

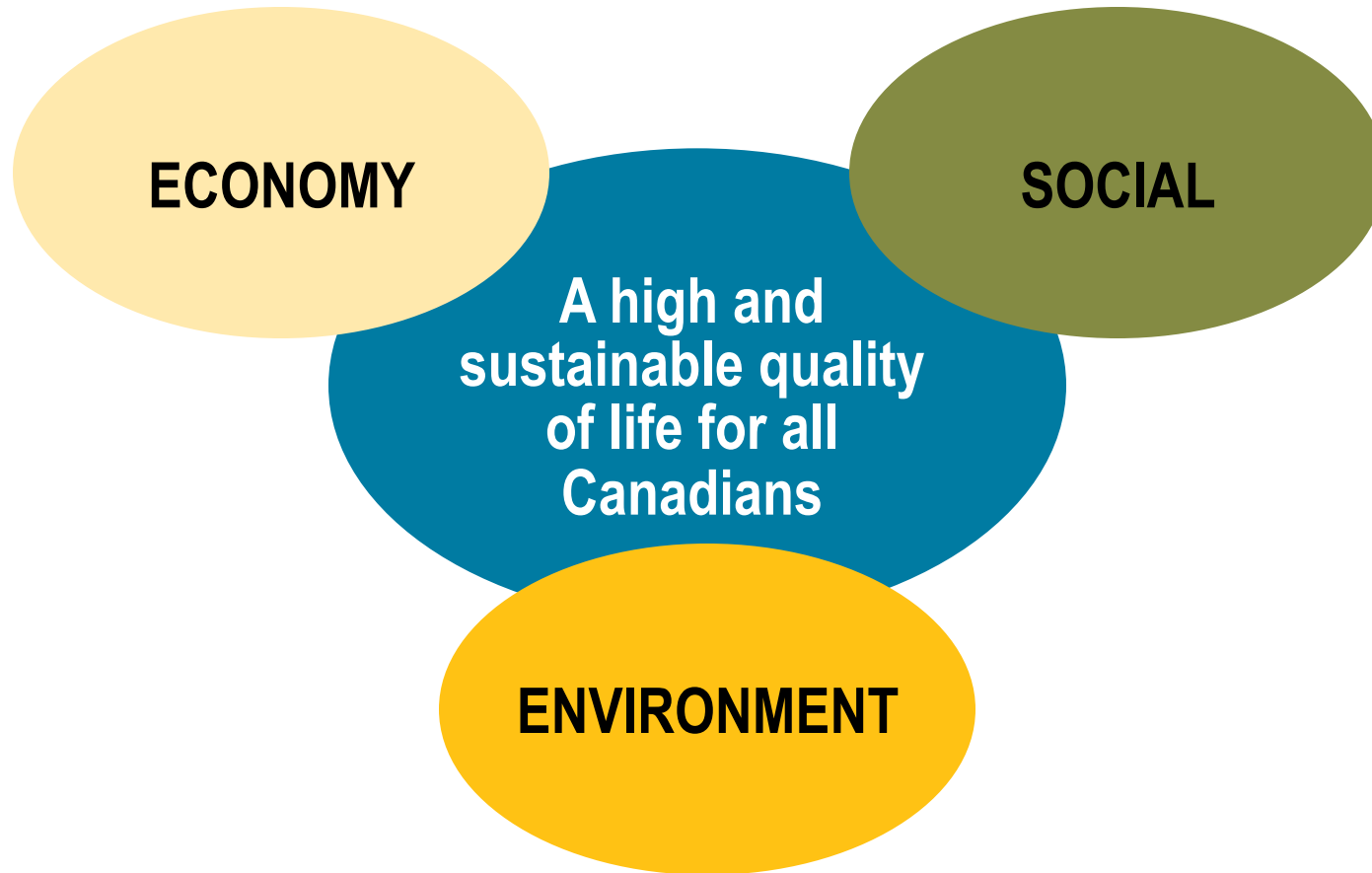
# How Canada Performs:

## Evaluating Environmental Performance

**Glen Hodgson**

Executive Vice President and Chief Economist,  
The Conference Board of Canada  
October 3, 2013

The Conference Board believes our economic, social and environmental policies are interdependent.



