welcomed the following new postdocs: Julia Szulecka, Håkon E. Norman and Beatrice Cointe.

Stine Bruland joined the administration, substituting Tina Næss who was granted a leave to work for “Samfunnsviterne” at UiO.

Bente Bleskestad left TIK and retired after many years of service. Jørgen Bollingmo’s position was expanded to include the tasks handled by Bleskestad.

## Research

Research at the TIK Centre is organised into two research groups: the Science, Technology and Culture research group and the Innovation Studies research group.

TIK's researchers in the Science, Technology and Culture research group are mainly situated within the multidisciplinary field of Science & Technology Studies (STS), and focuses on the ways in which science and technology are shaped, become institutionalized and become involved in politics. Science and technology are viewed as cultural and material practices that can be fruitfully studied from both historical and contemporary perspectives.

The innovation group focuses on understanding the complex and dynamic relationships between the technological, economic and social factors that contribute to innovation in various firms, sectors, regions and countries. The point of departure for this work is that technological change and learning are important driving forces for societal change.

Both groups are active in international networks and initiatives, including the Peder Saether Centre in Berkeley, EU-SPRI and Nordic STS.

In addition to the two groups, climate and the energy transition is a cross-cutting theme at TIK, encompassing researchers from both groups.

All the researchers at TIK apply for funding from a magnitude of programs and funding agents, but the dominant part of TIKs projects are funded by the Research Council of Norway. TIK's role is either as project coordinator or as partner in projects hosted by other institutions. Following national and university strategic decisions, TIK has also taken steps to ensure further application to, and hopefully funding from, the EU, through the Horizon 2020 Research Program.

Seven new projects were added to the list of TIK projects in 2017. One project, "ReDig", was transferred from the University of Bergen, when the project leader Ana Delgado Aleman joined TIK in May 2017. TIK is also partner in a new project at NTNU, "ResPublica", represented by Aleman. A third new project in the STS group is "InfraData", where Susanne Bauer is the local project leader. In addition Susanne Bauer and Kristin Asdal are participants in two new Convergence projects at UiO:LifeScience.

"Mission (im)possible" is a project granted by the Research Council of Norway, with Jan Fagerberg as project leader. In addition RCN granted support for another two new projects "ReNewGrowth" and "Greenfleet", both headed by Jens Hanson. Hanson is also involved in "SuSolTech" a FME coordinated by Institute for Energy Technology.

## Research projects at TIK in 2017

| <b>PROJECT</b>   | <b>PROJECT LEADER</b> | <b>STARTING DATE</b> | <b>FUNDING</b>   |
|--|-----------------------|----------------------|--|
| ReDig - Responsibility as an Integral Component of Digital Research Practices in Bio- and Nanotechnology                                       | Ana Delgado Aleman    | 01-mai-2017          | RCN – BIOTEK2021   |
| Mission (im)possible? How to deal with the quest for extensive structural change: A review.  | Jan Fagerberg         | 01-jul-2017          | RCN - FORINNPOL  |
| ReNewGrowth – Conditions for growth in renewable energy industries   | Jens Hanson           | 01-aug-2017          | RCN - ENERGIX  |
| InfraData - Infrastructuring Internet of Things for public governance  | Susanne Bauer         | 01-apr-2017          | RCN - IKTPLUSS via UIO IFI                                 |
| ResPublica - Responsibility, practices and the public goods across Digital Life  | Ana Delgado Aleman    | 01-okt-2017          | RCN – BIOTEK2021 via NTNU                                  |
| Greenfleet – Greening the Fleet – Sustainability Transitions in the Maritime Shipping Sector   | Jens Hanson           | 01-mar-2017          | RCN – ENERGIX via SINTEF                                   |
| SuSolTech - Research Centre for Sustainable Solar Cell Technology  | Olav Wicken           | 01-jun-2017          | RCN – FME via Institutt for Energiteknikk/ UiO:Energi      |
| OSIRIS   | Magnus Gulbrandsen    | 01-mai-2016          | RCN - FORINNPOL  |
| TEMPEST  | Fulvio Castellacci    | 01-des-2016          | RCN - via TØI  |
| HappyICT - Responsible Innovation and Happiness: A New Approach to the Effects of ICTs   | Fulvio Castellacci    | 01-des-2015          | RCN - SAMANSVAR  |
| Innovation dynamics within a multinational company: A survey-based study of Telenor  | Fulvio Castellacci    | 01-okt-2015          | Telenor  |
| ERC StG Little Tools Enacting the Good Economy: Biocapitalization and the little tools of valuation  | Kristin Asdal         | 01-aug-2015          | EU Horizon 2020 - European Research Council Starting Grant |
| InGrid - Integration of Power Transmission Grids - Prospects and Challenges at National and European Levels in advancing the energy transition | Allan Dahl Andersen   | 01-aug-2015          | RCN - ENERGIX  |

