

Forskningsudvalget (Møde i Forskningsudvalget)

06-10-2021 13:00 - 15:00

03.1-ne01 - Auditorie C

Information:

Mødet afholdes fysisk.

Dekan Andreas de Neegaard deltager under punkt 3.

Specialkonsulent Cecilie Thorsted Flo deltager under punkt 5.

Drøftelse af aktuel forskningspolitisk tendens: Strategiske forskningsbevillinger udmøntet igennem store konsortier med inddragelse af bred aktørkreds

Indstilling:

Det indstilles,

- At Forskningsudvalget med udgangspunkt i nedenstående sagsfremstilling, tilhørende baggrundsmateriale om tre eksempler/cases, samt kort mundtlig præsentation ved prorektor Peter Kjær og dekan Andreas de Neergaard, drøfter perspektiver og udfordringer for RUC i forhold til at indgå i store nationale forsknings- og udviklings-satsninger

Sagsfremstilling

Prorektor ønsker dels at orientere Forskningsudvalget om tre aktuelle tiltag på den nationale forskningspolitiske scene, som RUC på forskellig vis har engageret sig strategisk i indenfor det seneste år. De tre tiltag kan samtidig ses som en ny tendens i det statslige forskningsfinansieringssystem, der kan give anledning til overvejelse omkring RUC's beredskab i forhold til strategisk og politisk positionering og interessevaretagelse, hvorfor prorektor inviterer Forskningsudvalget til en uformel og indledende drøftelse heraf.

I de tre eksempler, som er genstand for denne drøftelse, har RUC's tilgang for involvering primært været baseret på interesse og engagement – samt villighed til at investere tid deri – for de relevante faglige miljøer. Alle tre eksempler har samtidig fordret forhandling og strategisk interessevaretagelse på dekan og/eller prorektor-niveau.

De tre eksempler/tiltag til drøftelse er:

- A. Udmøntning af midler fra Forskningsreserven (200 mio. kr. over 4 år) til forskningsindsats på børneområdet. Status og redegørelse for forløb fremgår af bilag 1.
- B. Digital Research Center Denmark – DIREC blev etableret pr. 1. oktober 2020 med en bevilling på 100 mio. kr. fra Innovationsfonden. RUC var ikke en del af partnerskabet fra starten men blev inkluderet med virkning fra september 2021. Baggrundsmateriale fremgår af bilag 2.
- C. Innomissions partnerskaber under Innovationsfonden er det primære virkemiddel til implementering af regeringens grønne forskningsstrategi fra september 2020 og de på finansloven afsatte 700 mio. kr. hertil. RUC-forskere har bidraget til udarbejdelse af roadmaps for tre ud af de fire missioner (nr. 1, 3 og 4), der blev indsendt i maj 2021, ligesom dekan Andreas de Neergaard og dekan Susanne Sørensen er medlemmer af styregrupper for de tre konsortier, som har stået bag de indsendte roadmaps.

Status lige nu er, at de samme konsortier arbejder på indsendelse af endelige ansøgninger pr. 19. oktober 2021 om etablering af Innomissions Partnerskaber med en lang række delprojekter specificeret til realisering af de valgte roadmaps. Bilag 3 indeholder en sammensætning af forskelligt baggrundsmateriale fra Innovationsfonden om processen.

Forelæggelsen er godkendt af

Prorektor Peter Kjær

Bilag

1. Notat fra CeDif
 2. Baggrundsmateriale om DIREC
 3. Baggrundsmateriale fra Innovationsfonden
-

Center for Daginstitutionsforskning

Strategisk kommunikation og positionering i forhold til udmeldte midler uden model for udmøntning

Notat, 24. september 2021

Den 30. oktober 2020 blev der indgået politisk aftale om udmøntning af midler fra Forskningsreserven. Af disse midler var 4 x 50 mio. kr. øremærkede til styrket forskning og kapacitetsopbygning på børneområdet. Der blev imidlertid ikke udmeldt en model for udmøntning af de nye midler.

Denne uklarhed om udmøntning gav med det samme anledning til positionskamp mellem især DPU og de største professionshøjskoler om dels andel af bevilling og dels udformning og placering af et bevilligende organ. Center for daginstitutionsforskning (CeDif) har fra starten valgt at spille en aktiv rolle i dette limbo, dels for at sikre en fastholdelse af det udmeldte metodiske fokus for forskningen (kvalitativ forskning), dels for at synliggøre sig som et centralt miljø på området og bejler til en andel af de 200 mio.

CeDif har opereret med en strategi for synliggørelse og indflydelse i fem spor:

- Bredt involverende dialog med forskere og interessenter om vidensbehov
- Løbende formidling af debatter fra seminarer samt andre indspil om emnet på [FB](#) og [LinkedIn](#)
- Løbende dialog om udmøntningen med universiteter og professionshøjskoler på ledelsesniveau
- Påvirkning af de politiske processer gennem skriftlige oplæg til politiske ordførere og ministre samt opfølgende dialoger
- Strategisk tilstedeværelse/networking i relevante sammenhænge (konferencer, udvalg etc.)

Der er endnu ikke truffet endelig beslutning om en model for udmøntningen, men et af ministeriet nedsat partnerskab bestående af relevante institutioner (herunder RUC) på området udarbejder lige nu et bud på et (evt. varigt) Partnerskab for Børneforskning, som skal forelægges ministeriet den 1. oktober.

Tidslinje og aktiviteter i regi af CeDif

December 2020: CeDif bidrager til et første bud på en model for udmøntning, som BUPL fremsender til ministeriet

8. Januar 2021: 40 forskere fra alle universiteter og professionshøjskoler inviteres til seminar om vidensbehov og forskningsmetoder

Januar/februar: CeDif inviterer praktikere, politikere og andre interessenter til to webinarer om vidensbehov - hver høring med 150 deltagere. De blev fulgt op af opslag og de sociale medier.

4. marts: CeDif sender en invitation til dialog til alle politiske ordførere på området og til relevante ministre. Med invitationen et resume af seminarerne i 21 opmærksomhedspunkter

April: Centerleder og dekan til møder med interesserede politiske ordførere

5. maj: Fremsendes en indstilling vedr. model for udmøntning til ministeriet

Juni 2021: Ministeriet inviterer repræsentanter fra relevante institutioner til at udforme en model for udmøntning af midler og kapacitetsopbygning på området.

Ultimo 2021: Processen frem mod model for udmøntning forventes afsluttet. CeDif har derfor foregribende indkaldt forskere på tværs af miljøer til dialog om, hvilke forskningstemaer man evt. kan samles om

Center for daginstitutionsforskning (2015-) er det største samlede danske forskningsmiljø på 0-6 års-området. CeDif består af forskere fra DPU og RUC og har derudover tæt samarbejde med forskere på de øvrige danske universiteter og professionshøjskolerne. Desuden er der opbygget en stor kontaktflade til politiske interessenter på området, fx KL, FOA, FOLA og særligt til BUPL, som støtter CeDif med en bevilling.



Nyt nationalt center for forskning i digitale teknologier

Nyt nationalt Center for Forskning i Digitale Teknologier – DIREC – skal udbygge kapaciteten inden for forskning og uddannelse i Danmark. Centeret er en unik alliance mellem syv danske universiteter og Alexandra Instituttet inden for digitale teknologier.

Med Innovationsfonden som hovedinvestor søsættes i oktober 2020 et spændende nyt og bredt funderet partnerskab: DIREC.

I løbet af de næste fem år skal centeret udbygge kapaciteten inden for forskning og uddannelse i digitale teknologier ved danske universiteter og medvirke til at tilfredsstille det store behov for højtuddannede it-specialister hos virksomheder og den offentlige sektor. DIREC skal desuden via samarbejder med virksomheder og den offentlige sektor bidrage til Danmarks konkurrencedygtighed ved at sikre udvikling af nye produkter og løsninger baseret på de nyeste digitale teknologier.

Imødekommer manglen på it-specialister

Digitale teknologier er den måske stærkeste driver for vækst og velfærd i samfundet og erhvervslivet, og vi har under Covid-19-krisen set digitale teknologier være aldeles afgørende for, at det er lykkedes at holde store dele af samfundet kørende på trods af en stort set total nedlukning. Og digitale teknologier vil være helt centrale, hvis vi skal i mål med den grønne omstilling.



Danmark er i front inden for en række 'klassiske' it-teknologier, men der er mangel på specialister. Det er derfor nødvendigt med en styrket indsats og dermed sikring af, at Danmark fortsat er i front og ikke mindst i forhold til nye teknologier som f.eks. kunstig intelligens, big data og internet-of things.

Folketinget har derfor besluttet, at det er nødvendigt at investere i en kraftig kapacitetsopbygning inden for digitale teknologier, herunder oprettelse af et nationalt center for forskning og uddannelse.

Det er et mål for DIREC at blive et internationalt anerkendt center og kunne matche de mest respekterede tilsvarende centre i Europa og USA og dermed tiltrække de bedste forskere til at opholde sig ved centeret.

Værdiskabende og tillidsskabende teknologi

Centerets aktiviteter vil ske på baggrund af samfundsmæssige behov, hvor forskning løbende omsættes til værdiskabende løsninger og digital omstilling i erhvervslivet og den offentlige sektor.

Forskningen vil i relevante sammenhænge inddrage etiske og moralske aspekter af den nye teknologiske udvikling og brug af kunstig intelligens og big data i en dansk kontekst, så man sikrer, at borgerne kan have tillid til de nye teknologier.

Konsortiet bag DIREC

DIREC er et unikt samarbejde på tværs af syv universiteter i Danmark, og konsortiet bag DIREC består af de datalogiske institutter på Danmarks Tekniske Universitet, Københavns Universitet, Copenhagen Business School, IT-Universitetet, Syddansk Universitet, Aarhus Universitet og Aalborg Universitet, som alle har forskergrupper, der kan måle sig med de bedste internationalt.

Desuden deltager Alexandra Instituttet A/S, som er ét af Danmarks Godkendte Teknologiske Service Institutter (GTS), der som mission har at omsætte ny it-forskning og teknologi til værdi i form af nye innovative produkter og services hos danske virksomheder og den offentlige sektor.

DIREC ledes af en bestyrelse bestående af:

1. Jens Christian Godskesen, prorektor, IT-Universitetet, formand
2. Michael Holm, grundlægger og CEO, Systematic, næstformand
3. Natasha Friis Saxberg, CEO, IT-Brancheforeningen
4. Thomas Asger Hansen, Head of Analytics and Artificial Intelligence, Grundfos
5. Rikke Hovgaard Zeberg, direktør, Digitaliseringsstyrelsen
6. Mads Nielsen, institutleder, Datalogisk Institut, Københavns Universitet



Følgende personer har observatørstatus i bestyrelsen:

1. Per B. Brockhoff, institutdirektør, DTU Compute
2. Helle Zinner Hansen, institutleder, Department of Digitization, Copenhagen Business School
3. Jesper Kjeldskov, institutleder, Institut for Datalogi, Aalborg Universitet
4. Børge Lindberg/Michael Hansen, observatører, Innovationsfonden

DIREC's bestyrelse har ansat Thomas Riisgaard Hansen som direktør med virkning fra 1. januar 2021. Thomas har en ph.d. i datalogi fra Aarhus Universitet og har været gæsteforsker på UC Berkeley i Californien.

Thomas Riisgaard Hansen har gennem hans karriere arbejdet med forskning og udvikling, både som forsker og som erhvervsleder. Han har været meget aktiv inden for iværksætttermiljøet og er bl.a. en af grundlæggerne af it-virksomheden Cetrea, som udvikler avancerede it-løsninger til hospitaler.

Læs mere på www.direc.dk.

Kontaktpersoner:

- **Ole Lehrmann Madsen, fungerende direktør for DIREC, ambassadør, Alexandra Instituttet A/S**
20 15 44 51, olm@alexandra.dk.
- **Jens Christian Godskesen, formand for bestyrelsen for DIREC, prorektor, IT-Universitetet**
45 51 17 09 15, jcg@itu.dk.
- **Jens Bomholt, presse- og mediechef, Innovationsfonden**
61 90 50 45, jens.bomholt@innofond.dk

Kontakt

Telefon: 61 90 50 00

Telefontid: hverdage kl. 9.00 - 12.00

Mail: kontakt@innofond.dk

DIREC

Digital Research Centre Denmark

Roskilde Universitet bliver en del af nyt nationalt it-forskningscenter

1.9.2021 10:53:27 CEST | [Alexandra Institut](#)

Del



Det nyetablerede forskningscenter DIREC vil styrke det digitale Danmark med it-forskning i verdensklasse, som skal anvendes i erhvervslivet og i det offentlige. På Roskilde Universitet arbejder man bl.a. med kunstig intelligens i sundhedsvæsenet.



Roskilde Universitet er nu en del af det nye nationale forskningscenter DIREC.

Dekan for Teknologi og Sundhed Andreas de Neergaard ser frem til, at universitetets forskere skal bidrage i DIREC med projekter relateret til it-dagsordenen. It bliver kun vigtigere i de kommende år, og Roskilde Universitet vil være med forrest i it-feltet, fortæller han:

"Fremtiden kalder på eksperter i data science og kunstig intelligens (AI), og det er et felt, hvor Roskilde Universitet er i hastig udvikling. Vi arbejder både med det som selvstændige forskningsfelter og ikke mindst i anvendte krydsfelter med bl.a. vedvarende energi, mobilitet

og sundhed. Og vi har en stærk tradition for at gå i dialog med brugerne for at finde de bedste løsninger.”

Kunstig intelligens og CT-scanninger

Et af de projekter, Roskilde Universitet forventes at bidrage med i DIREC, handler om kunstig intelligens i sygehusvæsenet.

I samarbejde med læger fra Sjællands Universitetshospital skal forskere ved hjælp af kunstig intelligens skabe systemer, der giver lægerne mulighed for at se detaljerne bag et positivt eller negativt svar fra en CT-scanning.

Det kan fx gøre os klogere på, hvorfor en patient med nyrekræft kan få stillet en forkert diagnose via en CT-scanning.