# How Canada Performs: The Conference Board's report card

- We have been producing a report card on Canada for nearly two decades.
- Compares Canada to leading OECD countries across six domains:
  - Economy
  - Education and Skills
  - Environment
  - Health
  - Innovation
  - Society

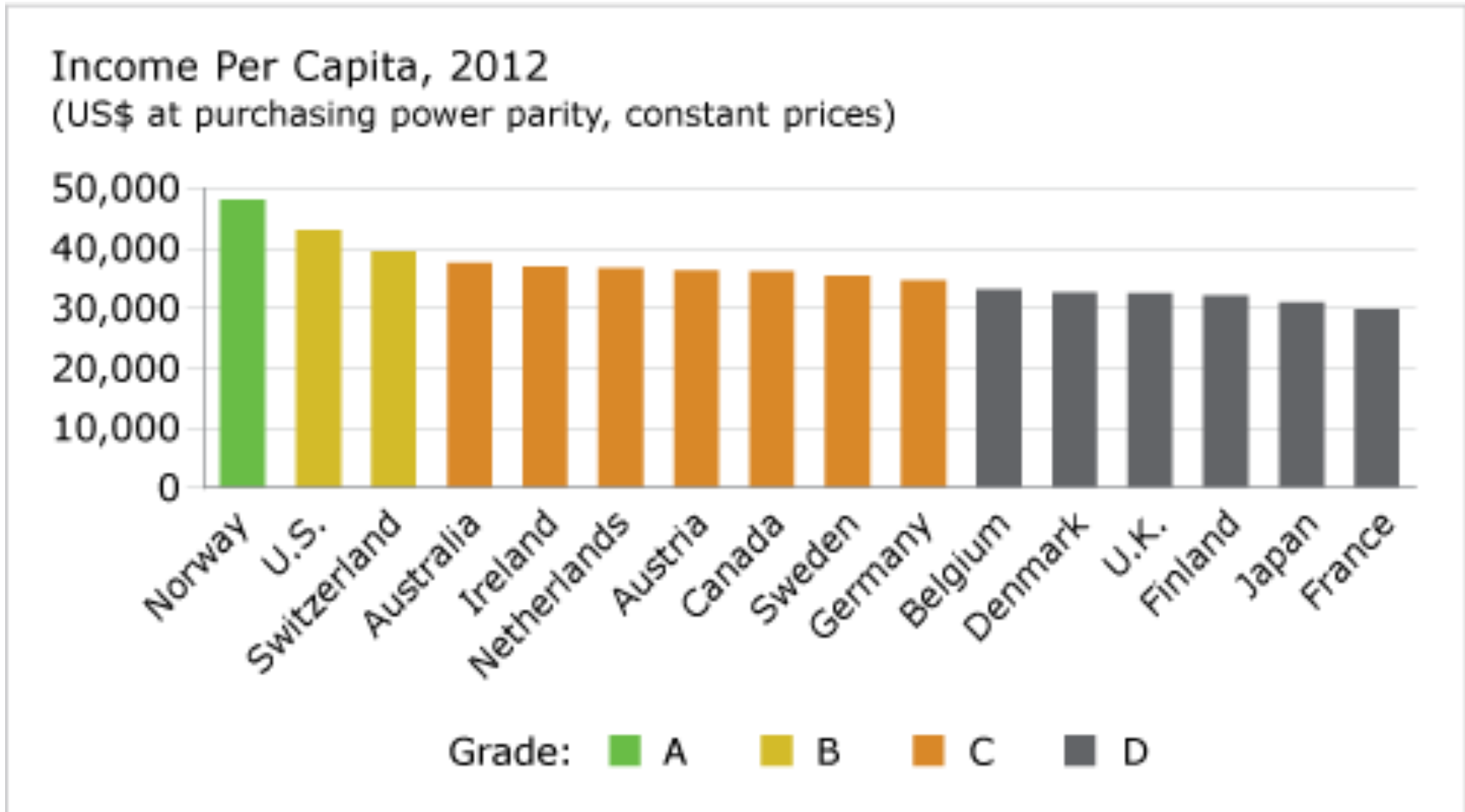


# Report Card on the Economy

REPORT CARD		
Economy		
1	Norway	A
2	Australia	A
3	Belgium	B
4	U.S.	B
5	Austria	B
6	Canada	B
7	Sweden	C
8	Switzerland	C
9	Denmark	C
10	Germany	C
11	Japan	C
12	Finland	D
13	Netherlands	D
14	U.K.	D
15	France	D
16	Ireland	D

