

National initiatives to strengthen internet based industry

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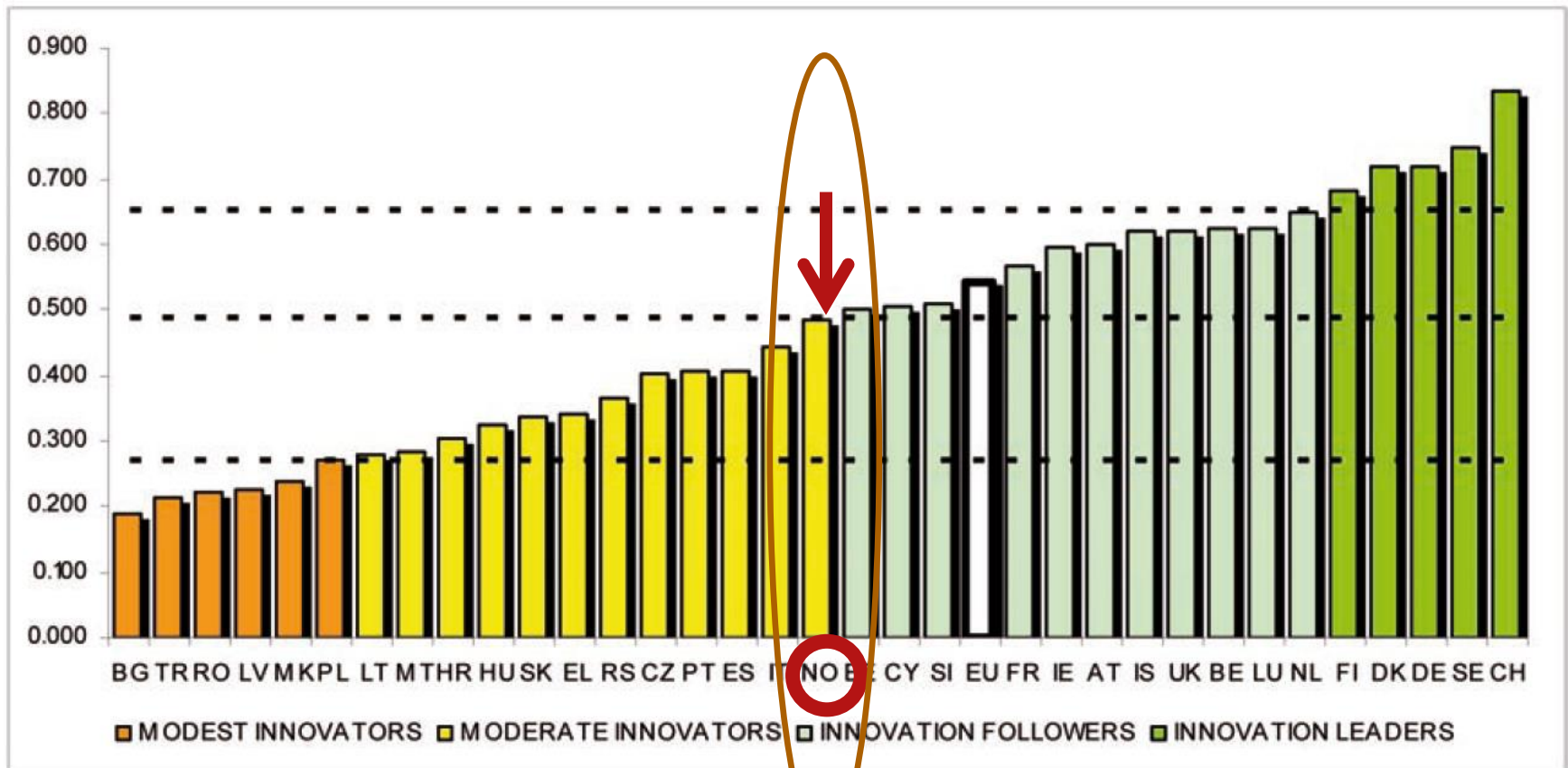
This is Norway

- Country # 121 in size
- Country # 24 in economy
- The largest governmental investor
- The largest shareholder in Europe
- 0,7% of world all science production
- 1,7% of GDP for R&D



