



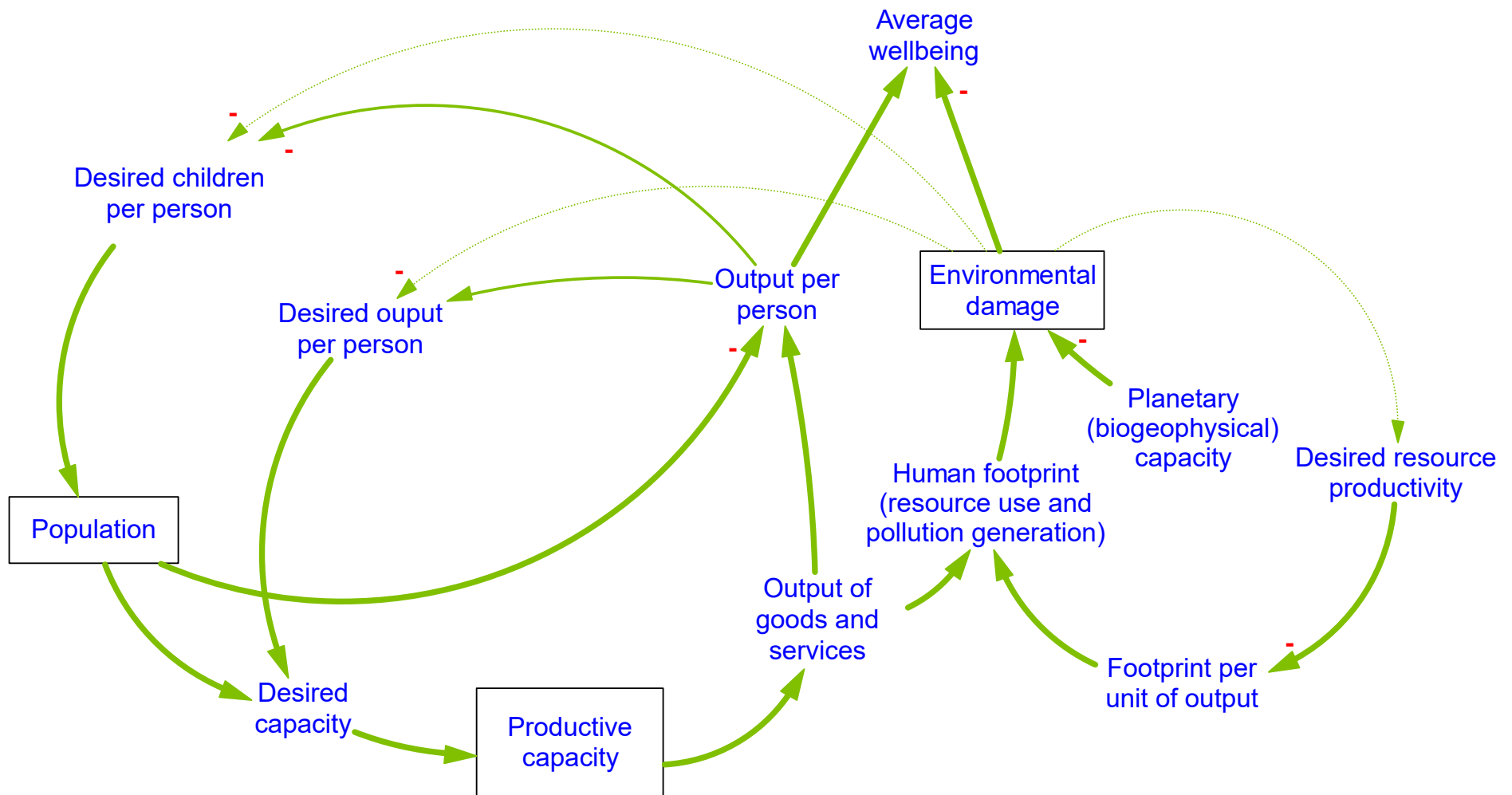
CENTRE FOR
GREEN GROWTH

Lessons from 8 attempts at saving the world

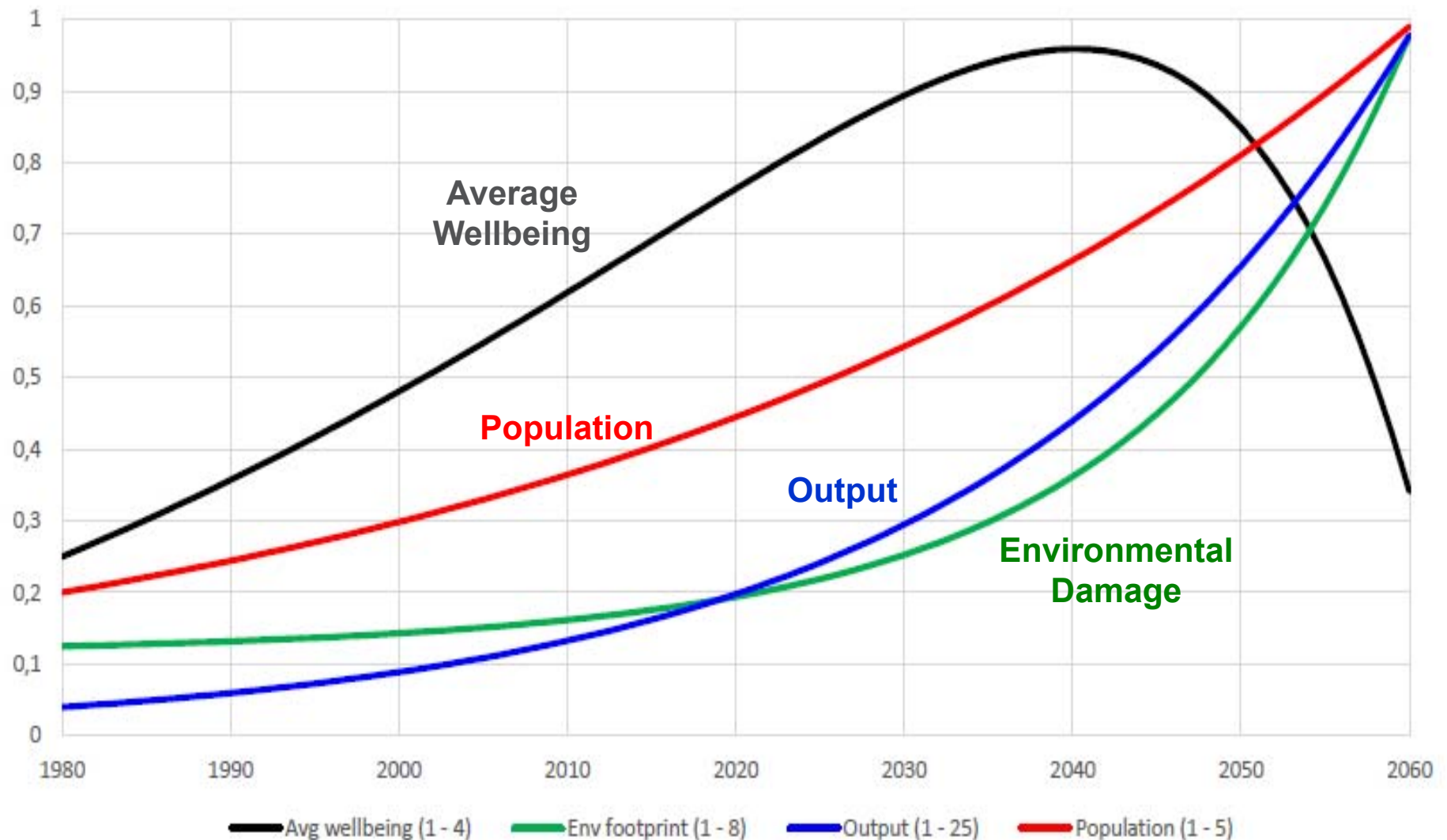
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Climate strategy
BI Norwegian Business School

International System Dynamics Conference
Reykjavik, Iceland, August 8, 2018

Population and economic growth on a finite planet



Population and economic growth on a finite planet





The Limits to Growth
(LTG):
Twelve scenarios for
the 21st century,
warning against
growth beyond the
carrying capacity of
small planet Earth.

1. Studying growth on a finite planet 1970-75

Lesson one:

It (certainly) is not enough
to tell people what your model says
if the model advice differs
from people's preconceived beliefs.

2. Studying growth in industrial sectors 1975-81

Lesson two:

**If you want people to love your model
(and understand its unconventional
and counter-intuitive conclusions),
they must participate in
the construction of the model**

3. Forecasting long term sector futures 1981-91

Lesson three:

**Most people (feel forced to) follow
the conventional wisdom of their
surroundings,
even when they know
they could have benefitted
from following your model advice.**