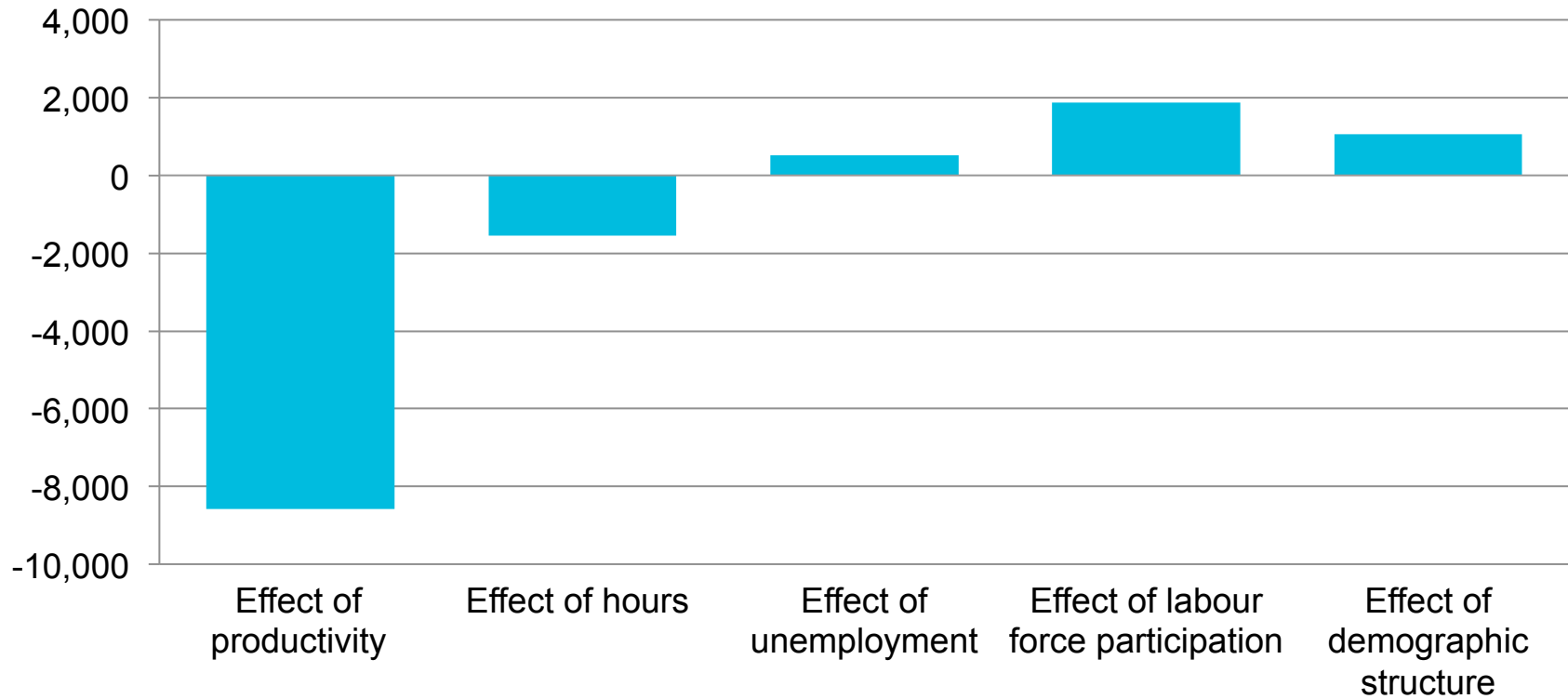
Note: Data for the most recent year available were used.  
Source: The Conference Board of Canada.