|  |                    |             |                                       |
|--|--------------------|-------------|---------------------------------------|
| SusValueWaste - Sustainable path creation for innovative value chains for organic waste products                             | Fulvio Castellacci | 01-jun-2015 | RCN - BIONÆR - via NIFU               |
| I3U Investigating the Impact of the Innovation Union   | Fulvio Castellacci | 01-feb-2015 | EU Horizon 2020 - via Uni. Maastricht |
| SIVAC - Supplier Industry and Value Creation   | Taran Thune        | 01-sep-2014 | RCN - PETROSAM 2                      |
| ETIS - Europeanisation of Energy-Technological Innovation Systems: drivers, consequences and strategic challenges for Norway | Olav Wicken        | 01-jan-2014 | NFR - ENERGIX via FNI                 |
| CenSES - Centre for Sustainable Energy Studies   | Olav Wicken        | 01-feb-2012 | RCN - FME - via NTNU                  |

In addition, three PhDs with external funding and a survey conducted for Inven2 are included in the total number of external projects in 2017.



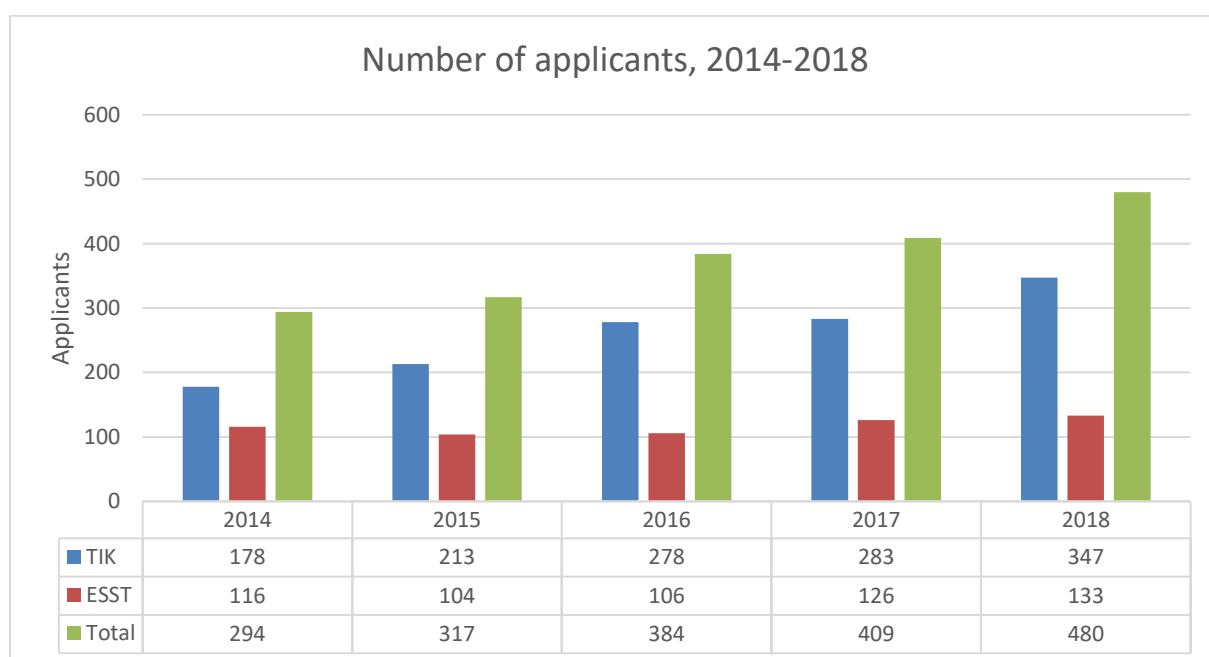
## Education

### Master programmes

TIK offers two programmes at the master level:

- TIK - Technology, Innovation and Knowledge (2 years)
- ESST - Society, Science and Technology in Europe (1,5 years)

30 master students are admitted every year, usually 20 TIK students and 10 ESST students. We have experienced a rise in applicants for the past few years, mostly to the TIK programme.



### High quality of applicants

Students can apply to a maximum of three UiO programmes any given year, and they must make a priority list. In 2015, around 100 of the applicants had TIK/ESST as their number one priority. In 2017 this number had increased to 141. So far in 2018, the TIK and ESST masters have 167 first priority applicants. The number for the TIK programme is particularly good, with more than 5 first priority applicants for each available place.

The grade point average (GPA) of applicants has gradually risen since 2013. If the trend is prolonged into 2018, the applicants will need a GPA of no less than B in order to be admitted.

Both of these developments are positive, and are expected to increase the quality of students that will enrol in TIK's Master programmes in the coming years.

### Student satisfaction

Studiebarometeret.no is a web portal made by NOKUT, which measures students' satisfaction with their study programme.

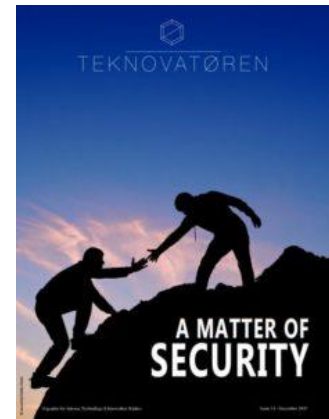
TIK students are generally happy with their programme. Students' reviews are most favourable on the indexes for inspiration and expectations. These indexes deal with how interesting and engaging the programme is, as well as how much effort is expected from the students themselves. The ESST programme received similar reviews, but slightly less favourable.

### Student magazine: Teknovatøren

Teknovatøren is the TIK and ESST students' semi-scientific student magazine. It is partly financed by the TIK Centre. Teknovatøren celebrated its 10<sup>th</sup> issue in 2016.

Editions in 2017:

- #12: Transitions
- #13: Failures
- #14: A matter of security



### New in 2017

- Tone Druglitrø was appointed master coordinator.
- Grades (A-F) were introduced for the first time in the 1.semester, and will be introduced in the 2.semester in 2018.
- Theses submitted: 15 TIK, 7 ESST.
- Measures for improving students' completion rates have been planned for 2018: 1) A MA supervisors' forum, 2) additional supervision groups for students.
- Winners of the "students vs employees" football match: Staffletico!



## PhD – doctoral degree

The TIK departmental doctoral study plan in Technology, Innovation and Culture is one of seven study plans within the doctoral programme that is offered by the Faculty of Social Sciences at UiO. The TIK programme aims to provide both research training and a broad base of advanced knowledge in theoretical and methodological approaches within STS and innovation studies.

Professor Susanne Bauer currently coordinates TIK's PhD programme track.

### Disputations

Two candidates successfully defended their thesis for the degree of PhD, and one candidate successfully defended her thesis for the Dr.Philos in 2016:

| Candidate                      | Date       | Thesis title   | Supervisors   | Committee   |
|--------------------------------|------------|--|---|---|
| Erlend Andre Tveiten Hermansen | 08.06.2017 | "Rigor and Relevance: Navigating the Climate Science-Policy Nexus"   | Prof. Göran Sundqvist (Göteborgs Universitet), Research Dir. Hege Westskog (Cicero) | Dr. Silke Beck (UFZ), Prof. Björn-Ola Linnér (Linköpings Universitet), Prof. Susanne Bauer (TIK). |
| Håkon Endresen Normann         | 09.03.2017 | Politics in energy system transformation: Conditions for the development of an offshore wind industry in Norway. | Prof Olav Wicken (TIK)  | Senior Lecturer Florian Kern (SPRU) Prof Marianne Ryghaug (NTNU), Prof. Jan Fagerberg, (TIK)      |

Another candidate, Christine Mee Lie, submitted her thesis for evaluation in 2017.