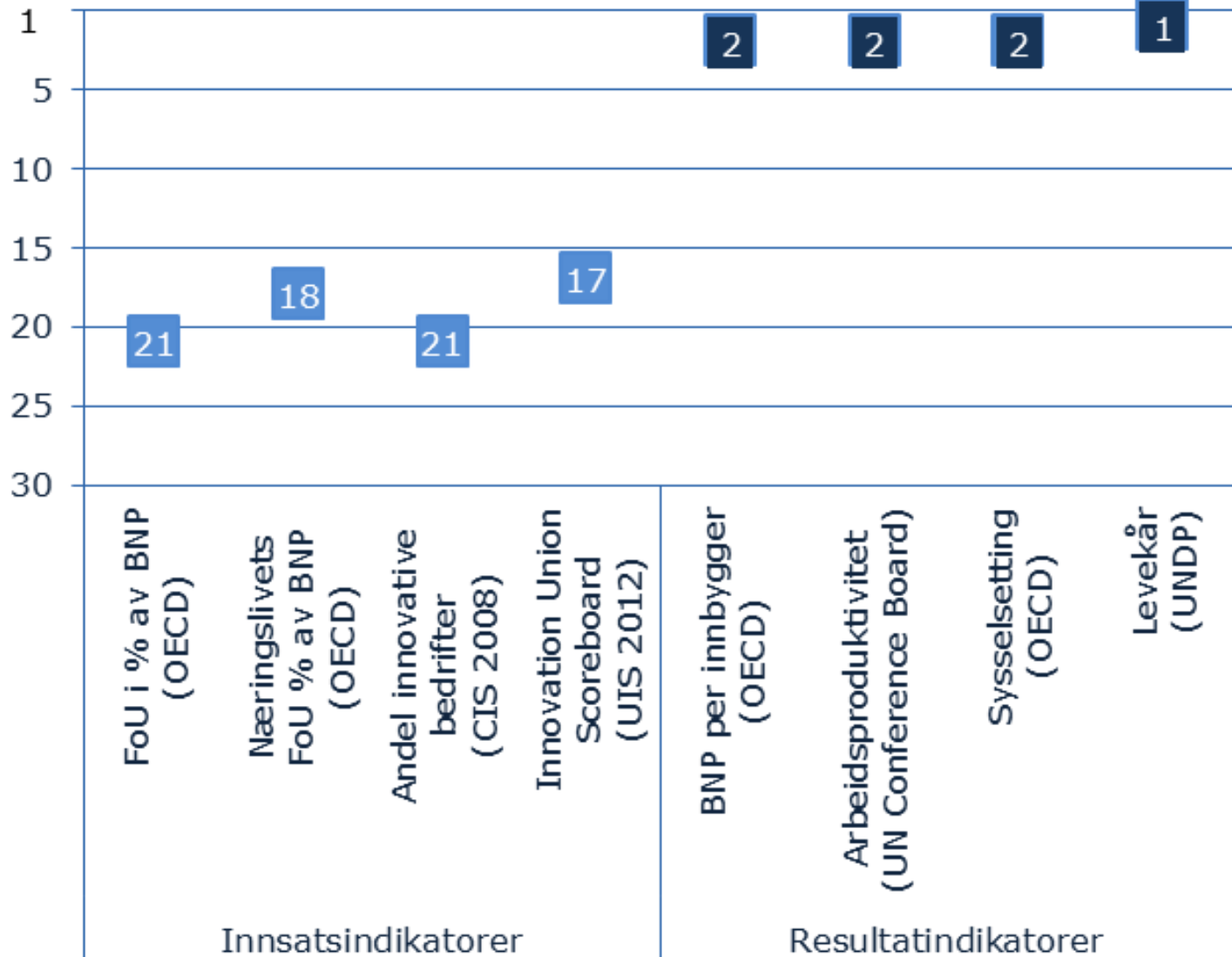
Norway a moderate innovator

- Innovation Score Board 2014



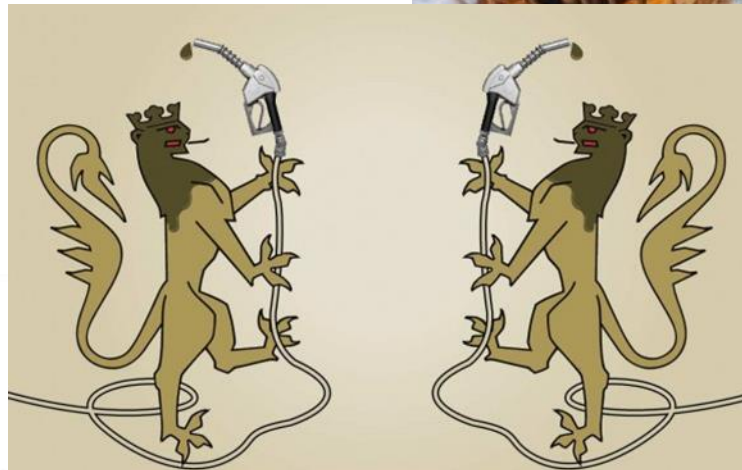
The Norwegian puzzle