# Report Card on the Economy



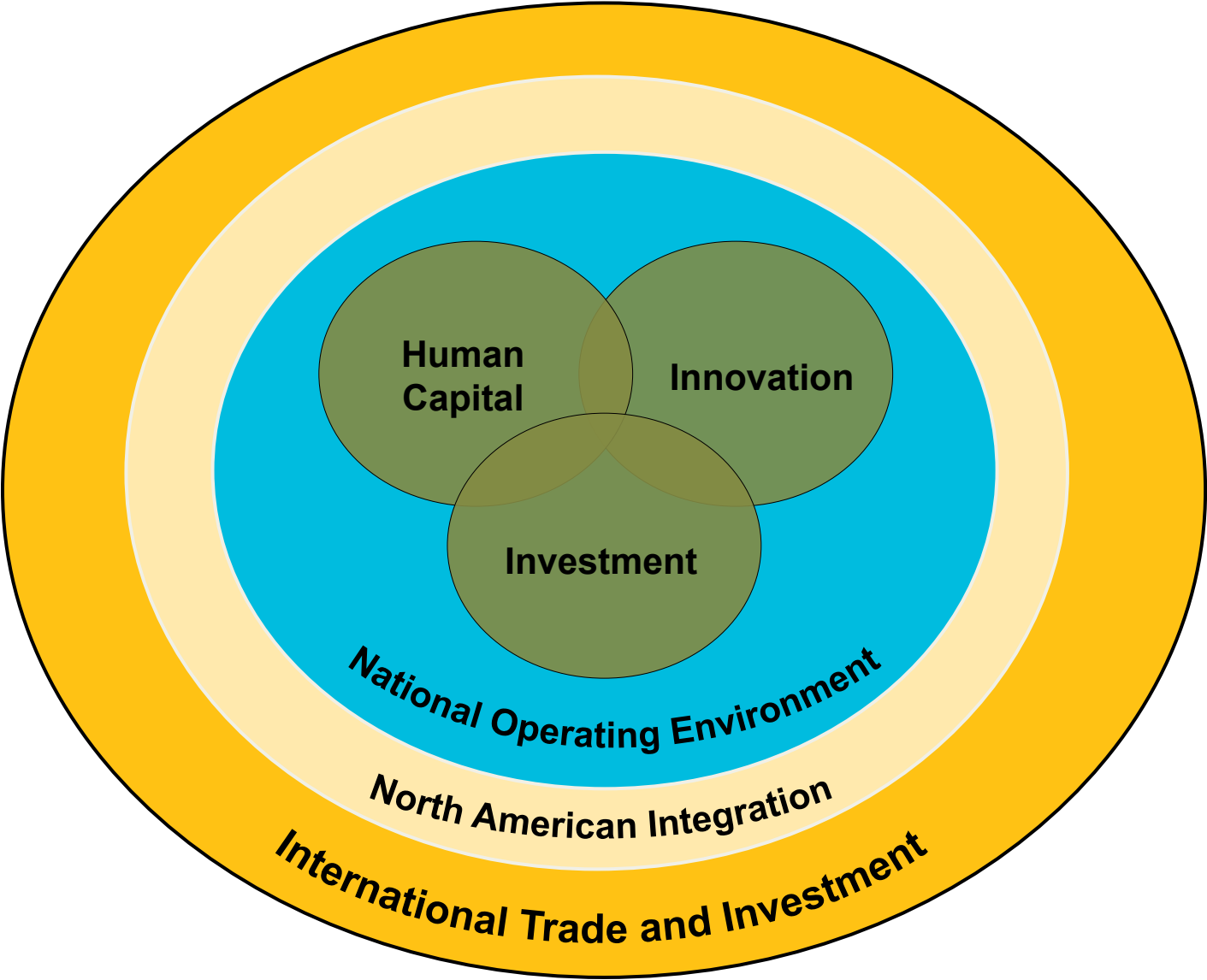
# Factors affecting the Canada–U.S. gap in income per capita

\$US, 2012.



Sources: The Conference Board of Canada; OECD.