### Candidates

TIK welcomed four new candidates in 2017, and had the following candidates enlisted in the program as of December 31<sup>st</sup> 2017:

| Candidate           | PhD project   | Supervisor(s)  | Funding                         |
|---------------------|---|--|---------------------------------|
| Bianca Cavicchi     | Governance of bioenergy innovation systems in the rural areas of Emilia Romagna and Oppland-Hedmark.                    | Olav Wicken, John Bryden                                       | NILF                            |
| Simen Gangnæs Enger | Factors affecting organizations' ability to participate and achieve EU-funding: Evidence from the Norwegian R&D sector. | Fulvio Castellacci, Magnus Gulbrandsen, and mentor Geir Arnulf | NFR/KD – <i>offentlig PhD</i> . |

|                          |  |  |                                 |
|--------------------------|--|--|---------------------------------|
| Morten Fosaas            | Innovation Systems and Innovation Policy: Perspectives and Challenges  | Jan Fagerberg og Anna Bergek               | TIK - basis                     |
| Jakoba Sraml González    | Creativity and the innovation process in small and medium firms during financial and economic turmoil: An ethnographic study   | Magnus Gulbrandsen                         | TIK - basis                     |
| Sveinung Grimsby         | How does the Norwegian food industry act during innovation processes? A study on new product failure rate and systematic differences between successful and unsuccessful innovation projects in the food industry. | Magnus Gulbrandsen and Cathrine Finne Kure | Nofima AS                       |
| Hanne-Stine Hallingby    | Modularization and dynamics in the mobile ecosystem  | Magnus Gulbrandsen and Patrick Waldemar    | Telenor/NFR - <i>næringsPhD</i> |
| Bård Hobæk               | Salmon Sustainabilities  | Kristin Asdal                              | TIK – strategic                 |
| Ásdis Jónsdóttir         | Climate change, ecology and knowledge in Iceland: An anthropological study.  | Tian Sørhaug and Gisli Pálsson             | TIK - basis                     |
| NEW: Bård Lappegård Lahn | Climate governance between global knowledge and national politics.   | Kristin Asdal                              | Cicero                          |
| Christine Mee Lie        | R&D Policy and green growth in East Asia   | Jan Fagerberg                              | TIK - basis                     |
| Marie Byskov Lindberg    | The politics of power transmission   | Allan Dah Andersen                         | TIK – project: InGrid           |
| Sylvia Lysgård           | Hva dreier det seg om? Næringsliv, politikk og praksiser i to norske (miljø)saker.   | Göran Sundqvist og Kristin Asdal           | TIK - basis                     |
| Turid Markussen          | Antropologi i nord   | John Law                                   | Centre for Gender Research      |
| Tuukka Mäkitie           | Function-interactions in innovation processes: the technological innovation system of petroleum industry   | Taran Thune                                | TIK - basis                     |
| Tommas Måløy             | Valuation in genomic databases: a case study on the Aqua Genome Project  | Kristin Asdal                              | TIK - basis                     |