Plassering



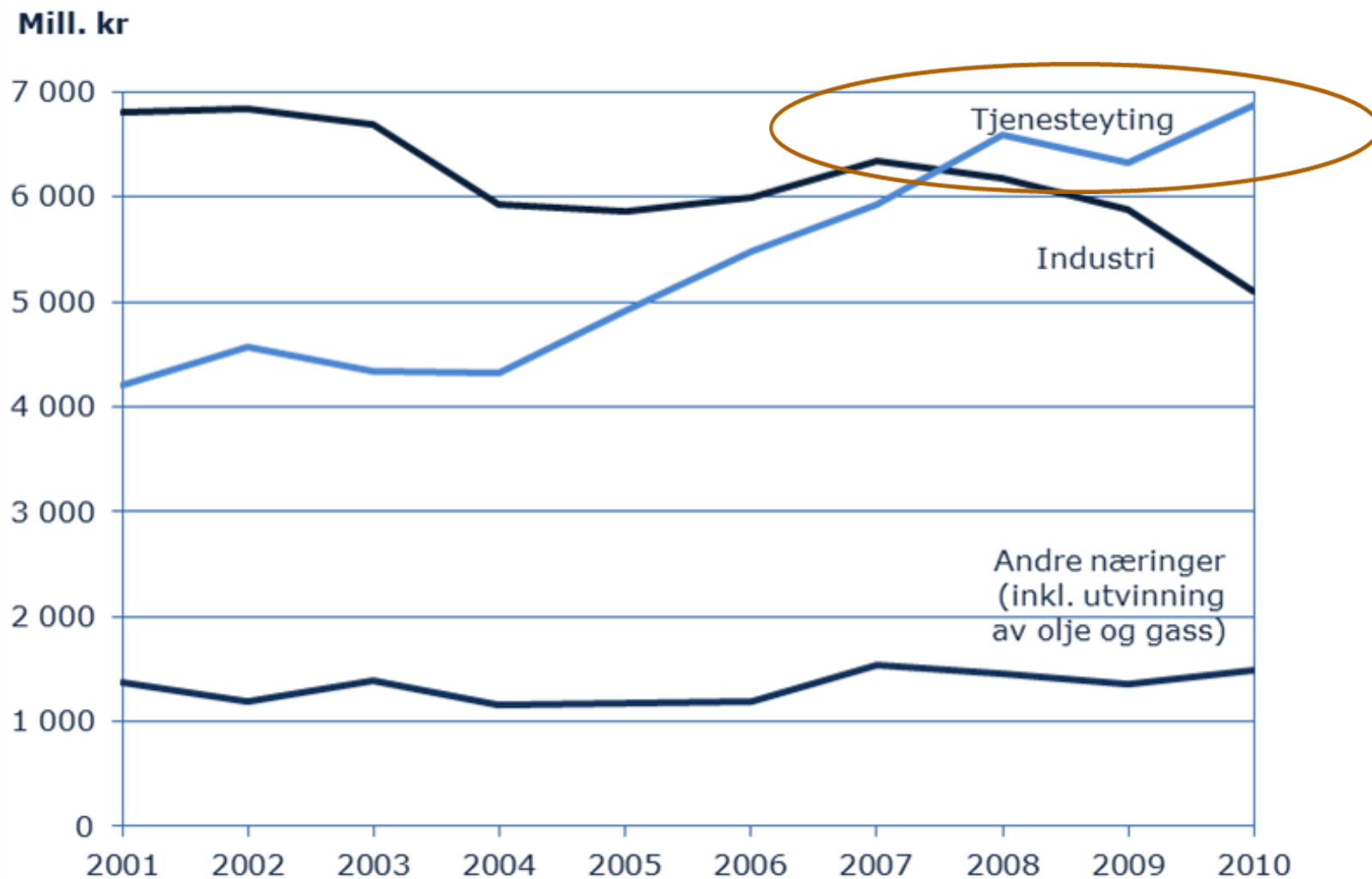
Business profil

- Oil and gas
- Shipping
- Fish
- However



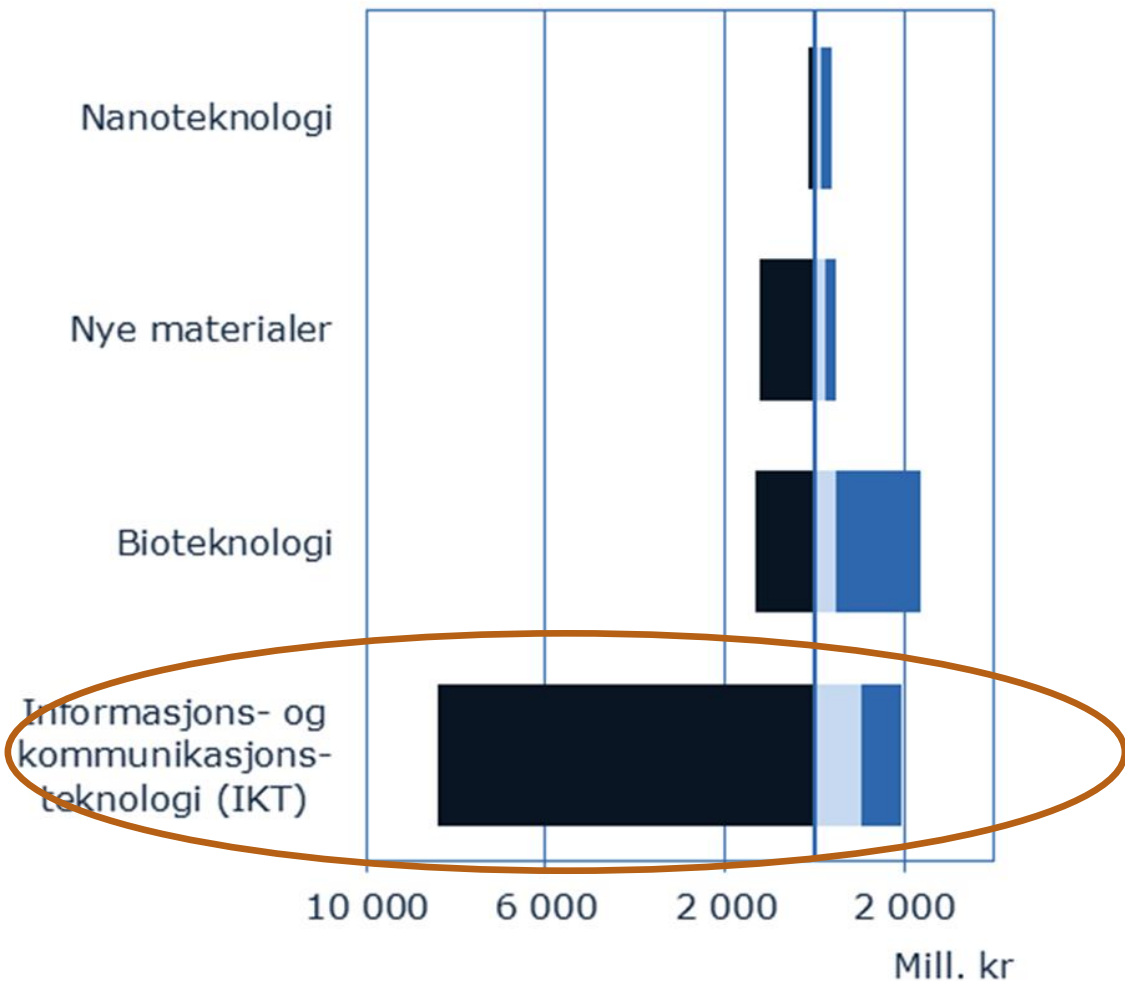
R&D in the business sector

Indikatorrapport 2013



ICT R&D...

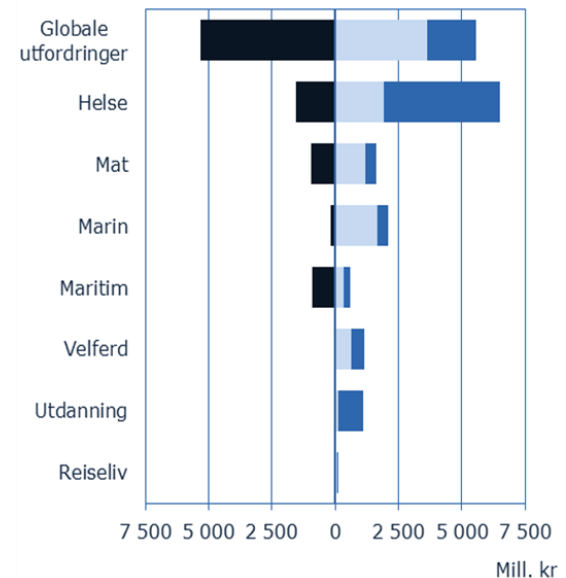
■ Næringslivet ■ Instituttsektoren ■ Universitets- og høyskolesektoren