# Productivity: A Conceptual Policy Framework



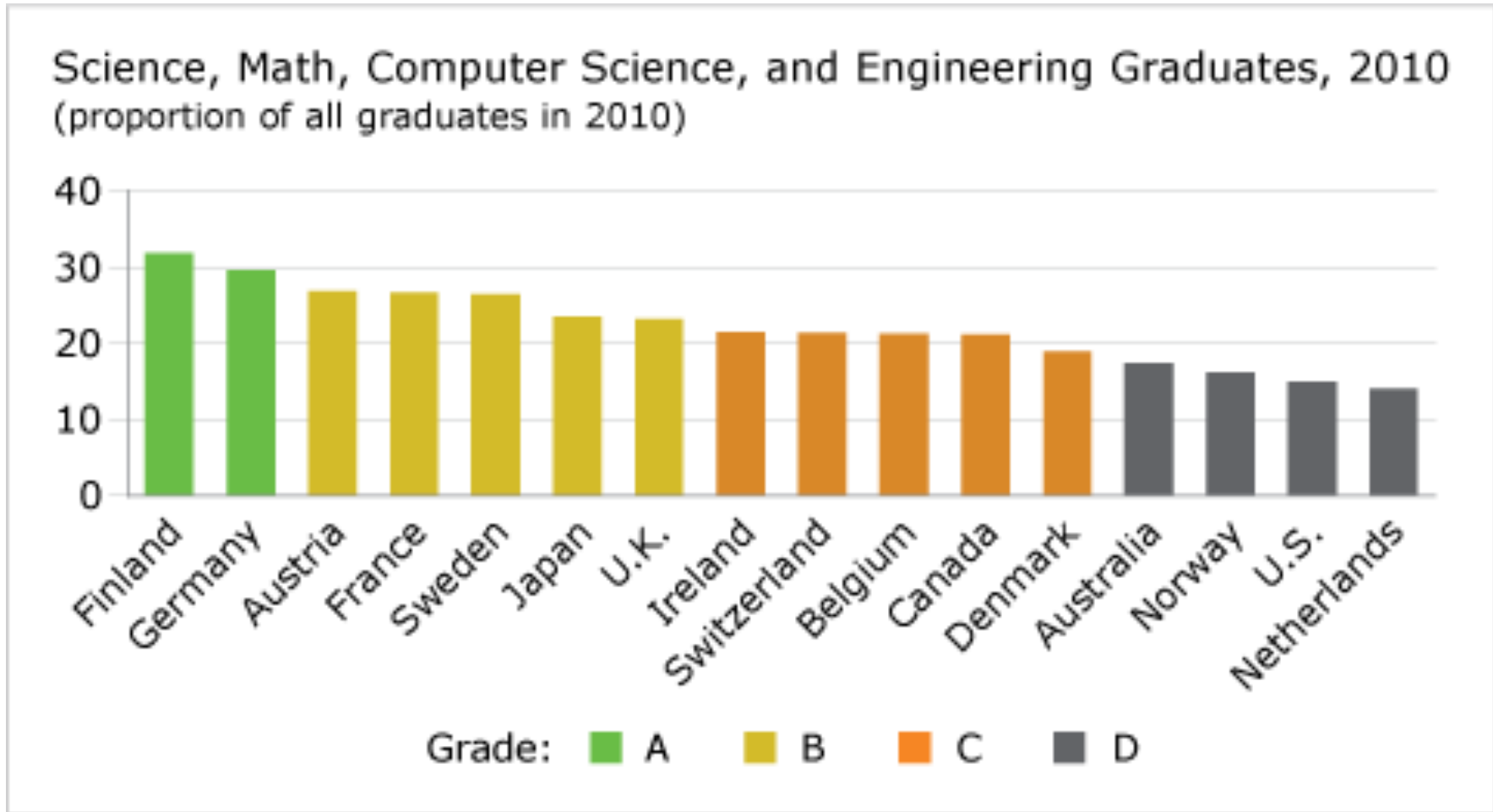
# Report Card on Education and Skills

REPORT CARD		
Education and Skills		
1	Finland	A
2	Canada	A
3	Japan	B
4	Australia	B
5	Switzerland	B
6	Sweden	C
7	Germany	C
8	U.K.	C
9	Netherlands	C
10	Norway	C
11	U.S.	C
12	Belgium	D
13	Ireland	D
14	Austria	D
15	Denmark	D
16	France	D

Note: Data for the most recent year available used.  
Source: The Conference Board of Canada.



# Report Card on Education and Skills



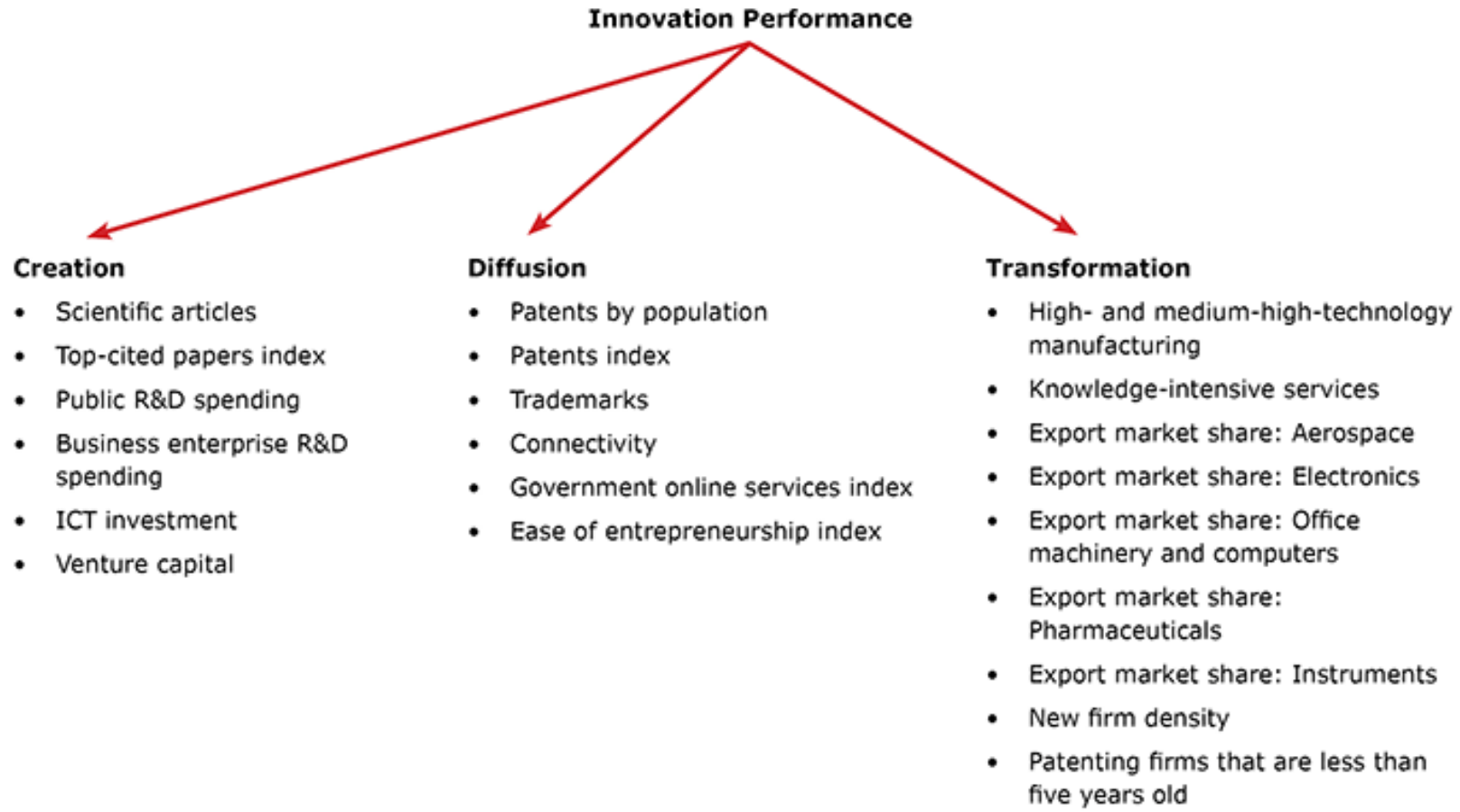
Sources: The Conference Board of Canada; OECD.