Med kunstig intelligens kan forskerne på Roskilde Universitet allerede nu konstatere, om der er kræft i en nyre ud fra CT-scanninger, som er væsentligt mere præcise end lægernes.

”Men når en læge skal træffe en beslutning under tidspres — skal der opereres eller ikke — er det ikke til meget hjælp, når AI’en blot langer et positivt eller negativt svar ud uden begrundelse. Der er brug for en forklaring på AI’ens vurdering, som lægen kan inddrage sammen med sit kendskab til patienten og sin lægevidenskabelige baggrund,” siger leder af forskningsprojektet og professor i datalogi Henning Christiansen.

”Vi samarbejder med lægerne om design og udvikling af de rigtige forklaringsystemer”, fortæller han.

Styrket fokus på it i DIREC

Det er yderst positivt, at alle otte universiteter nu med RUC’s tiltræden er partnere i DIREC, lyder det fra Jens Christian Godskesen, der er DIRECs bestyrelsesformand og prorektor ved ITU:

”For første gang er de centrale digitale forskningsmiljøer på alle danske universiteter forenet i et og samme forskningscenter. Det giver os en unik mulighed for at agere som en fælles national platform for forskningen indenfor det digitale felt og i fællesskab bidrage med at løfte udfordringerne indenfor området. Der er behov for, at mange flere søger ind på it-uddannelserne på universiteterne, og der er behov for meget mere forskning i it. DIREC har til formål at bringe de digitale muligheder endnu mere i spil, og nu kan også RUC’s forskere sammen med alle de øvrige universiteters forskere i centeret hjælpe med, at danske virksomheder kan udnytte de digitale muligheder langt bedre, end de ellers ville have haft mulighed for”, siger han.

DIREC er støttet af Innovationsfonden med 100 mio. kr. og har til formål at udbygge kapaciteten inden for forskning og uddannelse i de digitale miljøer i Danmark.

Læs mere om DIREC her: <https://direc.dk/about-direc/>

Yderligere information:

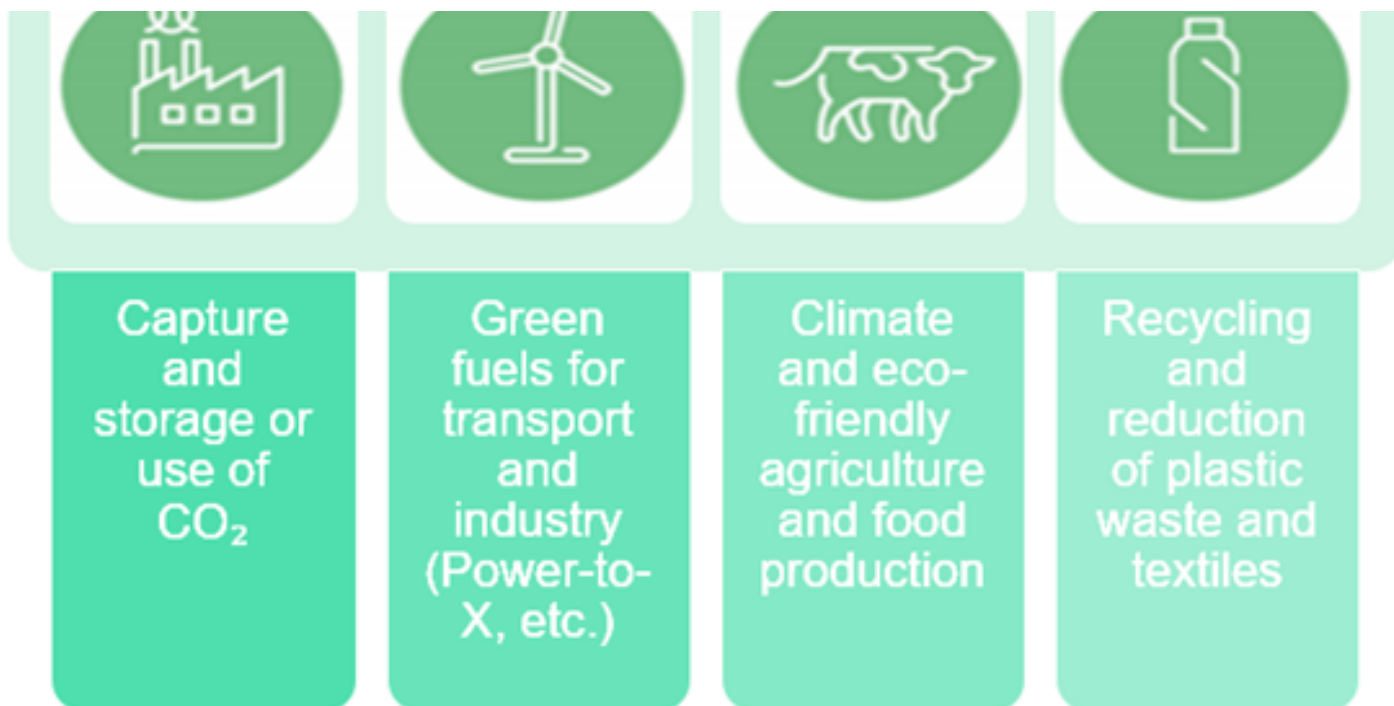
Andreas de Neergaard, Dekan for Teknologi og Sundhed på Roskilde Universitet, neergaard@ruc.dk/+45 24 43 43 31.



Innomissions - Missionsdrevne grønne partnerskaber

Dansk forskning og innovation skal bidrage til at løse de store og svære udfordringer, som er afgørende for at nå regeringens klimamål for 2030 og 2050. Gennem forskning og innovation skal vi udvikle de grønne teknologier og løsninger, der skal omstille Danmark til en bæredygtig fremtid, både hvad angår klima og miljø samt opbygning af viden, vækst og beskæftigelse.

Regeringen har med aftalen om finansloven 2021 afsat 700 millioner kr. til investering i missionsdrevne grønne partnerskaber, der via samarbejde på højt niveau skal omsætte investeringen til grønne resultater og løsninger inden for fire grønne missioner:



Det er Innovationsfondens opgave at investere de 700 mio. kr., i et eller flere partnerskaber under hver mission. Partnerskabernes indsats skal dække strategisk forskning, kapacitetsopbygning, talentudvikling og konkrete projektaktiviteter på tværs af værdikæden. Det er fondens opgave at sikre, at Danmark får mest mulig værdi af investeringen – både hvad angår klima, miljø, viden, talentudvikling og erhverv og arbejdspladser/vækst.

De ambitiøse mål og udfordringerne løses ikke ved enkeltstående tiltag eller løsninger. Der er brug for en helt ny type indsats med fokus på stærkt koordinerede og fokuserede forsknings- og udviklingsprocesser på tværs af fagligheder. For at lykkes skal indsatserne gå på tværs af aktører i værdikæden fra den lille innovative teknologivirksomhed til forskere, myndigheder og de store aftagere i industrien. Både i og uden for Danmark.

Partnerskaberne indgår som et centralt element i at lægge og udvikle langsigtede strategier for at nå de fastsatte mål. En del af resultaterne skabes inden for partnerskaberne, men det handler lige så meget om, hvad partnerskaberne sætter i gang parallelt med og efter projektperioden. Det stærke partnerskab arbejder ud fra et fokuseret roadmap og har en governance, der sikrer en langsigtet koordineret indsats, hvor der er klarhed over rollerne og stærke incitamentet til at løfte i flok og bidrage med kompetencer og finansiering.

Innovationsfonden er i gang med at udvikle processer for, hvordan man bedst muligt udbyder partnerskaberne inden for de fire missioner. Udfordringerne er forskellige under hver mission – ligesom der er stor forskellighed i, hvad der skal til for at nå målet. Det er forventningen, at processen om udvikling af roadmaps til hver mission og evt. partnerskaber sættes i gang i februar/marts 2021.

Fra klimalov til missioner

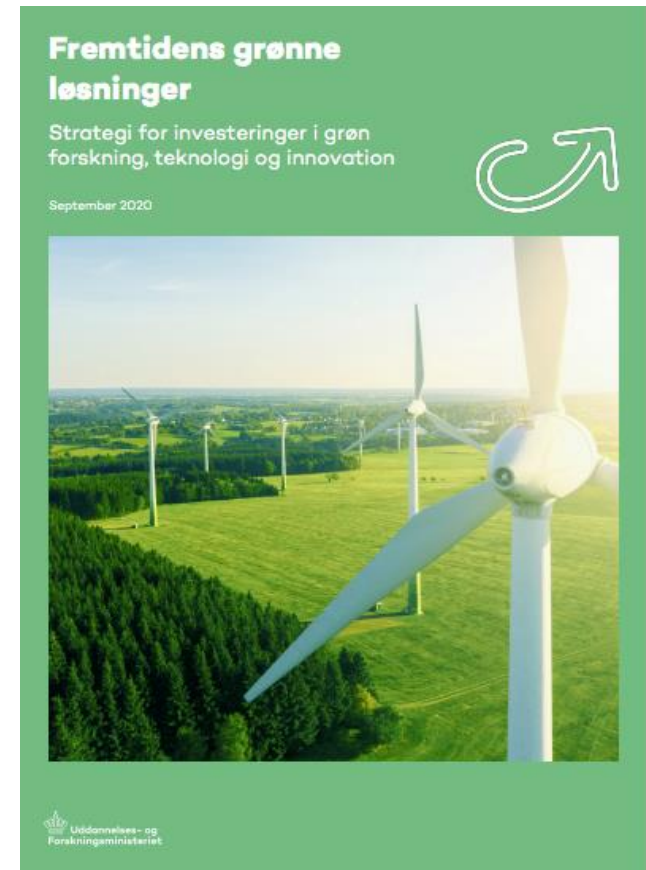
Aftale om klimalov

af 6. december 2019

70 procents reduktion i 2030
ift. 1990 og mod klima-
neutralitet i senest 2050



Behov for større strategiske
satsninger og partnerskaber



Forslag til fire grønne
missioner og nyt
partnerskabsprogram

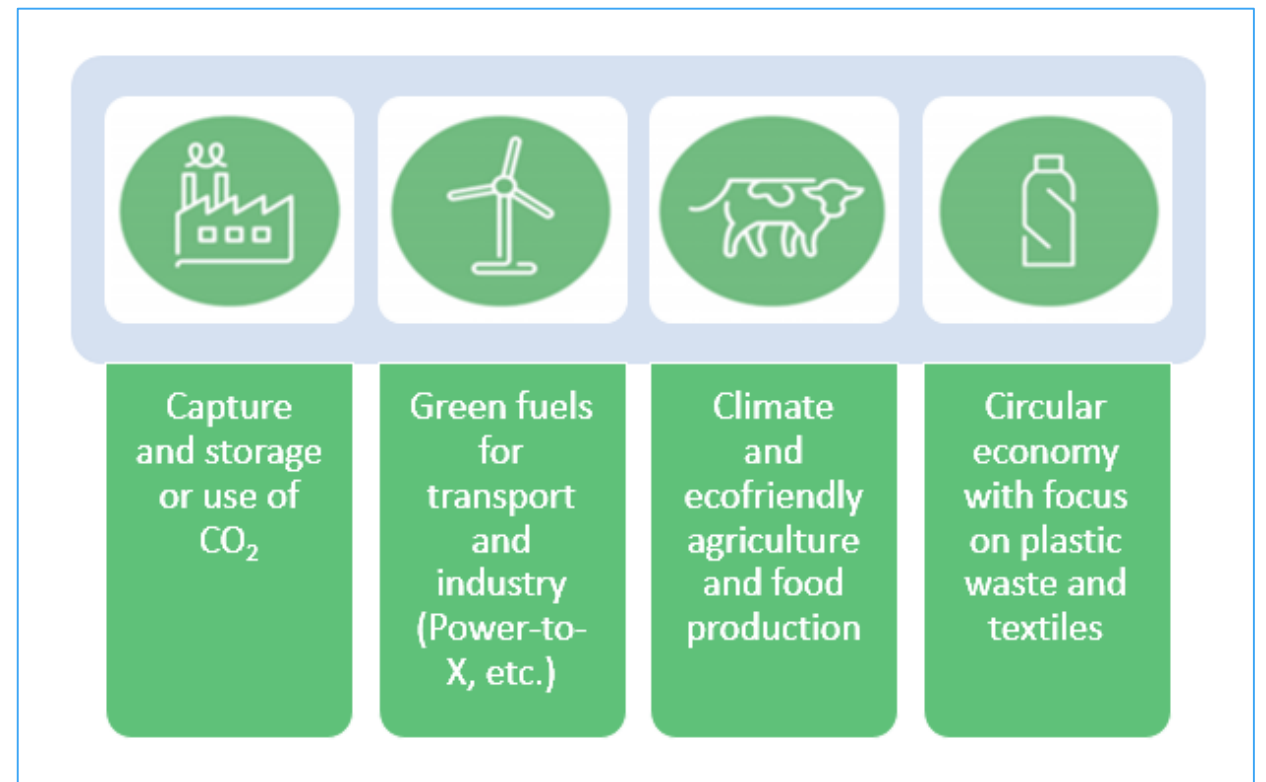
Hvad er formålet med missionerne?

Målet er at missionerne skal føre til **konkrete reduktioner i de danske drivhusgasudledninger, samt effekter på natur og miljø** og at teknologierne kommer ud og **styrker dansk erhvervslivs grønne førerposition.**

Missionerne kalder på langsigtede, sammenhængende indsatser og skal bidrage til hhv 70%'s reduktion i **2030** og neutralitet i **2050.**

Der er ikke sat specifikke reduktionsmål for hver af missionerne.