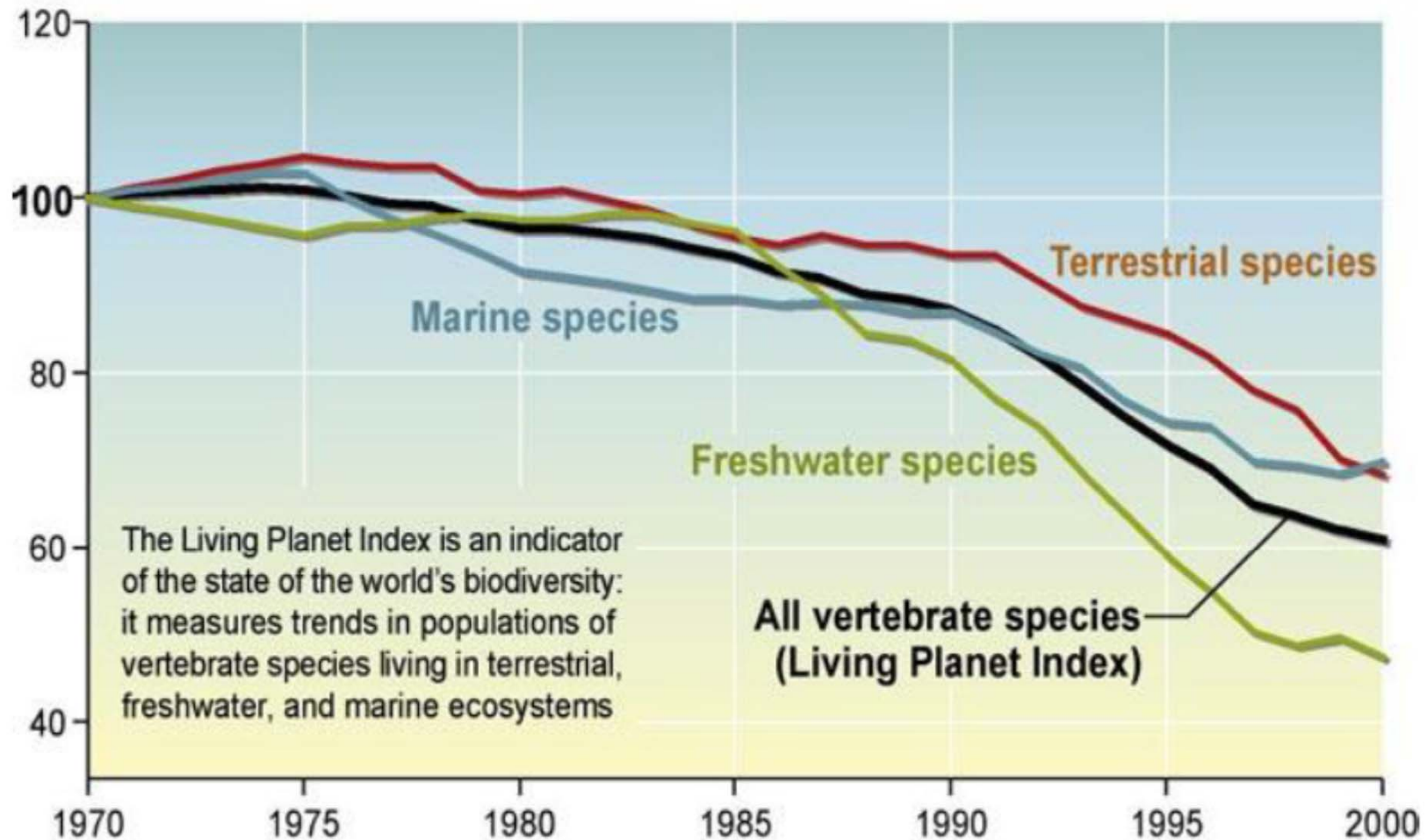
4. Green investments to save the world 1991-94

Lesson four:

**What society needs most
(eg reduced emissions),
is not
what is most profitable
in the investor perspective**

The WWF Living Planet Index 1970 - 2000

Population Index = 100 in 1970



5. Gathering support for conservation 1994-99

Lesson five:

To focus public attention on a slowly emerging problem, it helps to establish a quantitative performance indicator which is updated annually with great fanfare.

Must be repeated for more than 10 years.

6. Cutting Norway's climate emissions 2005-10

Lesson six:

**Most people
(at least rich Norwegians)
are not willing to spend money
(or change jobs)
today
in order to obtain an uncertain benefit
for their children or grand-children in
30 years.**

A Global Forecast
for the Next Forty Years



Jorgen Randers

A REPORT TO THE CLUB OF ROME
COMMEMORATING THE 40TH ANNIVERSARY OF
The Limits to Growth

EINE GLOBALE PROGNOSE
FÜR DIE NÄCHSTEN 40 JAHRE



나은 미래는
계 오지 않는다

A Global Forecast for the Next Forty Years
편운 세계, 나와 내 아이는 어떤 하루를 살고 있을까

2052 – A Global
Forecast for the Next
Forty Years

**A forecast of global
developments to 2052,
predicting that global
warming will exceed +2
deg C in mid-century**

See www.2052.info

今後 40 年のグローバル予測

ヨルゲン・ランデース
著
2012年10月

2052年までの地球の未来
予測
2012年10月

2052



2052

7. Warning people about their future 2011-15

Lesson seven:

**One cannot scare people into action
by telling them ahead of time
what sad future will result
from continuation
of their current behavior.**

8. Smart sustainability policy for rich world, 2016-7

Lesson eight:

**There is not necessarily
majority support for strong action,
even if it gives benefits
in the short term
and solves the underlying problem
in the long run.**

9. Planning the green transition in China 2017-

Lesson nine:



We need to act – and models are useful!