# Report Card on Innovation

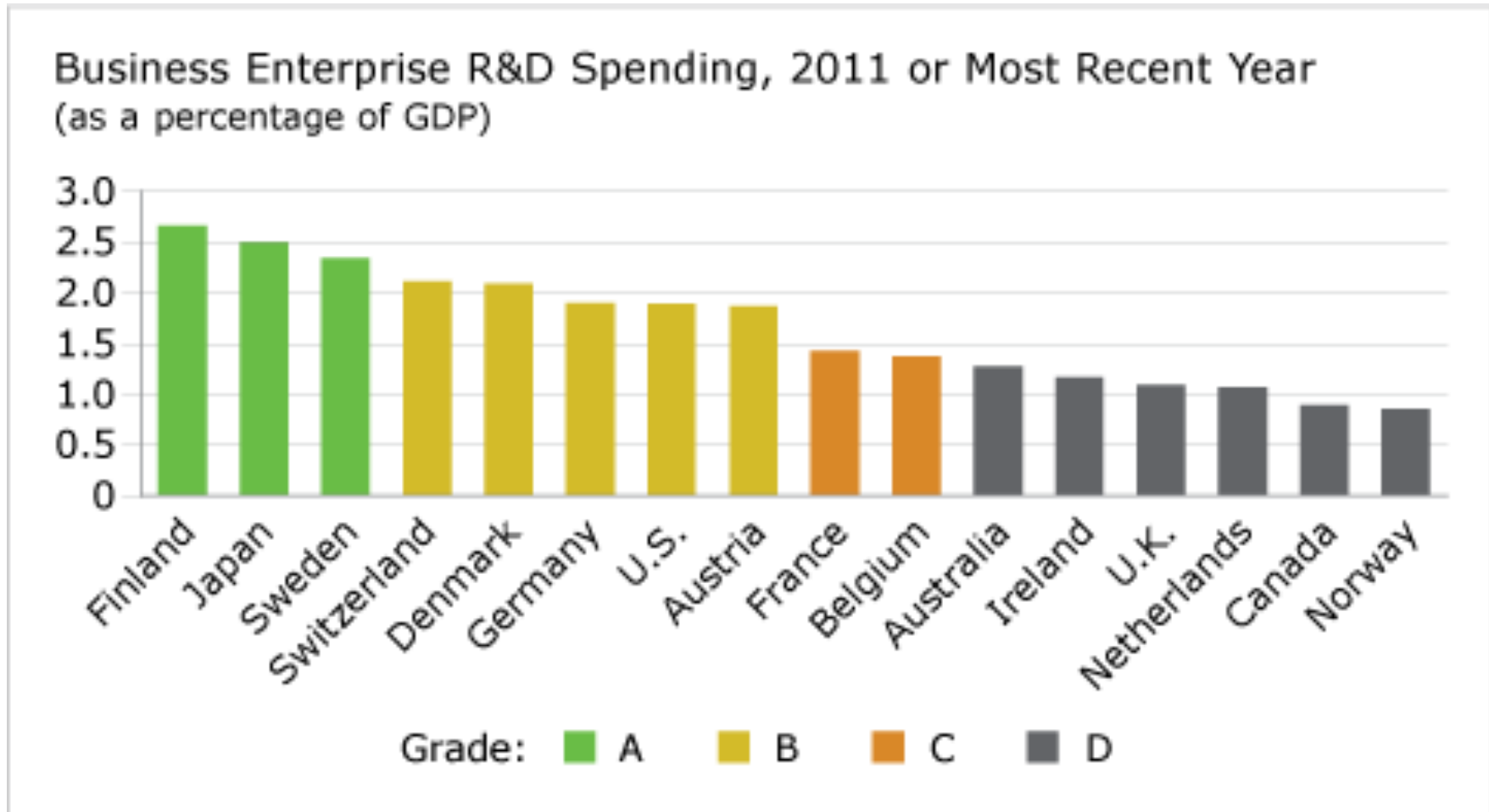
REPORT CARD		
Innovation		
1	Switzerland	A
2	Sweden	A
3	U.S.	A
4	Denmark	B
5	Netherlands	B
6	U.K.	B
7	Finland	B
8	Ireland	C
9	Japan	C
10	France	C
11	Germany	D
12	Australia	D
13	Canada	D
14	Norway	D
15	Austria	D
16	Belgium	D

Note: Data for the most recent year available were used.  
Source: The Conference Board of Canada.