80% av all R&D in the business sector

20% av all R&D

40% increase 2005-2011



The Research Council - a significant investor in ICT R&D



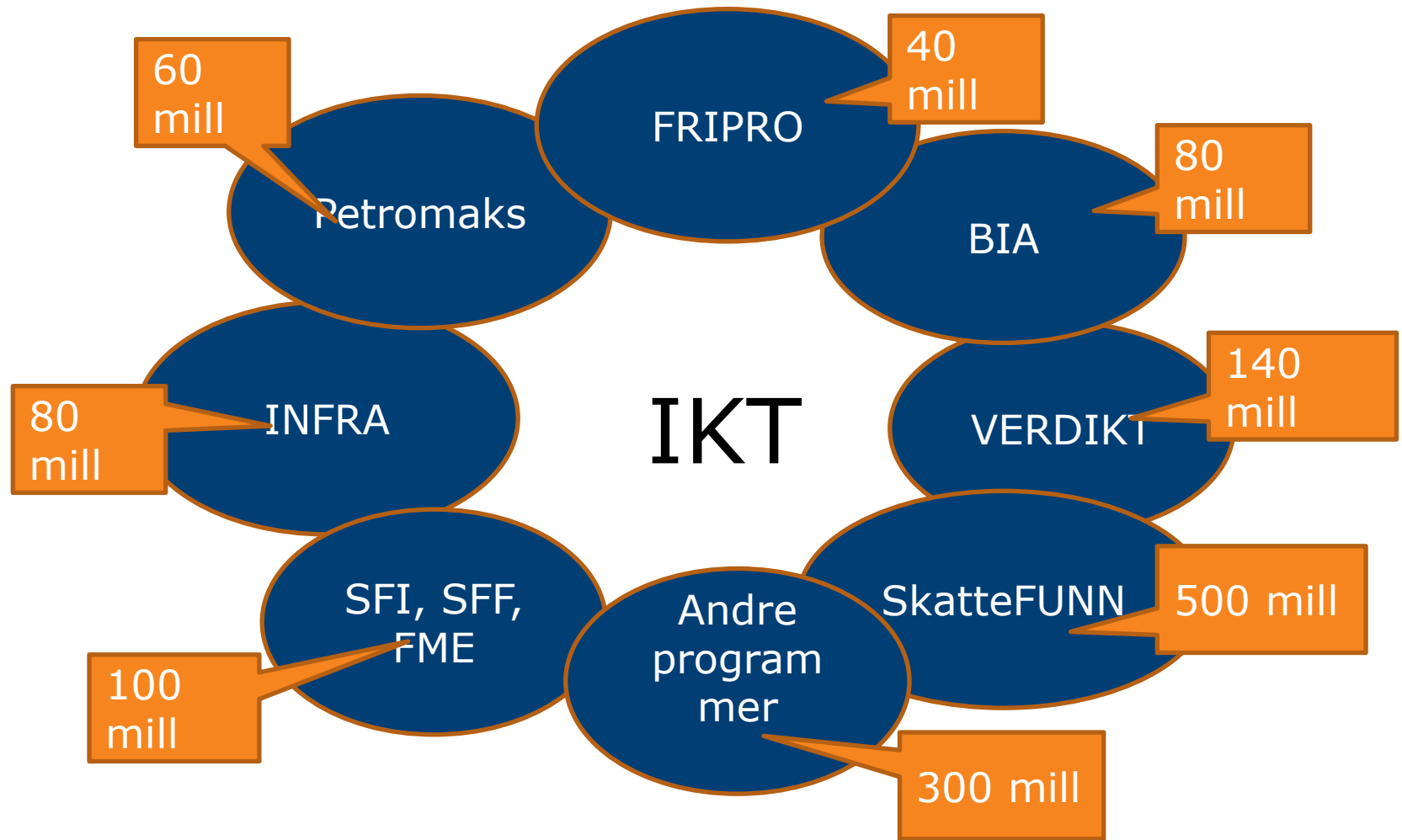
800 mill. NOK various instruments/year
500 mill. NOK (+) in SkatteFUNN/year

Business
sector

Reserach
institutes

Universities

Hospitals



VERDIKT 2005-14

- Large scale program

- 1,2 bill NOK + 0,5 bill NOK from the business sector
- 120 projects og 250 ph.d/post.doc
- > 2500 publications
- 550 innovations



Fremtidens internett

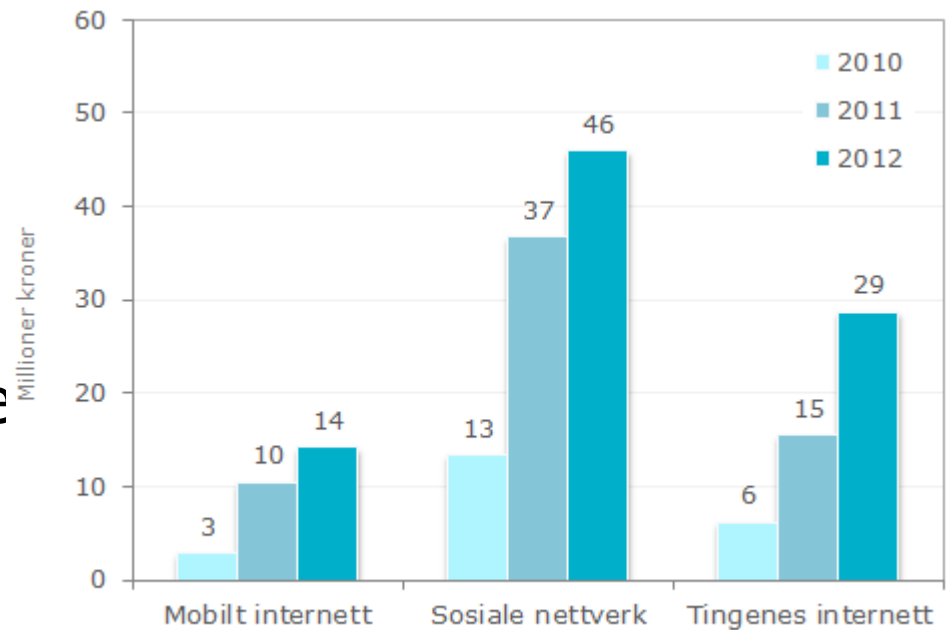
Sosiale nettverk

Tingenes internett

Mobilt internett

Investments in internet of things - VERDIKT

- Approx 175 mill NOK since 2010 in internet based research
- 50 mill NOK into internet of things projects
- Financing of an interne og things network