De fire missioner



Et nyt strategisk partnerskabsprogram ("Innomissions")

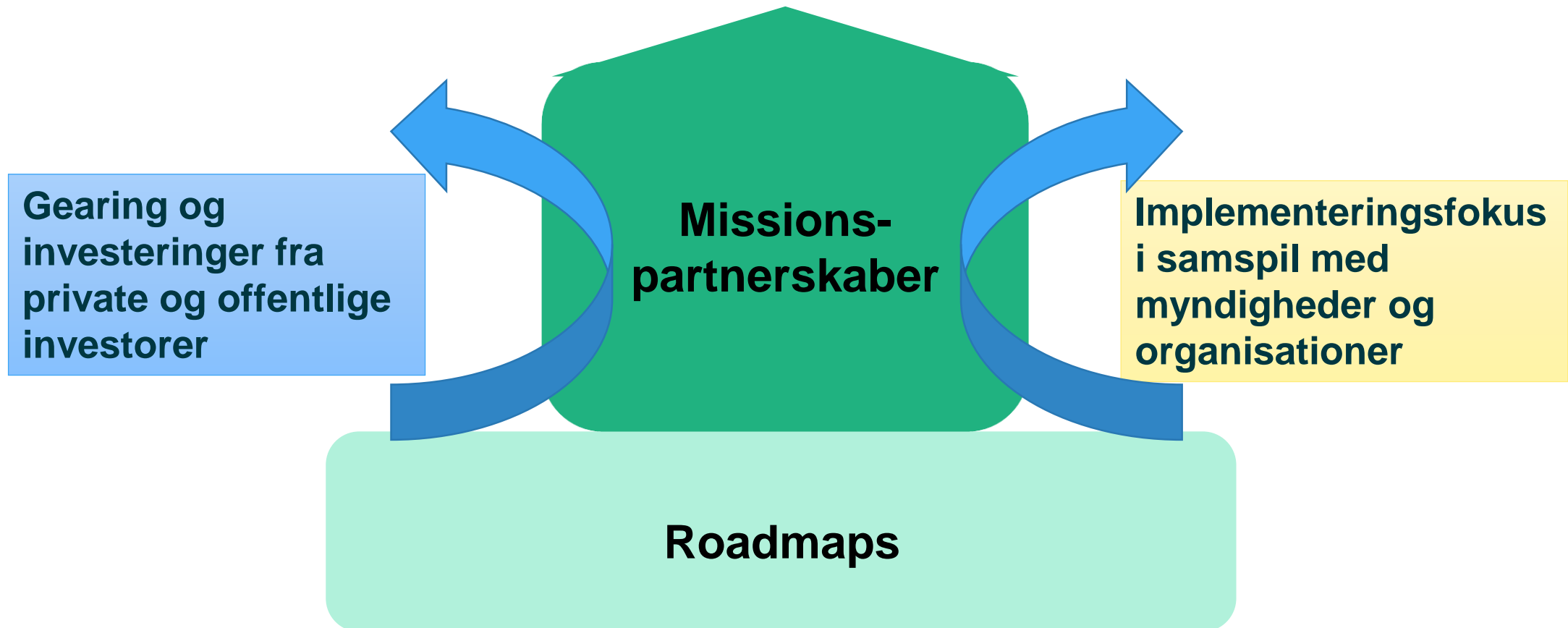
Hovedkarakteristika ved Innomissions:

- (a) Definerer **specifikke** innovationsområder og **fokuserer** IFDs investeringer
- (b) Styrker samspil mellem indsatser/innovationsprojekter inden for de fire områder mhp. på synergiskabende, transformative effekter. Porteføljetækning.

Rammebetingelser

- Politiske beslutninger definerer innovationsområder/missioner
- Programmet baseres på en langsigtet indsats (2050/2030)
- IFD er en central part i at finansiere dele af missionerne – dertil behov for stærkt samspil med andre aktører (fonde etc.) i værdikæden
- Brede partnerskaber på tværs af værdikæden – acceleration af F&I indsats fra basic research til implementering

Synergier rundt om partnerskaberne



Eksempler på deltagere i Innomission partnerskaber

Roller

Virksomheder
store, SMV
start-up

Store: markedsfokus, skalere, hånden på kogepladen, ledelse, videnoverførsel til SMV, spin-out

SMV/start-up: agilitet, markedsfokus, etc

Viden-
institutioner

- Alle typer strategisk forskning
- Uddannelse
- Forskeruddannelse
- Start-up
- Spin-out
- Patent
- Talenttiltrækning
- Internationale forbindelser

Test, demo
og udviklings-
faciliteter

- Eksisterende test og afprøvning
- Nye faciliteter
- Koordineret adgang

Fx GTS, Nordhavn, Doll, Living Lab

Kommuner/
Region/
Organisat.

- Efterspørgsel
- Regulering
- Test og afprøvning
- Skalering
- Ekspertviden
- Adfærd
- Borgernære

Offentlige og
private fonde

- Finansiering af andre dele af værdikæden – fx kommerialisering, start-up,

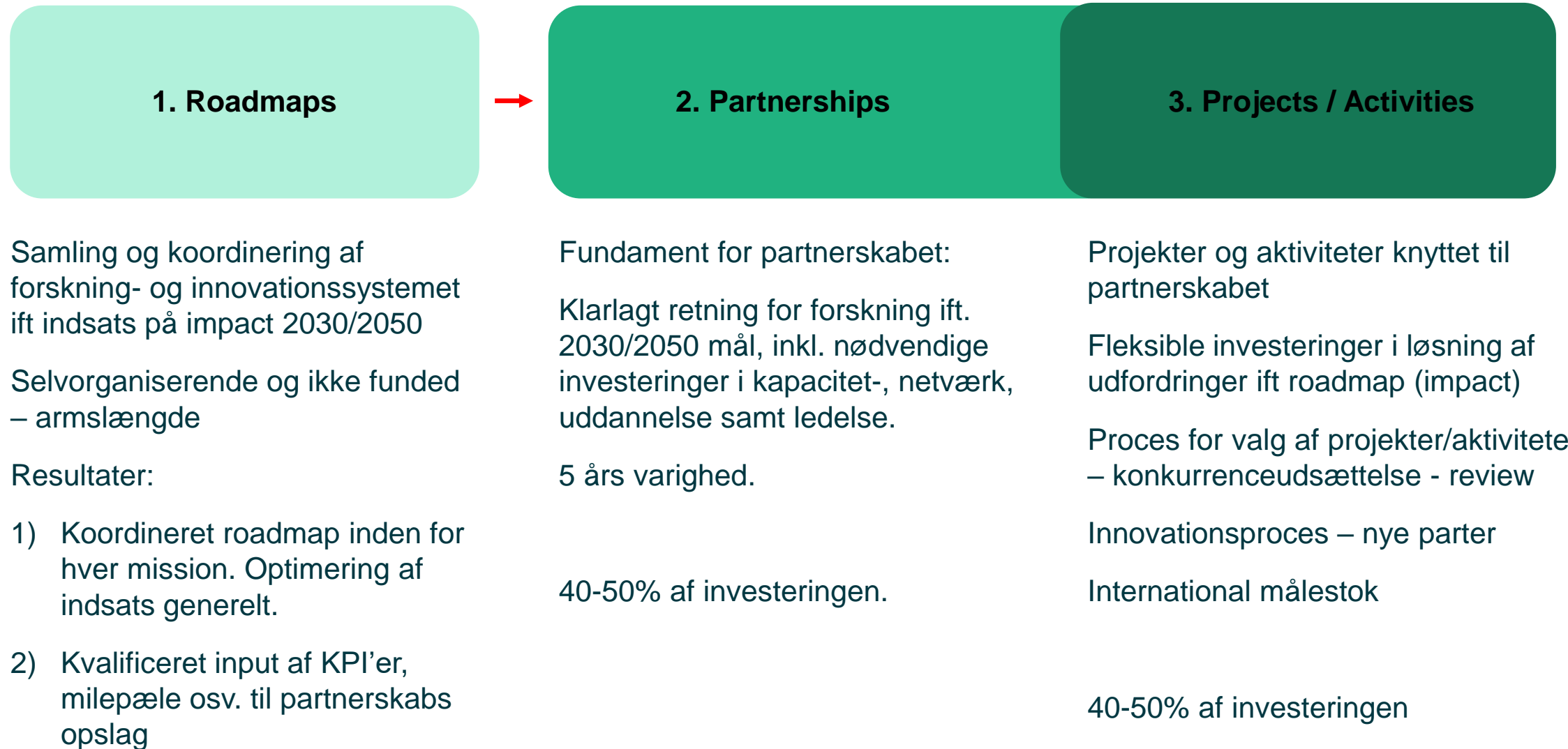
Fx Den Grønne Fremtidsfond, Vækstfonden, UDP'er, NNF, IF, Realdania

Klynger

- Fokuserer missionen
- Samle aktører
- Internationalt udsyn
- Samarbejdsmodeller (x helix)

12 nye klynger

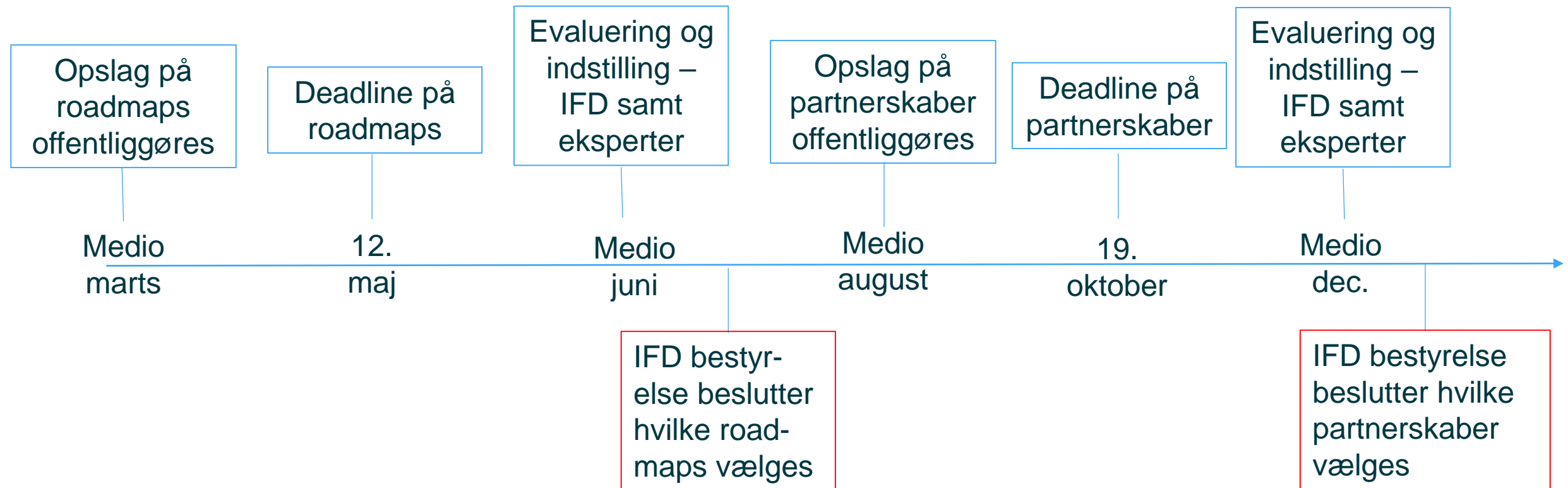
Faser i IFD Innominations partnerskaber



Andel af 700 mio. DKK for hvert partnerskab afhænger af identificerede behov i roadmaps.

Titel - Dato

Beslutningsproces - tidslinje



Call for:

Mission-driven green research and innovation partnerships (Innomission partnerships)



Application deadline: 19 October 2021 at 12:00 CET

Innovation Fund Denmark (IFD) calls for mission-driven green research and innovation partnerships within four areas:

1. Capture and storage or use of CO₂
2. Green fuels for transport and industry (Power-to-X, etc.)
3. Climate- and environment-friendly agriculture and food production
4. Circular economy with a focus on plastics and textiles

Missions are to fulfil ambitious goals

Denmark is committed to act on and reduce climate changes and has set goals to:

1. 70% reduction of greenhouse gas emissions (GHG) in Denmark by 2030 and net-zero emissions by 2050, and strengthen environment and nature, and
2. contribute to increased competitiveness of the Danish businesses and industries.

To fulfil these goals the government and all parliamentary parties have defined four missions as stated in the “Green solutions of the future - Strategy for investments in green research, technology, and innovation” as well as the agreement for the Research Reserve for 2021.. These missions focus on challenges that are critical for Denmark to address in order to reach its GHG ambitions. And they present significant opportunities for the Danish economy, drawing on Denmark’s competitive advantages and capabilities. With the missions the government sets a long-term direction for green research, innovation, development, and demonstration accelerating the development of new green solutions and technologies. This is a strategic research and innovation effort over several years.

Innomission partnerships: Translating mission roadmaps into sustained actions

The call for mission-driven green research and innovation partnerships is the second phase in Innovation Fund Denmark’s (IFD) Innomission program. Phase one generated roadmaps for each of the four missions (<https://innovationsfonden.dk/da/programmer/groenne-missioner/roadmaps-mission-driven-green-research-and-innovation-partnerships>). Phase two now asks for proposals to form Innomission partnerships to drive action based on the directions outlined in the roadmaps.

During phase one Innovation Fund Denmark received 12 roadmaps within the four mission areas. Of these 12 roadmaps, six roadmaps were selected by the IFD Board of Directors to provide direction to the partnerships in designing action plans. The six roadmaps are described below and are available at the IFD homepage. IFD is planning to invest in one partnership within each of the four missions, however, depending on the submissions IFD might decide to fund more than one partnership per mission.

The application for mission-driven green research and innovation partnerships should outline activities and the organisational structure proposed to implement the roadmaps and achieve the mission’s goals and visions. Each partnership will have to build on one final roadmap. The final, roadmap (according to the decision on roadmaps by the IFD as stated below) will be the backbone of the application. The final roadmap for each mission should be in accordance with the guidelines for roadmaps as stated in the call for roadmaps.