|                                 |   |   |                               |
|---------------------------------|---|---|-------------------------------|
| Hilde Nykamp                    | Green Innovation in the Norwegian Construction Industry   | Magnus Gulbrandsen                                      | TIK - basis                   |
| Helena Nynäs                    | Valuation of major waterfalls in modern Norway  | Sissel Myklebust and Mari Hvattum                       | NVE                           |
| Artur Santoalha                 | Smart Specialization: Where do European regions stand?  | Fulvio Castellacci                                      | TIK - strategic               |
| Henrik Schwabe                  | ICTs and Subjective Well-Being: Perceived fairness, social mobility and capabilities  | Fulvio Castellacci                                      | TIK – project: Happy ICT      |
| Erlend Osland Simensen          | Mapping the supplier industry   | Taran Thune   | TIK – project: SIVAC          |
| Guro Ådnegard Skarstad          | New Fish in a New Environment: Challenges to a Comprehensive Management of Fish, Environments and Human Beings.   | Kristin Asdal   | NILF                          |
| Kari-Elisabeth Vambeseth Skogen | The impact of research on policy: an empirical study of the use of scientific knowledge in policymaking in Norway   | Taran Thune, Magnus Gulbrandsen, and mentor Geir Arnulf | NFR/KD - <i>offentlig PhD</i> |
| Hege Rudi Standal               | Universities as Strategic Actors- University management and the new era of Governance.  | Magnus Gulbrandsen og Merle Jacob                       | TIK - basis                   |
| NEW: Elisabeth M C Svennevik    | Changes towards sustainable mobility: Experiences from car sharing in urban areas.  | Olav Wicken, Tom Erik Julsrud (TØI)                     | TIK – project: TEMPEST (TØI)  |
| Nhat Strøm-Andersen             | Towards a sustainable bioeconomy: The role of dynamic interplay between technology, industry and policy - a study of organic waste streams from the Norwegian food industry | Fulvio Castellacci                                      | TIK – project: SusValueWaste  |
| Kasper Rogde Søyland            | An Innovative Century? The origins for advanced aluminium prefabrication  | Olav Wicken og Finn Ørstavik                            | HBV                           |
| Tina Naomi Talleraas            | Unlocking the Black Box of Nuclear Disarmament: A case study of the Norwegian initiative to re-politicize the bomb  | Göran Sundqvist   | TIK - basis                   |
| Irene Øvstebø Tvedten           | Science and Corporate Policy –DNV GL as an  | Kristin Asdal /Susanne Bauer                            | TIK - basis                   |

|                  |  |                    |                           |
|------------------|--|--------------------|---------------------------|
|                  | enabler for a sustainable future"  |                    |                           |
| NEW: Lars Wenaas | Open Access: En endring av forskningspubliseringen med begrenset rekkevidde? | Magnus Gulbrandsen | CERES/NDR - Offentlig PhD |

## PhD courses and seminars

**TIK9024 Research, Innovation and Impact:** This weeklong course was offered for the first time in 2017. It was organized by OSIRIS centre director Magnus Gulbrandsen, in cooperation with NORSI (see below). 15 national and international ph.d candidates participated, as well as several representatives from the Norwegian Research Council and the Ministry of Education and Research. More information about the course: <http://www.uio.no/studier/emner/sv/tik/TIK9024/>

**TIK9101 Obligatory PhD seminars:** The yearly internal PhD seminar for TIK candidates was held in the Autumn semester, at the *Centre Universitaire de Norvège à Paris*.

TIKs candidates continue to benefit from TIK being involved in national and international research networks like EU-SPRI, EASST – European Association for the Study of Science and Technology, and the Norwegian Research School on Innovation (NORSI), giving access to a large number of research courses and relevant conferences.

## Research communication

### Web

During 2017, the following research-based news articles were written for TIK's web page:

- «Havvindprosjekt vart skrinlagde då oljeprisen gjekk opp», in connection with Håkon Endresen Normanns PhD defence, and
- «Etterlyser debatt om politikernes bruk av klimaforskning», with connection with Erlend A.T. Hermansen PhD defence –

both with around 600 unique views.

In addition, 32 shorter news articles/notices were posted online:

- 13 provided by the OSIRIS-team
- 9 provided by the Little Tools team
- 2 from SIVAC
- 1 post for "Innovasjonsbloggen", and the remaining
- 7 by TIK as a whole.

If we look at TIK's web pages as a whole, 2017 saw a total of 92.316 page views, or 71.383 *unique* page views, with an average monthly view rate at 7.693, or 5.949 *unique* page views (how many of these views were made up of UiO-users, ie. UiO-students and staff, as opposed to external visitors was unclear at the time of writing this report).