Sensorer som er koblet til pasienter og utstyr på sykehus kan fortelle helsepersonell hvor i forløpet pasienten er og hjelpe dem til en mer effektiv arbeidshverdag. VERDIKT-forskere er på saken.



Framtidas biler vil være på nett med hverandre og omgivelsene. VERDIKT-forskere utvikler og tester egnet kommunikasjons- og varslingsutstyr.

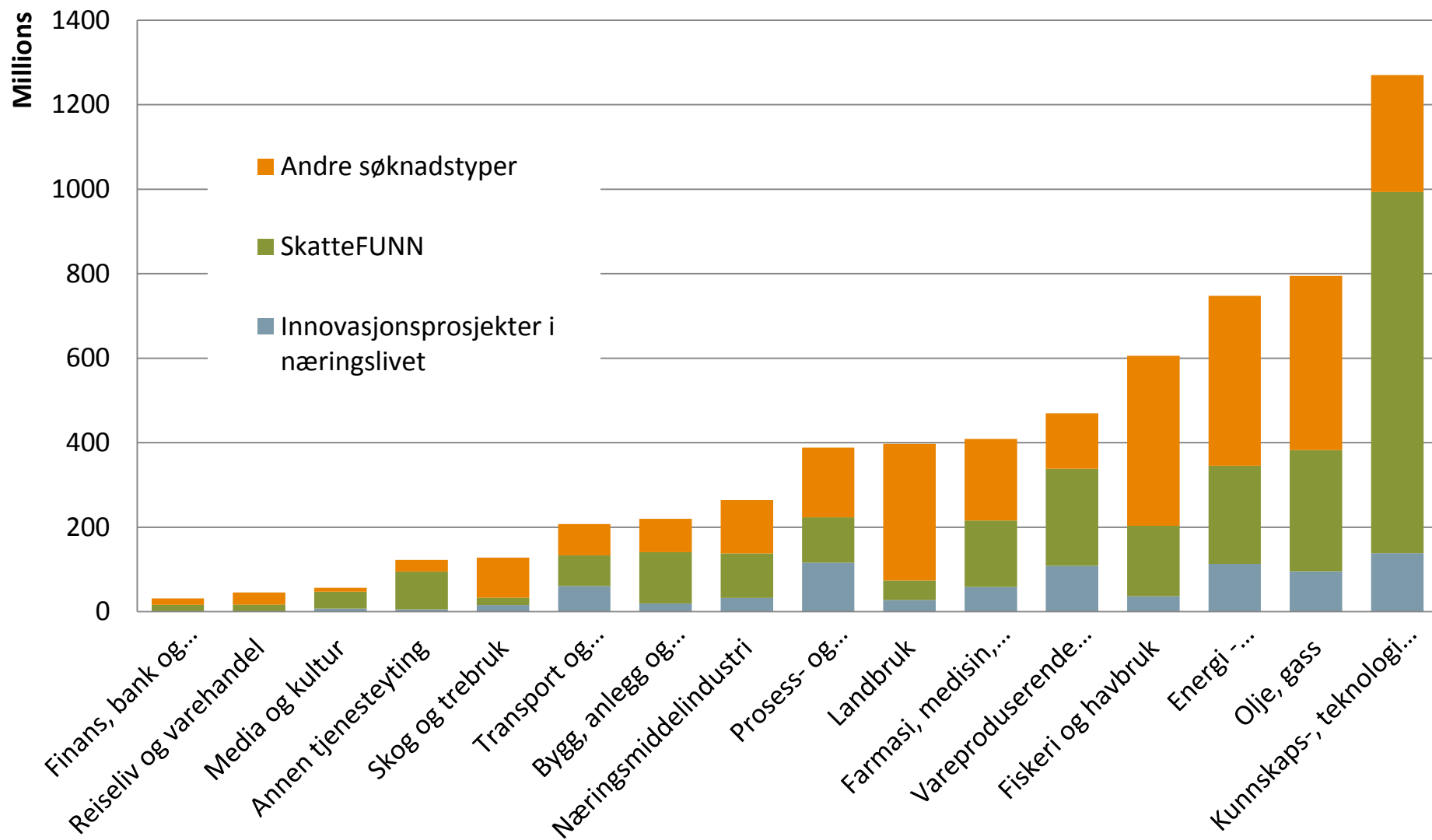


VERDIKT-forskere prøver å finne ut hvordan data fra sensorer kan gjøre arbeid med oljebrønner mer effektivt og sikrere