General guidance for Innomission partnerships

The following is to be specified in the application for partnerships:

1. Value creation and impact

Based on the prioritized pathways the application should state and quantify: 1) the value creation and impact of each pathway. This includes quantifying and setting clear KPI's for the mission CO₂e reduction impact as well as the partnership's contribution to fulfilling the strategic goals for climate, environment, and biodiversity, 2) the partnership's potential for increased Danish exports and international market opportunities, including the Danish job creation potential and identified job types within your mission. For an elaboration of the strategic goals please see the evaluation criteria below as well as the "Structure for Innomission-roadmap" at the IFD homepage (<https://innovationsfonden.dk/da/programmer/groenne-missioner/roadmaps-mission-driven-green-research-and-innovation-partnerships>). Moreover, the application should define the key inflexion points towards achieving the overarching goals of the partnership.

2. Prioritisation of activities

The application, based on the roadmaps' pathways and KPI's, should include a broad mission action plan that on an overall level shows that the partnership has a clear plan of how to reach the goals. In order to follow and execute this broad plan the partnerships should have clear decision criteria for new projects in place, so that the partnership (and IFD) will be able to make sound decisions about specific projects over the lifetime of the mission. Moreover, the partnership must specify concrete projects for the first years of the partnership (see more detail below: "IFD funding of partnership activities"). This in many cases means that the roadmaps should be updated at least once a year in relation to the investment review with clear and specific prioritisation of activities and expected outcomes of the early projects. Already ongoing national and international project-activities supporting or complementing the proposed activities must be taken into consideration when planning for partnership activities.

3. Partnerships covering the entire value chain

Innomission-partnerships should aim to cover the entire value chain and collect all driving forces from researchers, investors, existing and new industries, technology providers, education and talents, legislators and authorities to users and customers, and will include description of technical, implementation/regulatory, and business/financial pathways to the vision.

4. Private sector engagement

To ensure the transition to market and scalability of solutions all partnerships are required to have significant industry involvement – both by engaging industry in driving the partnership and in co-funding projects. Strong industry engagement is highly relevant in terms of identifying early market trends- and business development directions at low TRL as well as for implementing solutions downstream along the roadmap routes at high TRL levels.

Industrial engagement should include start-ups, SME, large enterprise in all aspects of the partnership. Moreover, the engagement of risk capital organizations is a clear benefit to secure capital for solutions to reach the market. Partnerships are strongly encouraged to also consider elements of capacity building in relation to supporting good conditions for start-ups and SME's within each mission.

5. International expertise and talents

Based on the partnership's identification of Danish strongholds and research gaps the application must outline the partnership's plan for involvement of international expertise (e.g., from international private companies or international universities) – related to each work stream/activity. Collaborating with efforts abroad can complement the Danish activities and is an important way of adding relevant key knowledge to the missions. Moreover, it can attract and engage international talents to increase short- and long-term impact.

6. National and international gearing of investment and co-funding

IFD has a role as key funding partner for starting up the missions but will not be able to fund the complete mission towards 2030 and 2050. The partnership application should also outline the plans for gearing of the IFD investment and co-funding activities with other public and private funds to complete the mission towards 2030 and 2050.

IFD asks all partnerships to specifically outline the plan for engagement in EU programmes and partnerships related to the mission.

7. Regulatory framework

Partnerships should identify any current regulations and policies within the fields, and outline which regulatory barriers that may exist and thereby need to be altered to ensure that solutions can reach impact. The regulatory framework in many cases is not fully specified or implemented at mission start. It is thus relevant that the application relates to identify possible alternative roadmap routes depending on future expected regulatory framework scenarios and inflection points. Partnerships should include activities related to developing the required scientific basis for existing or new regulatory frameworks, new types of regulation, business models, consumer behaviour etc. that can help Denmark meet accomplish the mission.

8. Public demand as a driving force

Partnerships are strongly encouraged to include activities related to models that can help municipalities, regions, etc. setting up new structures leading to economy-wide de-carbonization by creating market preferences for low-carbon products. It is therefore also strongly encouraged to include the public sector as active partners in the partnership.

9. Citizens' and end-users engagement

Partnerships should outline how they plan to effectively engaging citizens and end-users in the proposed transition. This includes making use of how information, empowerment, regulations, and incentives affect citizens' behaviour and adaption to the proposed transition(s).

10. Communication on mission progress

All partnerships should in their application commit to assist the IFD in organising an annual external event across all missions to secure ongoing involvement of relevant stakeholders and thus sufficient mission impact. This event should be organised to include other foundations, investors, politicians, industry organizations etc. Further communicative actions such as dissemination to the broader public, politicians, investors, other foundations to ensure full impact of the partnership activities should be described

11. Synergies between missions

To avoid activity overlap between missions, partnerships should identify topics with potential overlap and suggest mechanisms to coordinate across missions in order to reap the synergies between missions.

12. Visualisation of roadmaps including deliverables

Based on the prioritized activities for the partnerships, applications should provide visualisations of the roadmaps describing the presumed route to the target including the key inflexion points to be achieved. Roadmaps must include timing for expected deliverables on the CO₂e-reduction. Please make the description approaching 2030 the most detailed and sketch remaining parts.

Mission-specific guidance for Innomission partnerships

Apart from the general directions mentioned above, these are the specific directions for the partnership within the specific missions:

Mission 1: Capture and storage or use of CO₂

Mission partnership 1 should design its action plan based on roadmaps 1112-00004A & 1112-00010A in appendix 1 and 2.

Allocated IFD budget frame for mission 1: 195 mio. DKK as a minimum.

The proposed partnership initiatives should establish a appropriate balance between the activities suggested by 1112-00004A - CCUS Mission CCUS and 1112-00010A - GCCUS and to secure both short-term impacts and long-term innovation efforts along the value chain covering CO₂ capture, intermediate /permanent storage, infrastructure/ transport and sector coupling activities

Mission 2: Green fuels for transport and industry (Power-to-X, etc.)

Number of recommended roadmaps 2: (1112-00008A & 1112-00012A in appendix 3 and 4)

Allocated IFD budget frame for mission 2: 195 mio. DKK as a minimum.

Mission partnership 2 should design its action plan based on the two roadmaps 1112-00008A and 1112-00012A. The proposed initiatives should be based on the comprehensive roadmap (1112-00008A: Roadmap for Green Fuels in Transport and Industry) and include the specific projects outlined in roadmap 1112-00012A - E-transport with a clear focus on implementing key power-to-X technologies. All relevant activities should be included in the mission partnership proposal, distinguishing between the activities to be funded by IFD and those that will have to be financed by other means as stated below.

Mission 3: Climate and eco-friendly agriculture and food production

Number of recommended roadmaps (1112-00006A in appendix 5)

Allocated IFD budget frame for mission 3: 195 mio. DKK as a minimum

Mission partnership 3 should design its action plan based on roadmap 1112-00006A. The applicants should consider concentrating on a smaller number of activity areas than outlined in the roadmap. The applicants should consider creating a partnership to economize on costs, while organizing activities in two different tracks; 'Land use and management and plant-based biomass', and 'Animal based and processed plant based food production and alternative protein sources', given the considerable autonomy of the activity areas outlined in the roadmap.

Mission 4: Circular economy with focus on plastic waste and textiles

Number of recommended roadmaps 1: (1112-00007A in appendix 6)

Allocated IFD budget frame for mission 4: 100 mio. DKK as a minimum

Mission partnership 4 should design its action plan based on roadmap 1112-00007A.

IFD funding of Innomission partnership activities

The Innomission partnerships will execute a set of activities that covers a longer time-frame than for other IFD programs. The funding structure offered by IFD reflects this difference, and the need for flexibility to continuously align the partnership roadmap and activities that will be specified in detail during the course of the Innomission based on gained knowledge and other national / international initiatives in the course of the partnership duration. A full budget for the total investment must be submitted along with the partnership application. The proposed budget should be divided into two 'pools':

- **Pool 1**

The first pool can include up to 50% of the total budget the partnership is applying for. It must cover all activities within the first period (minimum one year) of the partnership duration, and cover all activities that the partnership has already fully specified. Cost that relate to the full duration of the partnership, e.g., administrative and management costs, equipment and initiation of longer lasting activities should also be included here.

All activities corresponding to the first pool must be described in detail in terms of work breakdown, deliverables, dependencies between the activities, milestones, stop/go decision criteria and graphical illustrations of the work in the form of Gantt-charts or similar. Also, a resource-breakdown per participating partner is required.

- **Pool 2**

In the second pool (the partnership can decide to further split this pool) the corresponding activities are not expected to be described in detail in the application. However, as mentioned in point two in the general guidance above, in order to follow and execute the partnership's broad plan and reach the defined milestones the application has to outline clear decision criteria for new projects, so that the partnership (and IFD) will be able to make sound decisions about specific projects over the life time of the mission.

In connection with the release of funding from pool 2, the IFD shall perform an Annual Investment Review (at least once a year) together with the mission partnership and international experts invited by IFD such as members of the *Missions International Advisory Board*. The application must describe the partnership governance for how investments will be distributed over time and how the IFD Annual Investment Review will be incorporated into this process in order for the partnership to execute the mission goals. The pool 2 funds are to be released according to the same evaluation criteria as applied for the partnership application (below) and the process approved by the Innovation Fund's Board of Directors, and the release is subjected to approval by the Innovation Fund's Board of Directors.

The budget must for each pool specify partner co-financing. For further details regarding budget details such as maximum IFD funding rates and co-financing, please refer to *Guidelines for Grand Solutions and Innomission-partnerships (August, 2021)*.

In the case that gaps in relation to the quality of the partner group and the organisations (both public and private) capacity are identified the budget related to capacity building should be included. Capacity building as the improvement in the organisation's capability to reach the mission goals, including internal improvement at an individual and organisational level.

The partnership must have an overarching grant-holder of the partnership grant from IFD and the application must describe how the grant-holder will administer the grant and redistribute the grant to existing and potentially new partners according to planned activities corresponding to the pools. The grant-holder must be a legal entity such as an association (formed by the partners).

It is mandatory to describe the overall organisation of the work and activities within the partnership for the full duration in a more generic overall structure, e.g., in the form of a workstream structure, portfolios, or thematic areas all in connection with the mission roadmaps.

Partnerships should include all activities to be performed by the mission partnership, however, it is important to distinguish between activities that are to be funded by IFD and are therefore limited by the state aid rules from activities financed by other means, e.g. private investors.

Governance and leadership

The application must describe the following:

- The partnership governance model, decision-making mechanisms and how the partnership will be lead and managed, including the qualifications of management team, diversity in the team, etc.
- Why the proposed partnership constitutes the right partner composition for the purpose of achieving the goals of the mission, including how the organisational structure and decision-making mechanisms match the complexity and international scale of the partnership.
- The partnership engagement plan and associated communication strategy allowing for flexible uptake of new ideas and partners, and continuous alignment of the roadmap with other initiatives at all levels.
- How the partnership will build an eco-system across the whole value chain that can implement the required innovation for the specific mission.
- Composition of a partnership Board of Directors with authoritative representatives from the various partners including project beneficiaries, leadership experience, plan for rotation etc.
- How the partnership plans to include IFD into its governance to ensure a smooth process in defining, approving and monitoring the activities corresponding to the additional funding pools.

Evaluation criteria

Innomission-partnership proposals will be evaluated based on their overall impact on GHG-reduction and their potential for increasing Danish competitiveness, including the partnership's potential for securing existing and creating new jobs, building start-ups and enabling exports of green solutions. Moreover, the partnership's ambitions will be assessed against their ability to reach the Danish strategic goals based on the framework described in the "Green solutions of the future - Strategy for investments in green research, technology, and innovation" as well as the agreement for the Research Reserve for 2021, the visions and recommendations described in the "13 climate partnerships" reports, the "Climate plan for Waste, water and circular economy", and the evaluation of Danish strategical goals for strengthening nature and biodiversity will be based on the overall "EU Biodiversity strategy 2030".

For the purpose of evaluating the robustness of the Innomission-partnerships as well as their impact and value creation the four evaluation criteria as stated below are used. The evaluation criteria include the abovementioned 12 guiding points:

- 1) **Impact** – outline the actual and potential contribution to the goals and green objectives as well as the creation of new green international industrial strongholds in Denmark.
 - Outline of the value creation, impact and prioritisation of activities. Potential impact by the Innomission-partnership on each mission-goals (climate, nature, environment, sustainable economically green growth), by which routes/method/standard they are measured, which trade-off decisions are made, and on how follow-up on these goals will be carried out.
 - Business model(s), scaling, strategy for financing (national and international gearing of investment and co-funding), advancement in Technology Readiness Levels (TRL) and Societal Readiness Levels (SRL) etc.
 - Actions undertaken to ensure that beneficiaries implement the results or take the results to the next step and highlighting the economic, regulatory framework, technical and societal barriers for implementation and a strategy for overcoming these barriers.
 - Strengthening green transition competencies, capacity and interplay across the innovation ecosystem, including creating an open innovation environment targeting start-ups and SME's
- 2) **Execution** – implementing the roadmaps.
 - Plan for organising the partnership (governance and leadership) ensuring efficient and effective implementation of the roadmap activities, taking into account contingencies throughout the time-frame of the mission, and continuous alignment of the roadmaps with other initiatives.
 - Plan for ongoing dissemination of the partnership progress to all relevant stakeholders across the mission areas aiding the collaboration between partnerships where synergies arises, and aimed towards peers, other foundations, investors, politicians, industry organizations etc

- Quality of partner group across the entire value chain including experiences, resources, and complementarity from both the public and private sector in a national and international setting including technology providers, public and private market drivers, citizens and end-users. In the case that gaps in relation to the quality of the partner group and the organisations (both public and private) capacity are identified an outline of capacity building should be included.
- 3) **Innovation** – moving beyond existing thinking and implementing new technologies;
- Degree of innovation within implementing new technologies, solutions and business models that provide novel approaches on an international level towards creating environmental and economic value.
- 4) **Excellence** – challenges, needs, gaps, key questions met by Danish strongholds within the partnership that cover the area of each mission.
- Quality in relation to unmet needs, State-of-the-Art and competing scientific, behavioural or technical solutions based on current and future Danish strongholds with a clear European and global perspective and outlook.