Our web pages in English are by far the most viewed and contains the web content which makes up almost half of our total page views. Our employee's profile pages rank 2<sup>nd</sup>, and our section on "Forskning" 3<sup>rd</sup> in terms of most page views.

## Social media

TIK has been on Twitter since 2012 and on Facebook since 2015, where we have published news, events, publications, available positions, TIK Talks, student information etc.

Our Facebook page mainly targeted potential applicants for the master and PhD programs, and increased its number of followers by almost 100; from 346 at the start of the year up to around 440 by the end of it.

Some overall statistics:

- *Daily* unique page engaged users\* (average): 16
- *Monthly* unique page engaged users\* (average): 313
- *Daily* total reach\*\*:
- *Monthly* total reach\*\*:

\* Number of people who engaged with our Page, ie. clicks.

\*\* Number of people for whom **any** content from our Page or about our Page entered their screen

In terms of page posts, 98 items in total were posted or shared by us on our Facebook page throughout the year, with an average reach of 205 unique users per post\*\*\*

\*\*\* So-called Lifetime Post Organic Reach - The number of people for whom our Page's post entered their screen through unpaid distribution (unique users).

## Traditional media

TIK researchers regularly appear in the media. In 2017, 11 media appearances by TIK researchers were cited on TIK's web page. *This is not an exhaustive list, however, as not all media appearances are reported to the Centre.*

## Internal seminars and workshops at TIK in 2017

| Date       | Speaker         | Title   |
|------------|-----------------|---|
| 14.12.2017 | Peter Karnøe    | Performing market models – re-performing society                        |
| 13.12.2017 | Artur Santoalha | Midway seminar: Smart Specialization - where do European regions stand? |

|            |                                |  |
|------------|--------------------------------|--|
| 24.11.2017 | Hanne-Stine Hallingby          | Final dissertation seminar: Hanne-Stine Hallingby  |
| 26.10.2017 | Bernadette Bensaude-Vincent    | Biomimetics and Bioeconomy   |
| 22.9.2017  | Fabian Muniesa                 | On the political vernaculars of value creation   |
| 14.09.2017 | SIVAC                          | Transformations in the Norwegian petroleum industry: handling turbulence and forging ahead? (half-day seminar)               |
| 8.09.2017  | Sveinung Grimsby               | Midway seminar: how does the Norwegian food industry act during innovation processes?  |
| 6.09.2017  | Adrian Smith                   | Human agency in post-automation  |
| 4.09.2017  | Jakoba Šraml González          | Final dissertation seminar: innovation in situations of industry crisis  |
| 4.09.2017  | Happy ICT team                 | Workshop on ICTs and well-being  |
| 8.06.2017  | Erlend Andre Tveiten Hermansen | PhD-candidacy trial lecture and defence  |
| 6.06.2017  | Irene Øvstebø Tvedten          | Midway seminar: Shades of green – enabling a transition in the Norwegian maritime sector                                     |
| 23.05.2017 | Antonio Botelho                | The long and winding road: building Brazilian innovation policy  |
| 16.05.2017 | Various                        | Research workshop on empirical analyses of innovation in firms   |
| 24.04.2017 | Little Tools team              | Lecture and workshop: Digital methods in Science and Technology Studies  |
| 24.03.2017 | Susanne Bauer & more           | Open workshop: Health by the Algorithm   |
| 23.03.2017 | Jeanette Pols                  | Self tracking – good for you?  |
| 21.03.2017 | Gary Herrigel                  | MNC Experimentalism and Upgrading in China   |
| 17.03.2017 | Simen Enger                    | Midway seminar: Drivere for økt søknadsaktivitet og deltakelse i EUs rammeprogram for forskning og innovasjon (Horisont2020) |
| 14.03.2017 | Tomas Kåberger                 | EU's bio-economy strategy: conflicts and prospects ahead   |