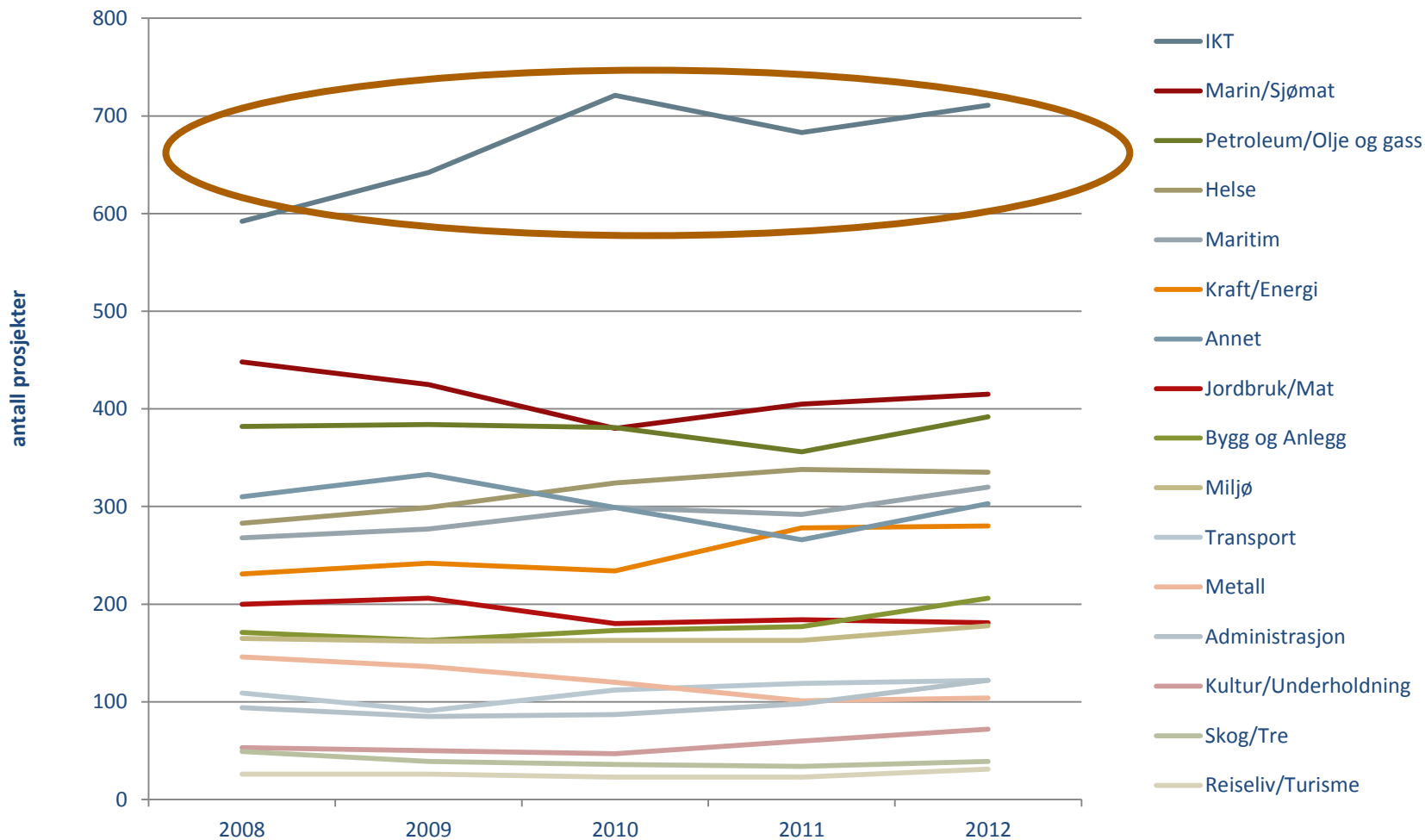


VERDIKT-forskere utvikler intelligente gjenstander som kan brukes til å aktivisere barn med funksjonsnedsettelse og deres nærmeste.