Decision process

The decision on which partnerships will be invited for contract negotiations is the responsibility of the impartial members of the Innovation Fund's Board of Directors. The cornerstones in the process are a two-step evaluation:

Step 1: Evaluations of the written proposal are conducted by a minimum of two internal IFD evaluators (including the below mentioned contact persons from each mission) and 2-5 international peers (selected from the EUREKA expert database). Evaluations from external peers will be subject to a hearing process. Evaluators score each proposal on a scale from 1-6 based on the evaluation criteria. The total score and joint evaluation form the basis of the decision by the impartial members of the Innovation Fund's Board of Directors of which proposals will advance to step 2.

Step 2: Applicants are invited for an interview (which will be arranged for week 48), with a panel of national and/or international experts and possibly IFD board members and other relevant stakeholders. A final assessment based on the first and second step will then inform the decision by the IFD Board of directors to render an invitation for contract negotiations, which will form the basis of the final investment.

All experts and peers, both internally and externally involved in the work of evaluating partnership applications must declare their impartiality before accessing the material, re the rules of IFD (<https://innovationsfonden.dk/da/saadan-arbejder-innovationsfondens-bestyrelse>). Ultimately, the impartial members of the Innovation Fund's Board of Directors decide on the investment in partnerships.

Instructions - links

- Guidelines for Grand Solutions and Innomission-partnerships (August 2021)
- Instructions for eGrant
- Vejledning om effektiv tilskudsforvaltning - <https://oes.dk/media/14941/vejledning-om-effektiv-tilskudsforvaltning-2016.pdf>

Appendix:

Appendix 1: 1112-00004A - Mission CCUS – a roadmap for Carbon Capture, Utilisation and Storage

Appendix 2: 1112-00010A - The Green CCUS Roadmap - Towards a fossil free future

Appendix 3: 1112-00008A – Roadmap for Green Fuels in Transport and Industry Innomission 2 (2021)

Appendix 4: 1112-00012A - Innomission Roadmap Leveraging Danish strengths to mature and scale up e-fuels for transport

Appendix 5: 1112-00006A - AgriFoodTure - Roadmap for Sustainable Transformation of the Danish Agri-Food System

Appendix 6: 1112-00007A Circular economy with a focus on plastics and textiles A 2030 & 2050 Roadmap

Contact:

Mission 1: Capture and storage or use of CO₂

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Mission 4: Circular economy with a focus on plastics and textiles

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Punkt 4: Orientering og drøftelse vedrørende ekstern forskningsfinansiering

Materiale eftersendes.

Oplæg til drøftelse af ph.d.-området

Indstilling

Det indstilles,

- At Forskningsudvalget drøfter og kommer med eventuelle input til handleplanen for ph.d.-området
- At Forskningsudvalget kommer med input til fokuspunkter, der kan indgå i en ny strategi for ph.d.-området

Sagsfremstilling

Ph.d.-uddannelse, der i sin natur binder uddannelse og forskning sammen, er en central og strategisk vigtig del af RUC's kerneforretning, det er samtidig også den største enkelte post på forskningsbudgettet fra år til år. Derfor ønsker prorektor, at Forskningsudvalget løbende får mulighed for at drøfte forskellige emner vedr. ph.d.-området.

Nærværende drøftelse tager afsæt i den internationale evaluering, der blev afsluttet i januar 2021 og den deraf følgende handleplan, som er udarbejdet i RDS. Derudover ønsker prorektor en indledende dialog om fokuspunkter til en ny ph.d.-strategi. Sidst men ikke mindst, så forventes det, at denne drøftelse kan bidrage til Prorektors forskningsoplæg for RUC's bestyrelse, der næste gang kommer til at have fokus på ph.d.-området.

Særligt vedrørende drøftelse af handleplanen for ph.d.-området

Som det fremgår af evalueringsrapporten (bilag 1) og det forelagte udkast til handleplan (bilag 2), så lægges der op til at Universitetsledelsen og RDS hen over de næste par år drøfter og evt. vedtager nye tiltag, der skal bidrage til at styrke vores ph.d.-uddannelse, ved bl.a. at sikre bedre forudsætninger for finansiering og rekruttering, tydeliggørelse af fælles forståelse for bl.a. tværfaglighed og internationalisering, styrkelse af vores vejlederkvalificering og evalueringspraksis, udbud af ph.d.-kurser og trivsel hos vores ph.d.-studerende.

På mødet bedes Forskningsudvalget

- Drøfte udkastet til handleplanen, herunder den foreslåede prioritering og tidsplan

Særligt vedrørende drøftelse af indledende input til den kommende strategi for ph.d.-området

Den seneste ph.d.-strategi (bilag 3) var gældende for årene 2016-2020. Den tog sit udgangspunkt i den internationale evaluering, der blev gennemført i 2013/2014 samt i den daværende *Strategi Ny RUC*. Selvom den beskrev en del overordnede mål, der blev arbejdet med og indfriet, så blev det aldrig rigtig en strategi som var bredt forankret i organisationen.

I den kommende strategi for RUC's ph.d.-uddannelse, er det prorektors ambition, at der udarbejdes en overordnet strategi, som spejler RUC's *Strategi 2030 Interconnected* (bilag 4).

På mødet bedes Forskningsudvalget

- Reflektere over og evt. komme med input til punkter/ambitioner for ph.d.-området, som de ser af særlig vigtighed i en fremtidig strategi

Videre proces

Handleplanen vil blive forelagt Dekanforum og ph.d.-udvalgene, der ligeledes vil få mulighed for at drøfte den og komme med input, inden den forelægges Universitetsledelsen til endelig godkendelse.

Forelæggelsen er godkendt af

Lene Lillebro og Peter Kjær

Bilag

1. Den Internationale Evaluering af Ph.d.-uddannelsen på RUC
 2. Udkast til Handleplan for ph.d.-området
 3. Seneste Ph.d.-strategi 2016-2020
 4. Strategi 2030 Interconnected
-

International Evaluation of the PhD programme at Roskilde University

2021

Table of Contents

Preface	3
Introduction	4
Members of the international evaluation panel	5
Focal points	6
Proces of the international evaluation	6
Observations and Recommendations from the International Panel	7
Focal point 1 - The coherence between the Doctoral School and the profiles of Roskilde University and the Department	7
Focal point 2 - The PhD education as a process with specified milestones and obligations	9
Focal point 3 - Quality and relevance of PhD activities	11
Recommendations that are not specifically addressed by the focal points:	12

Preface

A PhD is a complex challenge for the PhD fellow embarking on a voyage that may take three or more years. A PhD is also a complex challenge for the university offering the degree: Attracting the right candidates for our programme; creating an attractive environment for the enrolled candidates; offering competent supervision in specialized fields; and helping our PhD fellows navigate the many challenges that emerge in the course of the PhD process.

There is not a ‘one-best-way’ of organizing a PhD programme. A PhD programme should always reflect the overall profile and the mission of the university, as well as its resources, research traditions and its junior and senior faculty.

Running a PhD programme is an on-going learning process. We try to create occasions for learning as part of the everyday life in our doctoral schools – through formal and informal feedback, scholarly assessment, and ongoing conversations that involve PhD fellows, supervisors, administrators, and leaders. Conducting international evaluations is an important and necessary supplement to those internal processes because it offers an external view on the ambitions, practices, and organization of our Programme that induces us to reflect upon and develop the programme.

In 2013, Roskilde Doctoral Schools (RDS) conducted its first international evaluation, which set the agenda for a series of important changes and adjustments of the PhD Programme in the following years. The current international evaluation that was conducted in 2020-21 will, no doubt, be just as important, both because it allows us to consider the distance travelled since 2013 and because it allows us to address the current challenges of PhD education – in 2021. In the following, you will find the report of the international panel that conducted the new evaluation under extraordinary conditions but in a highly constructive spirit. The report is a summary of the individual panel members’ evaluation, compiled by the Secretariat for RDS.

I wish to thank the panel for its valuable input. We had to postpone the planned site-visit due to restrictions associated with the COVID-19 pandemic, and ultimately we had to transform the visit into a virtual site-visit. However, the panel showed great flexibility and still managed to meet and engage actively with all the involved parties online. Thank you for your critical and constructive engagement – and thank you for your patience and flexibility!

I also want to thank all the other actors that contributed to the evaluation process: PhD fellows, supervisors, PhD study programme leaders, deans, heads of doctoral schools, and local PhD administrators. Finally, a big thank you to Cecilie Thorsted Flo and Sara Schröder Kaas, our two dedicated RDS administrators, who organized and managed the entire evaluation process and compiled the final evaluation report based on the inputs from the panel.

I look forward to discussing the observations and recommendations of the panel with all the involved actors of Roskilde Doctoral Schools – and I welcome the opportunity to consider new ways of improving doctoral education in all its complex manifestations.

Peter Kjær, Pro-rector

Introduction

In order to secure and develop the quality of the PhD Programme at Roskilde University, a comprehensive international evaluation has been undertaken.

The PhD programme at Roskilde University is organised into four doctoral schools, which corresponds to the four departments; the Department of Communication and Arts, the Department of People and Technology, the Department of Science and Environment and the Department of Social Sciences and Business. Some of the doctoral schools are furthermore divided into PhD study programmes.

The four doctoral schools, responsible for managing and developing the department's PhD programmes, are:

- Doctoral School of Communication and Arts
- Doctoral School of People and Technology
- Doctoral School of Science and Environment
- Doctoral School of Social Sciences and Business

The PhD Programme at Roskilde University holds approximately 200 PhD fellows, with 40-50 new enrolments and 20-40 PhD degrees awarded each year.

As Roskilde University has employed an interdisciplinary approach, each doctoral school houses a range of academic environments with different traditions and approaches. Thus, the PhD fellows are encouraged to explore, challenge and take advantage of the various research environments and the potential for interdisciplinary collaborations.

The first international evaluation was completed in 2013, and laid the foundation for a series of actions undertaken to better secure the quality for PhD education at the University. The primary focus since 2013 has been to ensure better alignment of practices across the different doctoral schools and a heightened attention toward the continuous evaluation of the PhD fellows' progress. Additionally, the University completed a reorganization, in which 6 departments, and 7 doctoral schools were reorganized into the 4 current departments with one doctoral school respectively.

The purpose of this international evaluation is for a panel consisting of Danish and international researchers, all of whom have extensive insight into PhD education, to assess the overall quality of the framework and processes of the PhD programme in order to contribute to the University's continuous quality assurance of PhD education.

Roskilde University intends for the evaluation to provide an action-oriented and forward-looking perspective, which will support and inspire the continuous work with the quality of the PhD programme at the University as a whole as well as within each doctoral school. Members of the international panel are considered as 'critical friends' and are expected to challenge the University's self-perception in order to act on potentials for improvement and development.

Members of the international evaluation panel

Each of Roskilde University's four doctoral schools have suggested relevant members for the international panel with a primary consideration of the doctoral schools' core research area. The following parameters have been significant for the constitution of the international panel:

- The panel should consist of 5-6 members
- At least 50% of the panel members should be international researchers (based in a research institution outside of Denmark), with preference to members having a good knowledge of the Danish model for PhD education
- Gender balance among the members (preferably a 50/50 division)
- The panel should represent each of Roskilde University's main research areas (social sciences, humanities, life sciences and the technical sciences)
- The panel must overall have insight into doctoral school leadership
- Preferably, at least one member should have participated in the international evaluation in 2013.

Based on the above criteria the following international panel was selected:

- **Professor Ralph Schill, University of Stuttgart, Germany**
Professor in biology at the Institute of Biomaterials and Biomolecular Systems
- **Professor emerita Christina Gustafsson, University of Gävle, Sweden**
Professor emerita in education, Department of Business and Economic Studies
- **Associate professor Gitte Wichmann-Hansen, Aarhus University, Denmark**
Associate professor in pedagogy at the Centre for Teaching and Learning, School of Business and Social Sciences
- **Professor emerita Hanne Haavind, University of Oslo, Norway**
Professor emerita in psychology, Faculty of Social Sciences
- **Associate professor Sune Auken, University of Copenhagen, Denmark**
Associate professor in literature at the Department of Nordic Studies and Linguistics
- **Professor Ole B. Jensen, Aalborg University, Denmark**
Professor in Urban Design and Urban Theory, Department of Architecture, Design and Media Technology

Associate professor Gitte Wichmann-Hansen acted as the chairperson of the panel.

Focal points

As the framework for a solid and well-running PhD Programme is now in place, Roskilde University has invited the panel to evaluate new focus areas and present suggestions, which could be developed or improved to the gain of the PhD Programme at the University at large.

In order to describe the width and depth of the PhD programme at Roskilde University in a comprehensive manner, which also allows for qualitative reflections, three overarching focal points have been chosen. The focal points allow for reflection on practices and the quality hereof, while still being indicative of the overall quality of the PhD programme.

The focal points of the self-evaluation, interviews, and international panel's evaluation are:

1. The coherence between the Doctoral School(s) and the profiles of Roskilde University and the Department(s)
2. The PhD education as a process with specified milestones and obligations
3. Quality and relevance of PhD activities

The focal points have been identified by Roskilde Doctoral Schools; however, the panel was encouraged to address any matters, which can be improved and thereby beneficial for the overall quality of the PhD Programme.

Proces of the international evaluation

Firstly, the PhD programme undertook self-evaluations at doctoral schools-level as well as in the joint coordination unit Roskilde Doctoral Schools. The joint self-evaluation report was supplemented with excerpts from governing documents, alumni evaluations, etc. from the years 2016-2019. Secondly, the international panel has conducted interviews with a range of actors across the PhD Programme. Finally, the observations and recommendations based on the self-evaluation report and the interviews have resulted in this evaluation report.

The panel's feedback is divided into sections according to the three focal points, while the final section addresses other points of attention, which the international panel finds important to emphasize. The general observations are compiled in a more descriptive format, whereas the specific recommendations are listed as concrete suggestions from the panel to Roskilde Doctoral Schools and the PhD Programme at Roskilde University.

This evaluation report encompasses inputs from each of the members of the international panel who have submitted individual reports. The joint report, which is a compilation of the six individual reports, has been approved by all panel members.