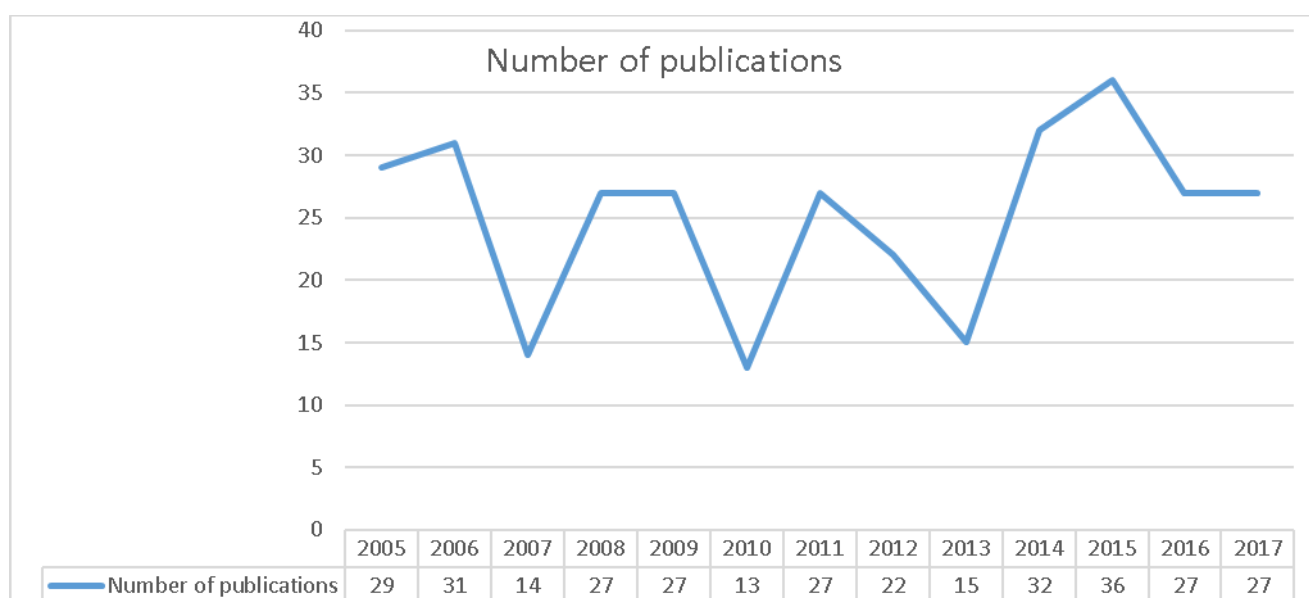
|            |                              |   |
|------------|------------------------------|---|
| 9.03.2017  | Håkon Endresen<br>Normann    | PhD-candidacy trial lecture and defence                               |
| 8.03.2017  | Florian Kern                 | The politics of low carbon innovation – lessons from six case studies |
| 3.02.2017  | Maria Fernanda Olarte-Sierra | Trial lecture for temporary position as Associate Professor           |
| 2.02.2017  | Tone Druglitrø               | Trial lecture for temporary position as Associate Professor           |
| 1.02.2017  | Martina Schlünder            | Trial lecture for temporary position as Associate Professor           |
| 23.01.2017 | Helena Nynäs                 | Final seminar: Valuating Waterfalls                                   |
| 12.01.2017 | Erlend Osland<br>Simensen    | Midway seminar: Innovasjon i<br>petroleumsindustrien                  |

## Publications

2017 has been a good year for TIK in regards to scientific publications. 19 scientific articles has been published by both junior and senior researchers in prestigious journals, such as Research Policy and Science, Technology and Human Values. One book has been edited by one of our senior researchers together with one of our junior researchers and seven book chapters has been published