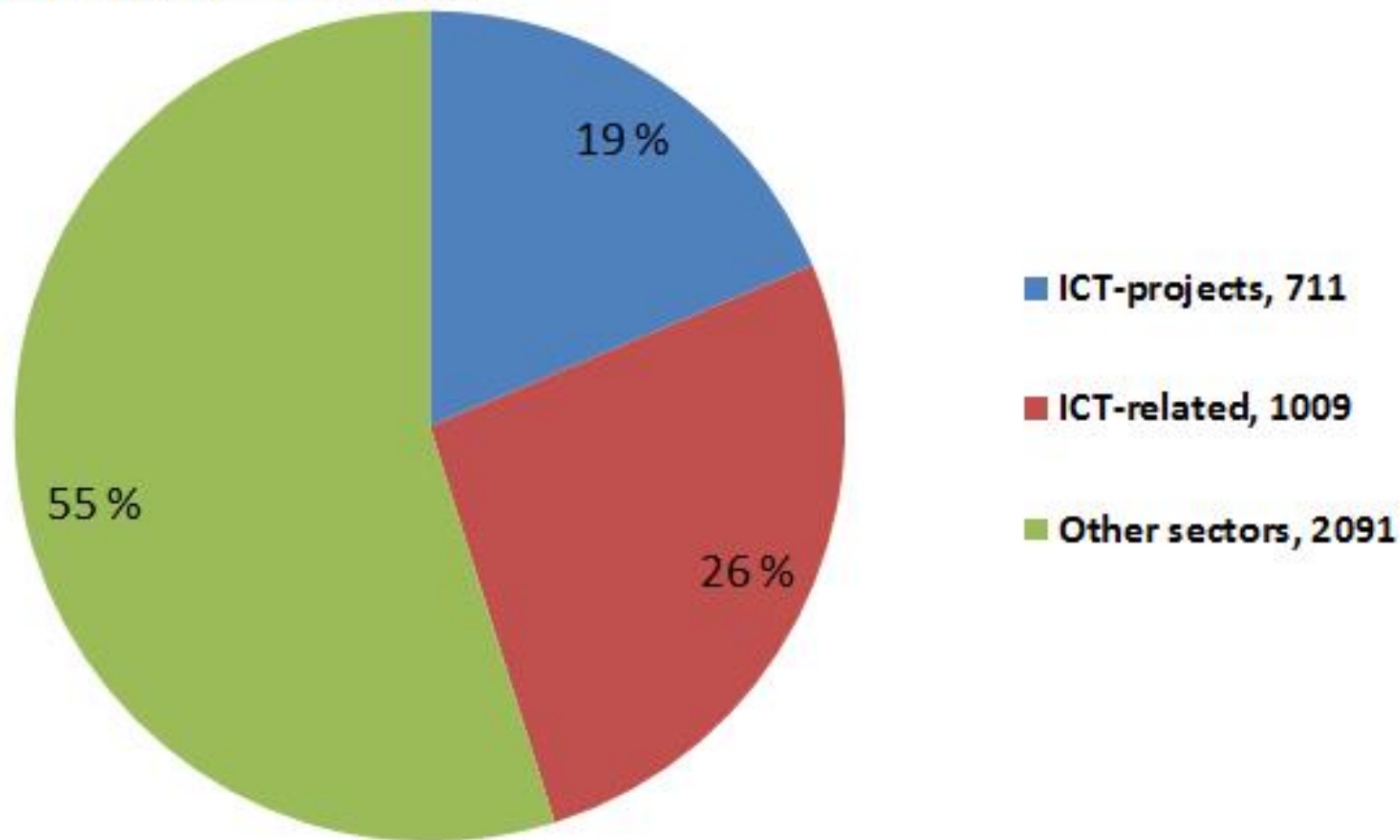
RCN investments in and for various business sectors in 2012



Aktive SkatteFUNN-prosjekter fordelt på sektor (2008 - 2012)



ICT in SkatteFUNN 2012




ICT R&D trends

- Growth in industry-driven R&D
- Expanding into many areas, incl social challenges (health, security and others)
- Public sector; promising tendency
- The RCN evaluation: *Why underinvestment in ICT R&D?*
- Our advice: *Growth, capacity building, societal challenges and innovation in all sectors*

The Norwegian ICT-business?

Reve et al, «Et kunnskapsbasert Norge» 2012

- A business sector for other sectors?
- Challenges
 - Recruitment
 - Cost
 - Capital
 - Public sector; strategy and competence

 From a front liner to an advanced user and follower?



ICT R&D in Horizon 2020

- **Excellent Science**
 - ERC, FET, Marie Curie, eInfrastructures
- **Industrial Leadership**
 - ICT programme
- **Societal Challenges**
 - ICT is key for solving societal challenges
 - Interdisciplinary projects
 - Opportunities for ICT in all areas

New large scale program IKT2025



ICT FRONTIER

GROUNDBREAKING
RESEARCH RESULTS



ICT EXCELLENCE

KEY COMPETENCE
AND EXCELLENT
RESEARCH GROUPS



ICT GROWTH

INDUSTRIAL
DEVELOPMENT AND
GROWTH AREAS



ICT LIGHTHOUSE

PRIORITISED SOCIETAL
CHALLENGES

INTERPLAY

| RESPONSIBLE INNOVATION |

INTERNATIONALISATION



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SENSORER I HELSEVESENET

Skal gjøre helsevesenet trygg

Nordmenn utvikler sikkerhetssystem for tingenes internett.



Testing new solutions to complex problems