Observations and Recommendations from the International Panel

The international panel are aware of that Roskilde University's PhD Programme has undergone a thorough reorganization since the first international evaluation in 2013. The panel found that the result is a well-organized, smooth, and well-running framework for the PhD Programme, wherein quality assurance and division of roles and responsibility has been explicated. The panel was able to use the assigned task in the format of three focal points for their presentations of recommendations for further development.

Focal point 1 - The coherence between the Doctoral School and the profiles of Roskilde University and the Department

The panel shares with Roskilde University the assumption that the individual PhD fellows and their PhD education should be closely connected to a research environment, where early career researchers and senior researchers meet in knowledge exchange and development. The aim to maintain an alignment between doctoral schools and the scientific profiles of the University and the departments depends, however, on the establishment of a strong framework for recruitment, and a dynamic balancing of sources for financing and available and well-qualified candidates. We see this as important because Roskilde University has such a strong engagement in addressing societal challenges that often call for interdisciplinary solutions in collaboration with external partners both nationally and internationally.

Throughout the virtual site-visit, the panel members worked to consider how the doctoral schools manage to ensure that there is a tight connection between the profiles of the individual schools and the profile of the University and the departments respectively. This was elaborated on during interviews through reflections on recruitment practices, and collaboration with external partners.

The international panel's general observations

There is no doubt that the coherence in terms of profile between the respective doctoral schools and departments is more visible now than in 2013. However, the panel finds that there is room for improvement in how PhD fellows, their projects and research are embedded in the research profile of the department. This will also allow for a better external promotion and visibility of Roskilde University's PhD Programme.

Therefore, we have addressed three aspects of profile coherence: interdisciplinarity, imbalance between size and profile of the departments and doctoral schools respectively, and internationalization.

Strong interdisciplinary and problem-based values permeate the University and its PhD Programme on all levels. However, the University is encouraged to discuss and establish a stronger common understanding of the definition of interdisciplinarity and to consider how it can be understood in the context of the PhD Programme.

The panel finds that there are a number of challenges, which the University should take into account to ensure a stronger alignment between the PhD fellows and their projects with an overarching interdisciplinary university profile. The panel finds that there are imbalances among the four departments'/doctoral schools' ability to attract external funding. In part, the imbalances may reflect how funding bodies tend to favour research within the natural and technical sciences over social sciences and humanities. Furthermore, there is a need to address the balance between a bottom-up versus top-down approach to obtaining external funding for

PhD fellowships. It is important that the University is aware that a strong reliance on external funding and co-funding of PhD projects may come at a high price. The University may risk directing its attention solely towards market-driven research demands, which may then lead to a more fragmented research profile between the respective doctoral schools and departments. A strengthened and strategic focus on funding of fellowships may help avoid an uneven balance, where senior researchers who attract external funds are primarily the only ones who undertake PhD supervision.

In general, we have a positive view with regards to how the doctoral schools determine goals for internationalization, interdisciplinarity and collaboration in the PhD Programme. However, the doctoral schools could benefit from a more well defined and common understanding of internationalization vis-à-vis PhD education, as it is a concept, which can be understood and practised in a range of ways (i.e. recruitment, change of environment, course collaboration). Furthermore, the doctoral schools could gain useful insight into how they can better work actively with internationalization if they collect data on internationalization in a more systematic approach in order to be able to analyse and utilize it.

The international panel's recommendations

Specify how interdisciplinarity should be understood across the University and how it relates to a good PhD programme:

- Elaborate and concretize interdisciplinarity in research to better understand and implement it across the University.

Be aware that lack of funding strategy may result in the University primarily performing market-driven research:

- The University should formulate a funding strategy which requires the University to relate to the following:
 - Maintaining joint efforts to obtain external funding for PhD fellowships
 - Providing a continuous (and increased) supply of fully university-financed fellowships through open calls
 - Establishing balance between strategic and market-driven research
- If fully university-financed open calls are given priority it is pivotal to implement clear procedures for internal allocation within each doctoral school and external allocation among the four doctoral schools

Rethink the goals of internationalization and how it relates to a good PhD programme:

- Discuss how to conceptualize and gauge internationalization and develop an action plan for which elements to focus on (within a three-year period)
- Analyze and evaluate if the current interpretation of the mandatory change of environment has a positive impact on the PhD fellows' process, dissertation and the general researcher skill set. A re-evaluation of how change of environment can be adapted into a modern technological setting could be used to further promote and increase the number of PhD fellows, who completes a change of environment in the future, as it will accommodate PhD fellows in all stages of life.

Focal point 2 - The PhD education as a process with specified milestones and obligations

During the process of a PhD education, several milestones and obligations must be met under the guidance of highly qualified supervisors. Nevertheless, a good PhD education relies on more than just good supervision; it is also an organizational task. Therefore, doctoral schools play an important role in ensuring a persistent emphasis on a good work environment, clear and balanced expectations in relation to tasks and time spent, and a continual focus on evaluating the performance and progression of the PhD fellow.

The panel was asked to consider how the doctoral schools ensure that the PhD Programme is of highest quality and lives up to international standards. Some of the parameters for this specific evaluation were set around how the doctoral schools work with, and ensure quality of supervision, evaluation and assessment, in order to ensure progression and completion of the PhD education within the standard timeframe. Furthermore, the panel was asked to consider PhD supervision in general, the character of interaction and collaboration between the various actors within the doctoral schools, and how the doctoral schools prepare the fellows for the fulfilment of teaching and dissemination obligations.

The international panel's general observations

The panel compliments the doctoral schools on having successfully framed a well-structured PhD process, which seeks to support the PhD fellow from enrolment to PhD degree. The panel especially wants to highlight the on-boarding processes and introductory period as well-organized at all four doctoral schools. The institutional organisation at Roskilde University is perceived to provide a comparatively flat structure, which promotes a less hierarchical and more dialogue-based approach between the actors within the PhD programme. Nevertheless, the doctoral schools are encouraged to emphasize, and thereby strengthen, the understanding that supervision is not only a formal task to be undertaken by the individual supervisor, but also lies as a joint responsibility for the research community/groups at large.

Specifically, regarding PhD supervision, the panel finds that the doctoral schools display an overall high quality of supervision. However, the panel strongly suggests that the doctoral schools prioritize continuous training of PhD supervisors and offer inspiration to refine the craft of supervising PhD fellows. Alongside supervision, the mandatory evaluations performed by the PhD fellows and supervisors are viewed by the panel as key instruments to support progression and quality. However, the panel recommends that the doctoral schools consider revising the content and reducing the number of half-year evaluations in order to ensure meaningful evaluation of quality and progression, which complies with the directives in the PhD Order. The panel has formulated recommendations, which seeks to support both the improvement of supervision and evaluations.

Lastly, the panel finds that the University's PhD Programme, as indicated in its self-evaluation, has a strong focus on the fulfilment of established target points (i.e. standard completion times, milestones, and obligations). The panel finds it useful to have such targets. However, it is important that the doctoral schools prioritize the PhD fellows' educational process and allow for more in-depth focus and development of research skills rather than overly focusing on meeting set goals and obligations. In the same avenue, the panel encourages the University to better support PhD fellows, who aim for a career outside academia. This should likewise be validated, especially in the supervision process.

One point in particular highlighted by Roskilde University in the self-evaluation is the focus on completion times. However, the panel believes that completion time is but one of many indicators of quality and of a successful PhD programme. Thus, the panel suggests that evaluations and focus on a timely completion

encompass a more general attention to PhD fellows' well-being in terms of balancing research activities and skills, teaching obligations, networking opportunities, as well as the development of the PhD dissertation.

The panel's recommendations:

Establish incentives and encouragement to further professionalize supervision:

- University management should formulate an incentive policy to increase supervisors' participation in the formal training programme (Masterclass for PhD Supervisors). The policy should include different strategies; not necessarily or only compulsoriness.
- Emphasize local, informal, and peer-oriented approach to supervisor development, and share best-practices
- Expand the use of two supervisors for each PhD fellow. Partly to broaden the competence and thus correspond to the high demands on each supervisor. Partly to use it as a mentoring programme, where the main supervisor trains a less experienced co-supervisor. However, panel supervision (two supervisors or more) may not apply to all settings and thus, exceptions should be made when relevant
- Make better use of the existing and highly valuable data regarding the assessment of supervision provided through the PhD alumni survey
- Each of the four doctoral schools follow up on the pros and cons of their individual organization, which was identified by the panel

Create a framework for PhD fellows, which sustains a better balance of formal milestones and obligations and the PhD fellows' academic progression and general well-being:

- Maintain, and if possible, increase the efforts to integrate the PhD fellows into the daily research environment (e.g. the research groups)
- All four doctoral schools apply the good examples of aligning expectations regarding fellows' teaching obligations, which are already implemented at some of the doctoral schools
- Address supervision strategies that provide tools, which potentially promote timely completion (e.g. through offering training in time and project management). Parallel to this initiative, there should be a focus on the analysis and use of data to support the doctoral schools in this regard
- Problematize "culture of perfection" and address how fellows and supervisors can collectively create a better balance between the standards for quality, required tasks and the timeframe available
- Increase focus on the PhD fellows' well-being and how their position may be vulnerable within the academic hierarchy
- Review the use and purpose of evaluations; specifically, the frequency, purpose and meaningfulness both academically and formally
- Improve the alignment of expectations, from the beginning throughout the PhD process regarding i.e. teaching obligations, and balancing demands from different collaborating partners
- The PhD administration develops a register with complete data about students' time for completion, taking into account different types of enrollment (part-time/full-time, external/internal funding, leaves, etc.

Focal point 3 - Quality and relevance of PhD activities

The ongoing development and challenging of knowledge through activities such as courses, discussions, and lectures is extremely important for the PhD fellow. It allows them to engage with peers and more experienced researchers in relation to core traditions and discussions as well as new methods, theories and practises influencing their field of study and their individual projects. Roskilde University aims to ensure that the range of activities are relevant, high-level, and flexible and thereby strengthens both the PhD fellows' educational process as well as prepare them for a career afterwards within or outside academia.

Roskilde Doctoral Schools invited the panel to evaluate the quality and relevance of PhD activities. The panel was given a list of courses offered by the doctoral schools as well as a description of their course evaluation practices in order to assess the range and volume of course offerings and to suggest measures, which could be taken to improve the relevance, range and volume.

The international panel's general observations

While the panel wishes to commend the positive development the doctoral schools have achieved with regard to the quality and relevance of PhD courses and activities since the last evaluation, the panel nevertheless finds that there is room for improvement.

The panel wishes to emphasize that PhD courses should function as much more than a formal requirement to be achieved, and should be seen as an essential way to acquire academic knowledge and skills. Furthermore, the panel encourages the doctoral schools to view courses and other activities as a platform for PhD fellows to network and sharpen academic skills (e.g. through peer-review). The PhD alumni survey indicates that the fellows take up to half of their course load outside of the University. While this is not ideal, the panel believes that it corresponds to the size of the PhD Programme. The panel finds that some PhD courses can, with great benefit, be developed and offered in collaboration with other universities and promoted across national and international course-databases in order to attract PhD fellows from other universities in Denmark and abroad to Roskilde University.

The panel also acknowledges that the doctoral schools do in fact initiate and offer courses corresponding to needs and requests from the PhD fellows; however, there is room for improvement as supply is quite varied across the doctoral schools. Thus, the panel encourages a larger focus on a stable but demand-driven supply of PhD courses.

Lastly, the panel wishes to emphasize the need for a sharpened focus on the quality of the PhD courses as it became apparent, especially through the alumni-data provided, that the PhD fellows themselves assess that there is a need for improvement of the quality of courses offered at Roskilde University. With this in mind, the panel presents the following recommendations regarding the relevance and quality of PhD courses and activities.

The panel's recommendations:

Focus on demand-driven and stable supply to increase participation and relevance:

- Encourage PhD fellow-initiated and -driven activities such as journal clubs, master classes, work-in-progress seminars that prompts ECTS-points, in order to make the course catalogue more flexible by offering a range of different formats
- Increase the focus on the wide range of career possibilities for PhD fellows

Focus systematically on improving the quality of course offerings, as high-quality PhD education requires high quality PhD courses:

- Analyze and utilize course evaluations as well as the data regarding PhD courses supplied through the alumni survey
- Involve the Unit for Academic Development in developing/re-designing the teaching formats and/or offer training for PhD course leaders
- Revisit and possibly expand the pedagogical teaching course offered to PhD fellows in order to ensure that it is comprehensive enough and sufficiently prepares the PhD fellow to undertake teaching and supervision according to the PPL-model

Recommendations that are not specifically addressed by the focal points:

Roskilde University is encouraged to address issues of sexual harassment and bullying in a systematic and sustained manner:

The #metoo movement took center stage in the public debate in the months after the panel received the self-evaluation report. Therefore, the panel found it paramount to discuss these matters with the actors in PhD Programme during the interviews, as inherent structures at the university-level call for attention and action. Although the panel did not find evidence of sexual harassment or bullying during the interviews, it did become clear that the PhD fellows did not have a clear understanding of how the University understands and addresses these issues. The fellows did not know whom to contact about experiences with sexual harassment or bullying, nor did they know what the University's official policies concerning these issues were. Thus, the panel recommends the following:

- Clarify Roskilde University's policies and guidelines, as well as points of contact regarding harassment and bullying, and secure that the system in place is responsive
- Address topics of how to handle and prevent harassment and bullying in the masterclass for PhD Supervisors, the PhD Introduction Seminar as well as the PhD Career Seminar

Give assessment committees a better understanding of the framework for PhD education in Denmark:

The panel acknowledges that Roskilde University's PhD Programme is governed by the Danish national framework for PhD education. Hence, the University has limited flexibility with regards to time frame, mandatory elements, and the corresponding distribution of time between research and formal obligations, such as courses and teaching. These facts might, however, not be clear to all foreign members of assessment committees. Therefore, the panel suggests the following:

- Revise the 'Advisory guidelines for the PhD assessment committee' as it needs improvement of especially two points:
 - Explicate basic conditions for PhD education in Denmark and how RDS interprets the rules/framework
 - Explicate differences between a summative assessment of a PhD monograph and other academic evaluative genres e.g. formative peer review of journal manuscripts.