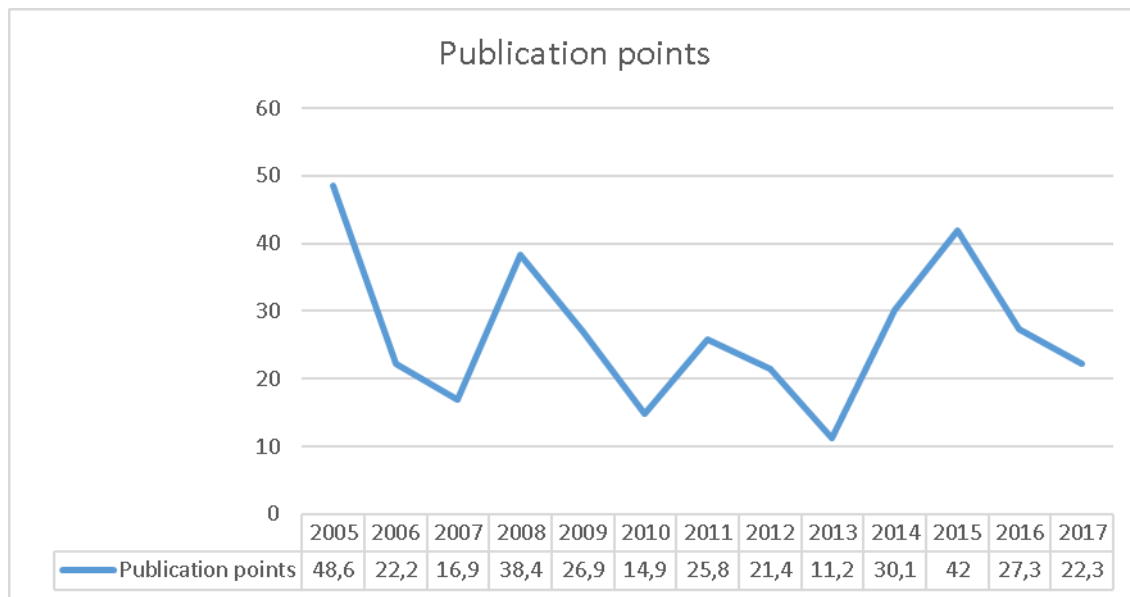
The total number of publications are 27, where 5 are level two publications. The number of total publications are the same as for 2016, but a reduction compared to 2015, which was a very good year in terms of publication (36 in total).

The graph below shows TIKs number of scientific publications in the period 2005-2017:



The continued high number of publications might be a result of TIK's new policy of granting an extra allowance to researchers with a certain level of publications.

Converting the publications to publications points, 2017 gave 22,3 points. The graph below shows TIKs publication points in the period 2005-2016:

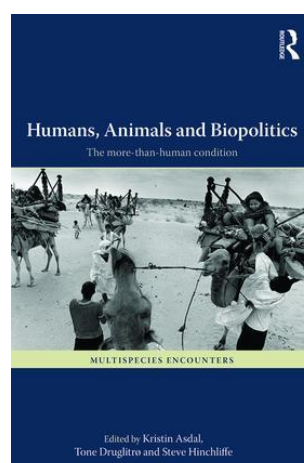
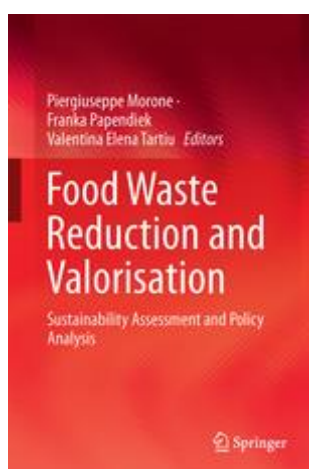


In 2015 a new formula for the national publication indicator was introduced in with the aim of closing the gap between the scientific domains. With the old indicator, the Social Sciences and Humanities gained more publication points relative to the Natural Sciences, based in a more traditional publication strategy, where one or just a few authors write monographs. The new indicator is set to even the field, emphasizing, among other things, international cooperation. The lower result in publications points in 2017 from 2016 despite the same number of publications for these two years is due to more co-authored publications in 2017 than in 2016.

### Edited books

**Valentina Elena Tartiu, Piergiuseppe Morone and Franka Papendiek**, 2017. Food Waste Reduction and Valorisation. Sustainability Assessment and Policy Analysis. Springer International Publishing.

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