Handleplan for ph.d.-området på RUC 2021-2024

På baggrund af anbefalinger fra den internationale evaluering af RUC's ph.d.-uddannelse (2021) udfolder skemaet nedenfor Roskilde Doctoral Schools (RDS) prioriterede emner, som blev drøftet og vedtaget på RDS-seminar d. 21. juni 2021.

Emnerne fremgår i overskrift af kolonne A, hvorefter hvert emne udfoldes i kolonne B. Kolonne C viser den beslittede prioritering af emnet samt den forventede tidshorisont, som emnet skal behandles under.

Kolonne D lister de aktører på RUC, der forventes at blive inddraget i forbindelse med behandling af emnet. Hvorefter kolonne E-G beskriver de forventede handlinger for hvert emne opdelt i en beskrivelse af en kort-, mellem- og langsigtet opfølgning.

Til sidst udfyldes Kolonne H, I og J når der forventeligt gøres status på handleplanen i 2022, 2023 og 2024.

EMNE	KONKRETISERING AF EMNET <i>drøftet på RDS-seminar i juni 2021 og på baggrund af den Internationale Evaluering</i>	PRIORITERING OG TIDSPLAN	RUC-AKTØRER, DER SKAL INDDRAGES UD OVER RDS	KORTSIGTET OPFØLGNING <i>forudsætter ikke inddragelse af RDS</i>	MELLEMSIGTET OPFØLGNING <i>drøftelse af problemstilling(-erne) i RDS</i>	LANGSIGTET OPFØLGNING <i>mål/delmål fuldføres og eventuelle beslutninger vedtages efter høring/inddragelse af relevante aktører</i>
Ph.d.-strategi, herunder også finansierings- og rekrutteringsstrategier og relationen til RUC's strategi 2030	<ul style="list-style-type: none"> * I samarbejde med dekanerne bør RDS drøfte en fremtidig strategi for ph.d.-området, herunder en finansierings- og rekrutteringsstrategi, der også tager stilling til hvordan vi sikre en bæredygtig balance mellem basisbevillingen og ekstern finansiering * I den sammenhæng bør dekanerne evaluere fordelingsnøglen og drøfte om den evt. skal revideres eller ændres 	<p><i>Forslag efter drøftelse i RDS</i></p> <p>Høj - 2021/2022</p>	<ul style="list-style-type: none"> * RDS-sekretariatet * RUC Budget & Analyse * Dekanerne * UL 	<ul style="list-style-type: none"> * I samarbejde med RUC Budget & Analyse udarbejder RDS-sekretariatet div. relevante data vedr. økonomi og ph.d.-finansiering både ift. udmøntningen af ph.d.-bevillingen og fordelingsnøglen 	<ul style="list-style-type: none"> * Med udgangspunkt i data og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden drøfter RDS og dekanerne sammen ønsker til den fremtidige strategi for ph.d.-området og dens relation til RUC's strategi 2030 * Med udgangspunkt i data og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden drøfter RDS og dekanerne sammen med RUC Budget & Analyse forslag til en decideret finansierings- og rekrutteringsstrategi under den overordnede ph.d.-strategi, og dertilhørende retningslinjer for ph.d.-området * Med udgangspunkt i data drøfter dekanerne og RUC Budget & Analyse behovet for en revidering af Fordelingsnøglen, der ligger til grund for fordelingen af RUC's ph.d.-budget 	<ul style="list-style-type: none"> * En ph.d.-strategi bør drøftes i FoU og evt. AR og godkendes i UL * Ændringer og/eller tilpasninger af RUC's ph.d.-fordelingsnøgle skal vedtages af UL
Vejlederkvalificering	<ul style="list-style-type: none"> *RDS bør drøfte og evaluere på den nuværende vejlederkvalificering *RDS bør faciliterer en erfaringsudveksling af lokale tiltag for vejlederkvalificering og vurdere om der er potentiale for en øget tværgående indsats 	<p><i>Forslag efter drøftelse i RDS</i></p> <p>Høj - 2022</p>	<ul style="list-style-type: none"> * Ph.d.-skolesekretariatene * RDS-sekretariatet * EAE * HR * Ph.d.-udvalgene * Dekanerne og/eller UL 	<ul style="list-style-type: none"> * Ph.d.-skolesekretariatene fremsender en beskrivelse af hvorledes de sikre at deres ph.d.-vejledere lever op til kravet om deltagelse på RUC's PhD Masterclass for ph.d.-vejledere. Derudover fremsendes beskrivelse af praksis for eventuelle andre tiltag, der eksisterer på ph.d.-skolen vedr. ph.d.-vejlederkvalificering * RDS-sekretariatet kontakter EAE og beder om fremsendelse af evalueringer fra PhD Masterclass og oversigt over VIP, der har deltaget fordelt på institut <p><i>- ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</i></p>	<ul style="list-style-type: none"> * Med udgangspunkt i ph.d.-skolernes praksisbeskrivelser og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden drøfter RDS (evt. sammen med EAE) det nuværende udbud af vejlederkvalificering (både lokalt og centralt). Erfaringsudvekslingen af de lokale tiltag for vejlederkvalificering skal også munde ud i en vurdering om der er potentiale for en øget tværgående indsats 	<ul style="list-style-type: none"> * Hvis drøftelserne fører til tilpasninger og/eller ændringer af det nuværende udbud, skal ph.d.-udvalgene og evt. UL inddrages
Ph.d.-kurser	<ul style="list-style-type: none"> * Der er behov for en afdækning og drøftelse af lokal og fællesudbud af ph.d.-kurser på RUC, herunder om der er obligatoriske kurser * Dernæst skal RDS drøfte ambitionsniveauet både for lokal og fælles udbud og evt. fremtidig ønsker til udbud * RDS bør ligeledes drøfte ønsker og behov for hvorledes vi kan booste fælles/tværgående miljøer for ph.d.-studerende 	<p><i>Forslag efter drøftelse i RDS</i></p> <p>Høj - starten af 2022</p>	<ul style="list-style-type: none"> * Ph.d.-skolesekretariatene * RDS-sekretariatet * EAE * Ph.d.-udvalgene 	<ul style="list-style-type: none"> * Ph.d.-skolesekretariatene fremsender en oversigt over deres kursus udbud (inkl. eventuelle fremtidige og en indikering af om nogle af kurserne er obligatoriske) til RDS-sekretariatet <p><i>- ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</i></p>	<ul style="list-style-type: none"> * Med udgangspunkt i oversigterne, drøfter RDS ambitionsniveauet for kursusudbud for ph.d.-studerende, herunder behovet for fællesudbud og resursebehov * RDS drøfter hvorledes der sikres en bedre planlægning af ph.d.-kurser, herunder langtidspanlægning og involvering af relevant VIP-resurser * RDS skal ligeledes drøfte om kursusudbud kan bidrage til et boost af fælles/tværgående miljøer for ph.d.-studerende, evt. ved nedsættelse af tværgående ph.d.-kursusplanlægningsgruppe 	<ul style="list-style-type: none"> * Udbud af eventuelle nye kurser/ ny kursuspraksis skal drøftes og godkendes af ph.d.-udvalgene

<p>Evalueringspraksis/-kadence</p>	<p>* Der er behov for en afdækning og drøftelse af lokale praksiser og kadencer for evaluering * RDS skal evaluere og drøfte hvorledes vi fremadrettet sikre at evalueringspraksis er meningsgivende både for de ph.d.-studerende, vejledere og ph.d-skolen * Dernæst skal RDS drøfte om der er potentiale for fælle rammer, som der har været hidtidigt</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem - 2023</p>	<p>* Ph.d.-skolesekretariaterne * RDS-sekretariatet * Ph.d.-udvalgene</p>	<p>* Ph.d.-skolesekretariaterne fremsender en beskrivelse af deres evalueringspraksis inkl. kadence samt de anvendte skabeloner til RDS-sekretariatet - ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</p>	<p>* Med udgangspunkt i ph.d.-skolernes forskellige praksis og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden, evaluerer RDS på nuværende evalueringspraksis og tager stilling til om der skal foretages ændringer * RDS drøfter ligeledes hvordan evalueringspraksis fremadrettet er meningsgivende for både de ph.d.-studerende, -vejledere, -skoleledelse og -administration * RDS skal ligeledes drøfte om der fortsat er grundlag for fælles evalueringspraksis på tvær af ph.d.-skolerne - hvis ikke, så bør et minimumsudgangspunkt fastsættes</p>	<p>* Tilpasning og/eller ændring af evalueringspraksis skal drøftes og godkendes i ph.d.-udvalgene og evt. forelægges for FoU/AR til orientering og implementeres i Fællesreglerne</p>
<p>Tværfaglighed og problemorientering</p>	<p>*RDS bør eksemplificere hvad tværfaglighed og problemorienteret tilgang kan være i et ph.d.-skole/-uddannelsessammenhæng *RDS bør erfaringsudveksle og derved skabe synlighed for hvordan tværfaglighed og en problemorienteret tilgang spiller en rolle på ph.d.-skolerne *RDS' drøftelser bør her knytte an til RUC's overordnede strategi og sigtelinjer</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem - 2023</p>	<p>* Ph.d.-skolesekretariaterne * RDS-sekretariatet * Ph.d.-udvalgene * Evt. RUC Kommunikation og Rektorsekretariat</p>	<p>* Ph.d.-skolesekretariaterne fremsender en beskrivelse af hvorledes tværfaglighed og problemorienteret tilgang eksemplificeres i deres ph.d.-skole - ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</p>	<p>* Med udgangspunkt i ph.d.-skolernes praksisbeskrivelser og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden drøfter RDS hvad tværfaglighed og problemorienteret tilgang betyder i et ph.d.-skole/-uddannelsessammenhæng og hvordan dette kan blive mere synligt både internt og eksternt *RDS' drøftelser og beskrivelse bør her knytte an til RUC's overordnede strategi og sigtelinjer</p>	<p>* RDS' drøftelser skal bl.a. munde ud i en beskrivelse der kan bruges både til intern og ekstern formidling</p>
<p>Gennemførelstider</p>	<p>*Med afsæt i data og erfaringer bør RDS drøfte hvad der skaber forsinkelser og hvilke tiltag, der eventuelt kan igangsættes for at reducere den gennemsnitlige gennemførelstid</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem - 2023</p>	<p>* Ph.d.-skolesekretariaterne * RDS-sekretariatet</p>	<p>* Ph.d.-skolesekretariaterne fremsender en beskrivelse af hvorledes ph.d.-skolen arbejder med gennemførelse til tiden og hvordan eventuelle forsinkelser håndteres rent administrativt * RDS-sekretariatet trækker data og laver statistik vedr. gennemførelstider via bl.a. PhD Manager samt dimittend-data. Derudover laves der benchmarking til de andre universiteter - ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</p>	<p>* RDS drøfter hvordan de grundlæggende opfatter vigtigheden af gennemførelstider i henhold til god ph.d.-uddannelse og behovet for initiativer, der kan igangsættes for at forbedre gennemførelstiderne for ph.d.-studerende på RUC * Med udgangspunkt i ph.d.-skolernes data og praksis, og med inddragelse af anbefalingerne fra den internationale evaluering og evt. anden erfaringsbaseret viden, evaluerer RDS på nuværende praksis og drøfter forslag til hvordan praksis kan justeres, således de gennemsnitlige gennemførelstider mindskes og kommer på niveau med de andre universiteter</p>	
<p>Akademisk kultur</p>	<p>*RDS bør adressere den akademiske kultur og herunder afdække eventuelle uklare forventninger til den endelig afhandling blandt de ph.d.-studerende og evt. mellem de ph.d.-studerende, deres vejledere og forskningsmiljøer - dette kan evt. ske med afsæt i en spørgeskemaundersøgelse</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem - 2023</p>	<p>* Ph.d.-skolesekretariaterne * RDS-sekretariatet * HR * Ph.d.-udvalgene</p>	<p>* RDS drøfter indledningsvist hvorledes der bedst skabes et vidensgrundlag, der skal være udgangspunktet for diskussionerne vedr. den akademiske kultur. Skal viden evt. tilvejebringes gennem en større spørgeskemaundersøgelse blandt alle ph.d.-studerende og vejledere? Skal der laves fokusgruppeinterviews? Skal PARU inddrages?</p>	<p>* Med udgangspunkt i den indsamlede data og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden drøfter RDS og HR hvordan vi bedst italesætter udfordringer ift. akademiske forventninger blandt de ph.d.-studerende.</p>	<p>* RDS' drøftelser kan bl.a. munde ud i en beskrivelse der kan bruges både til intern og ekstern formidling</p>

<p>Internationalisering, herunder miljøskifte</p>	<p>* Der er behov for et opgør med den abstrakte norm/krav om miljøskifte, således kravet i bekendtgørelsen opleves som meningsgivende og værdifuldt for de ph.d.-studerende * RDS bør erfaringsudveksle hvorledes de opfatter internationalisering set ud fra et ph.d.-uddannelsesperspektiv * RDS bør drøfte hvordan ph.d.-skolerne understøtter miljøskifte og andre former for internationalisering og hvilke potentialer de ser som kan styrke dette område</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem til lav - 2023/2024</p>	<p>* Ph.d.-skolesekretariaterne * RDS-sekretariatet * RUC International Uddannelse & Mobilitet (RIUM) * HR * Ph.d.-udvalgene</p>	<p>* Ph.d.-skolesekretariaterne fremsender en beskrivelse af deres praksis og retningslinjer vedr. miljøskifte til RDS-sekretariatet. Herudover sendes eventuelt andet relevant materiale, der relaterer sig til internationalisering * RDS-sekretariatet trækker data og laver statistik vedr. miljøskifte og internationale ph.d.-studerende fra bl.a. PhD Manager samt dimittend data. Derudover laves der benchmarking til de andre universiteter - ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</p>	<p>* RDS drøfter hvordan de grundlæggende opfatter internationalisering set ud fra et ph.d.-uddannelses perspektiv og hvilke initiativer, der skal igangsættes for at styrke internationalisering * Med udgangspunkt i ph.d.-skolernes praksis og retningslinjer for miljøskifte, og med inddragelse af anbefalingerne fra den internationale evaluering og evt. anden erfaringsbaseret viden, evaluerer RDS på nuværende praksis og drøfter forslag til hvordan praksis kan justeres, således miljøskifte opleves som mere meningsgivende og værdifuldt for de ph.d.-studerende men samtidig lever op til ph.d.-bekendtgørelses krav * RDS drøfter ligeledes hvordan ph.d.-skolerne understøtter miljøskifte og andre former for internationalisering og hvilke potentialer de ser som kan styrke dette område</p>	<p>* Tilpasning og/eller ændring af praksis vedr. miljøskifte skal drøftes og godkendes af ph.d.-udvalgene og evt. forelægges FoU/AR til orientering og implementeres i Fællesreglerne</p>
<p>Trivsel og forventninger, herunder sygefravær</p>	<p>*RDS bør drøfte behovet for et større fokus på den generelle trivsel for ph.d.-studerende, herunder om der er behov for yderligere tiltag ift. at skabe større klarhed om forventninge til ph.d.-studerende, vejledere mv. *Med afsæt i data og inddragelse af HR bør RDS drøfte status for sygefravær (både kort og langtid) blandt de ph.d.-studerende og hvilke eventuelle tiltag, der skal tages</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem til lav - 2023/2024 <i>Dag med løbende ajourføring i samarbejde med HR</i></p>	<p>* Ph.d.-skolesekretariaterne * RDS-sekretariatet * HR * Ph.d.-udvalgene</p>	<p>* Indsatsen indledes bl.a. med en afdækning vedr. trivsel blandt de ph.d.-studerende * Ph.d.-skolesekretariaterne fremsender en beskrivelse af hvorledes ph.d.-skolen arbejder med trivsel blandt de ph.d.-studerende, samt hvordan de sikrer en god forventningsafstemning og klarhed blandt de forskellige aktører i ph.d.-uddannelsen * RDS-sekretariatet beder HR trække data og laver statistik vedr. sygefravær - ved fremsendelse af materiale, kan der med fordel tages udgangspunkt i det der blev udformet ifm. selvevalueringen til den internationale evaluering med eventuelle justeringer</p>	<p>* Med udgangspunkt i data drøfter RDS og HR sygefravær for ph.d.-studerende, herunder behovet for igangsættelse af tiltag for at mindske sygefraværet blandt RUC's ph.d.-studerende * Med udgangspunkt i data, ph.d.-skolernes praksis og med inddragelse af anbefalingerne fra den internationale evalueringsrapport og evt. anden erfaringsbaseret viden drøfter RDS og HR trivsel blandt de ph.d.-studerende, herunder om der er behov for særlige tiltag for at sikre en bedre trivsel blandt RUC's ph.d.-studerende</p>	
<p>Synlighed og profilering af RUC's ph.d.-uddannelser på digitale platforme</p>	<p>* I samarbejde med RUC Kommunikation & Presse bør RDS drøfte idéer til hvorledes RUC's ph.d.-uddannelse bliver mere synlig for eksterne potentielle studerende, forskere, samarbejdspartnere og aftagere</p>	<p><i>Forslag efter drøftelse i RDS</i> Mellem til lav - 2023/2024 <i>Dag vil RDS-sekretariatet påbegynde afdækning og dialog med RUC Kommunikation inden</i></p>	<p>* RDS-sekretariatet * Ph.d.-udvalgene * RUC Kommunikation & Presse</p>	<p>* I samarbejde med RUC Kommunikation & Presse drøfter RDS indledningsvist ønsker og forventning til øget synlighed af RUC's ph.d.-uddannelser, herunder behovet for nedsættelse af en arbejdsgruppe og hvilke andre aktører det vil være relevant at inddrage</p>	<p>* Med udgangspunkt i forslag fra den, til formålet nedsatte, arbejdsgruppe drøfter RDS og Kommunikation & Presse hvilke forslag til øget synlighed der skal igangsættes, herunder hvilke "produkter", der skal skabes</p>	

RUC's ph.d.-strategi 2016-2020

Konsolidering og kvalitetsudvikling

Indledning

RUC har – lige som andre universiteter – til opgave at drive forskning på højeste internationale niveau. Forskning på højeste internationale niveau forudsætter velkvalificerede forskere, og uddannelse af nye forskere bliver dermed også en af RUC's kerneopgaver. Derfor har RUC i de senere år haft en ambition om at øge omfang og kvalitet af ph.d.-uddannelsen.

I begge henseender er der sket en markant udvikling. RUC har arbejdet målbevidst for at øge optaget, og ph.d.-bestanden er ved at stabilisere sig på et fast niveau. De ph.d.-studerende er en integreret del af institutternes forskningsmiljøer, og de samfinansierede ph.d.-stipendier giver mulighed for eksternt samarbejde og netværksdannelse.

Målsætningen om et øget optag er opfyldt, men der er behov for yderligere udvikling og konsolidering på ph.d.-området. Dermed er der også behov for en ph.d.-strategi.

RUC's ph.d.-strategi ligger i forlængelse af Strategi Ny RUC og formulerer de overordnede mål på området. Strategien danner ramme for institutternes ph.d.-strategier, og konkretisering og realisering af strategien vil i høj grad ske i institut- og ph.d.-skoleregi.

Kvantitet, kvalitet og måltal

Det overordnede mål vil fortsat være at fastholde volumen og udvikle kvaliteten. Volumen giver en kritisk masse, som er med til at sikre kursusudbud, studiemiljø og høj faglig kvalitet.

RUC ønsker at fastholde ph.d.-bestanden på et stabilt niveau og har som overordnet mål at optage ca. 60 ph.d.-studerende om året, men dette tal kan ikke ses uafhængigt af RUC's øvrige økonomi. RUC ønsker at undgå store udsving i ph.d.-bestanden og vil prioritere stabilitet frem for høje optag i enkelte år.

Herudover ønsker RUC at fortsætte sit arbejde med kvalitetsudvikling af ph.d.-uddannelsen i forlængelse af den internationale evaluering, der blev gennemført i 2013-14.

Den høje faglige kvalitet er det overordnede mål. Herudover lægger RUC vægt på følgende:

- RUC ønsker en fordeling af ph.d.-studerende, som understøtter udviklingen af RUC's fagmiljøer
- RUC ønsker at tiltrække ph.d.-studerende, som bidrager til realisering af RUC's strategiske satsninger
- RUC ønsker at give de ph.d.-studerende en uddannelse, som udover det specifikt faglige indhold indeholder særlige RUC-kvaliteter
- RUC ønsker at bidrage til internationalisering af ph.d.-uddannelsen for at styrke det eksterne samarbejde

Forskerkompetencer, forskningsgennemslag og det særligt RUC'ske

RUC ønsker at uddanne ph.d.er, som udover at udvikle intellektuelle kompetencer og tilegne sig faglig viden får kendskab til RUC's særlige kvaliteter som tværfaglighed og problemorientering.

I forlængelse af Strategi Ny RUC, som sætter fokus på forskning med dobbelt gennemslag, er det en strategisk intention at tiltrække flere studerende under ErhvervsPhD-ordningen, som forener forskningens videnskabsinterne og samfundsmæssige dimension.

At være ph.d.-studerende på RUC

De ph.d.-studerende på RUC skal være del af et levende forskningsmiljø, hvor det forventes, at den ph.d.-studerende bidrager aktivt til forskning og udvikling på instituttet, også ud over egen forskningsgruppe.

En ph.d.-uddannelse giver mulighed for faglig fordybelse, men derudover betragter RUC det at lære at undervise og vejlede som en vigtig del af uddannelsen. De ph.d.-studerende, som er fritaget for undervisningsforpligtelsen, f.eks. ErhvervsPhD-studerende, bliver på anden vis introduceret til RUC's særlige model for projekt- og forskningsbaseret uddannelse.

At være ph.d.-studerende på RUC kan også være at forberede sig på et arbejdsmarked uden for de universitære forskningsinstitutioner, hvor forskningsmæssige kvalifikationer efterspørges. Karrierespørgsmål tematiseres både i vejledningen og ved MUS-samtaler.

Ph.d.-vejledning på RUC

RUC prioriterer ph.d.-vejledning højt og har igangsat fælles udviklingsforløb for vejledere på tværs af ph.d.-skoler. Nogle af RUC's ph.d.-skoler har faste vejlederkorps, mens andre har skiftende vejledere. I alle tilfælde sikres et højt niveau for vejledning, f.eks. via tilknytning af en eller flere bivejledere med særlige kompetencer.

Ph.d.-vejledning består ikke kun af formelt aftalte møder, men er også det uformelle møde i hverdagen eller samarbejdet i laboratoriet. Den uformelle vejledning underbygges af RUC's tætte miljøer.

Talentpleje, rekruttering og fastholdelse

RUC ønsker udover det almindelige 5+3-forløb at benytte 4+4- og 3+5-ordningerne for at kunne fastholde studerende, som tidligt udviser særligt talent inden for et bestemt område. Det kan dog være vanskeligt at udpege disse studerende.

I forlængelse af Strategi Ny RUC opfordres institutterne til at overveje tiltag til fastholdelse af færdiguddannede ph.d.er på forskningsstrategiske områder.

Internationalisering

RUC ønsker at understøtte internationalisering, bl.a. ved at afsætte ressourcer til løsning af faglige og praktiske problemer ved ph.d.-studerendes udlandsophold. RUC vil tiltrække flere udenlandske ph.d.-studerende, bl.a. ved aftaler om joint og double degrees.

Samfinansierede og fuldfinansierede ph.d.-stipendier

Samfinansierede ph.d.-stipendier er med til at realisere RUC's overordnede strategi, idet de giver mulighed for at etablere eksterne samarbejder og styrke RUC's omverdensrelationer.

Fuldfinansierede stipendier giver mulighed for afsøgning af nye faglige dimensioner, f.eks. udpeget af RUC eller i institutternes strategier, som kan være svære at få finansieret eksternt.

På grund af en økonomisk trængt situation indføres en ny model for ph.d.-optag og ph.d.-finansiering, hvor det vil være et krav, at institutterne skaffer ekstern medfinansiering i et omfang på i gennemsnit mindst 50 %.

Organisering og administrativ understøttelse

RUC's nye struktur forventes at styrke den administrative understøttelse af ph.d.-området. Herudover vil RUC udbygge ph.d.-koordinatornetværket og styrke ph.d.-administrationen via standardisering og forenkling af procedurer.

Strategi

RUC 2030: Interconnected



Banebrydende tværfaglig forskning

- RUC udfører banebrydende forskning på højeste internationale niveau og skal udvikle en tydelig tværfaglig profil, som baseres på samfundsvidenskab og humaniora kombineret med kernebidrag fra naturvidenskab, teknisk videnskab og sundhedsvidenskab.
- RUC's forskning er excellent og udfordringsdrevet, og skal bidrage til bæredygtig udvikling i et tæt samspil med det omgivende samfund, både lokalt, nationalt og internationalt.
- RUC's samfundsmæssige impact skal altid bygge på grundlæggende principper om forskningsfrihed, forskningsintegritet og open science.
- RUC skal være et internationalt samlingssted for kritisk tværfaglig forskning.
- RUC skal skabe sammenhængende tid til forskning, velfungerende forskningsorganisering og en solid administrativ forskningsunderstøttelse.



Miljømæssig, økonomisk og social bæredygtighed

- RUC vil være foregangsuniversitet for bæredygtig institutions- og campusdrift, hvor økonomiske, sociale og miljømæssige hensyn altid indgår i universitetets langsigtede prioriteringer.
- RUC's campus skal være et levende forsknings-, studie- og arbejdsmiljø, hvor studerende, ansatte, alumner og samarbejdspartnere er til stede, trives og samarbejder på tværs af faglige styrkepositioner og interesser.
- RUC skal sikre reel ligestilling og mangfoldighed - i forhold til samvær og samarbejde og i forhold til tiltrækning og fastholdelse af medarbejdere og studerende.



Problemløsende og kritisk nødvendige uddannelser

- RUC's uddannelser skal give de studerende bred tværfaglig viden og metodiske kompetencer med udgangspunkt i universitetets hovedområder og med fokus på digital, etisk og demokratisk dannelse.
- RUC's uddannelser skal bibringe tværfaglig fordybelse, hvor studerende og forskere i fællesskab skal arbejde med at bringe forskningen og dens metoder i spil.
- RUC's uddannelser skal tiltrække engagerede danske og internationale studerende, der er motiveret af at udvikle en bæredygtig fremtid. Underviserne skal beherske og videreudvikle RUC's pædagogiske model Problemløsende ProjektLæring (PPL), så de studerende kan anvende denne tilgang i deres studier og akademiske professionelle virke.
- RUC skal i samarbejde med arbejdsmarkedet udbyde fremtidens videre- og efteruddannelse.



Medskaber af samfundsforandring

- RUC's forskere og forskningsmiljøer skal bidrage til samfundsforandring og til at udvikle universiteternes rolle i samfundet gennem forskningsformidling, åben innovation og citizen science.
- RUC's kandidater skal være fagligt stærke forandringsagenter og kompetente projektledere, der er dygtige til at omsætte viden på det etablerede arbejdsmarked, og som selvstændige entreprenører og meningsdannere.
- RUC's ansatte og administrative enheder skal understøtte samarbejdsrelationer i forhold til forskning og uddannelse, internationale alliancer og lokale og regionale partnerskaber.

Mission

Roskilde Universitet flytter samfundet med banebrydende tværfaglig forskning og uddannelse.

Vision

Roskilde Universitet vil være blandt de foretrukne europæiske universiteter inden for tværfaglig videnskabelse med lokal forankring og globalt udsyn og anerkendt for sit bidrag til forskningsbaseret bæredygtig forandring.

Punkt 6: Eventuell