# Report Card on Innovation

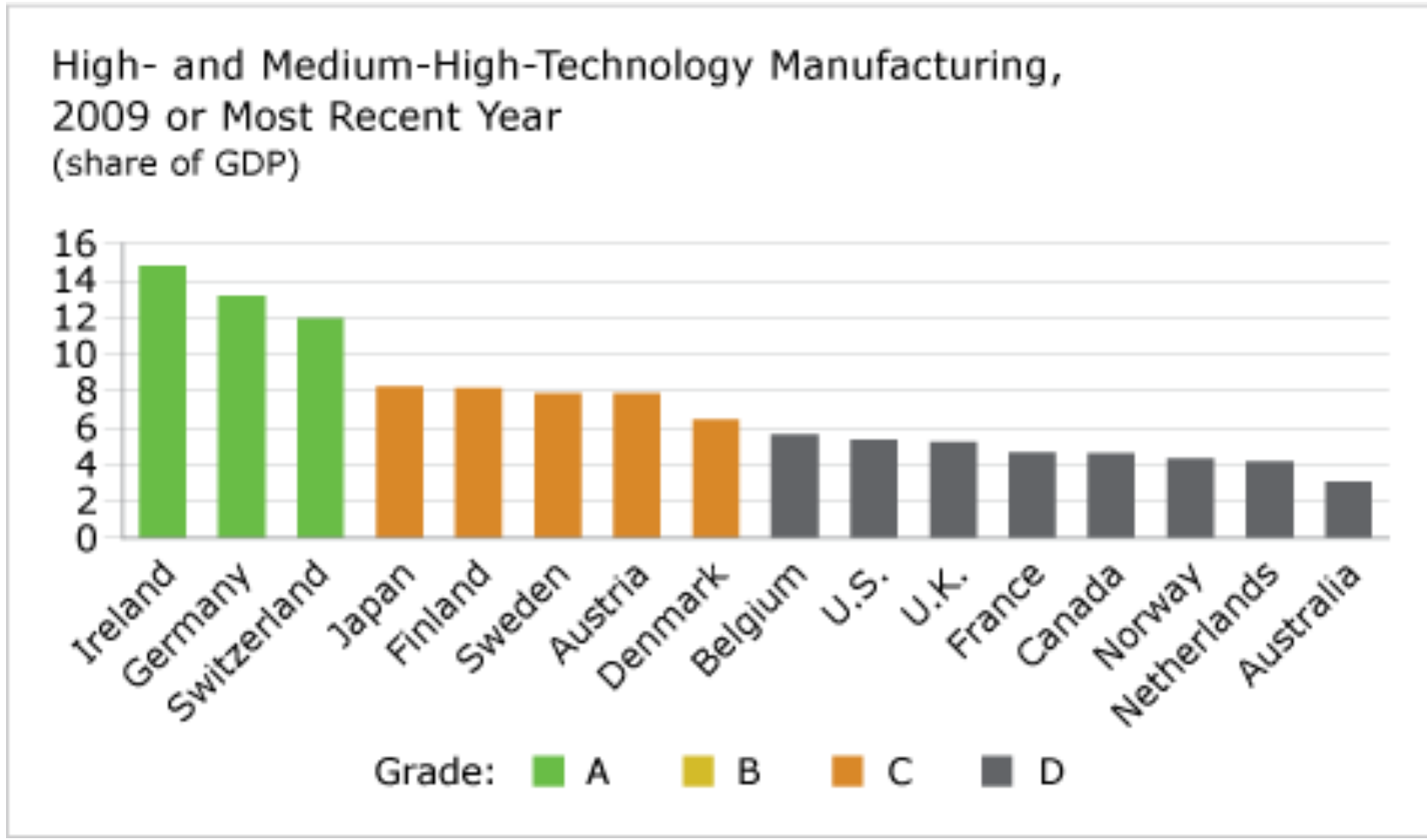


# Report Card on Innovation



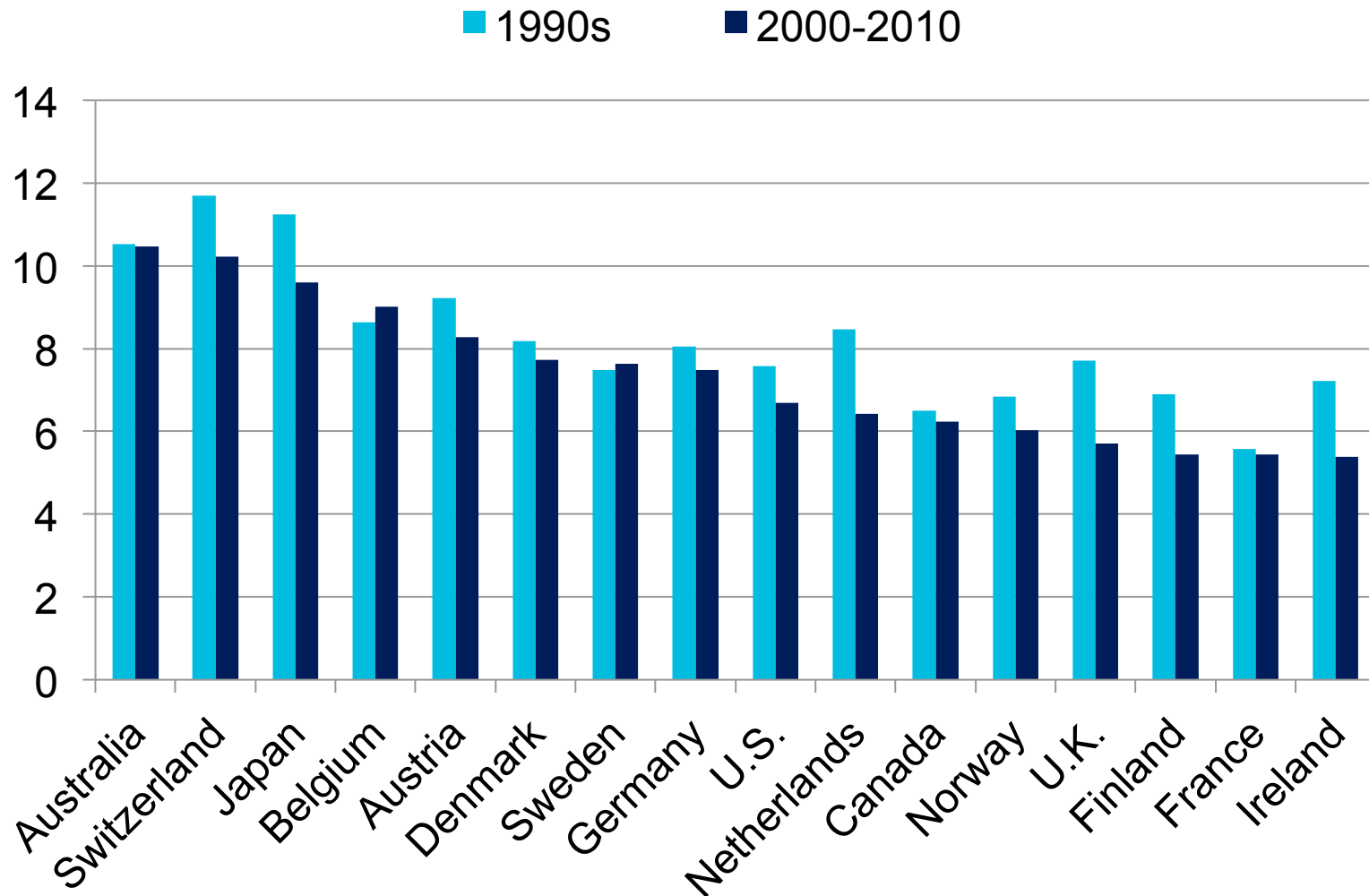
Sources: The Conference Board of Canada; OECD.

# Report Card on Innovation



Sources: The Conference Board of Canada; OECD.

# M&E Investment as a % of GDP



Source: OECD.

# Report Card on Society

REPORT CARD		
Society		
1	Denmark	A
2	Norway	A
3	Sweden	A
4	Netherlands	A
5	Finland	A
6	Austria	A
7	Canada	B
8	Belgium	B
9	Ireland	B
10	Germany	B
11	Switzerland	B
12	France	B
13	Australia	B
14	U.K.	C
15	Italy	C
16	Japan	D
17	U.S.	D

Note: Data for the most recent year available used.  
Source: The Conference Board of Canada.

# Report Card on the Environment

REPORT CARD		
Environment		
1	France	A
2	Norway	A
3	Sweden	A
4	U.K.	A
5	Ireland	A
6	Switzerland	A
7	Japan	A
8	Italy	A
9	Austria	A
10	Denmark	A
11	Germany	B
12	Finland	B
13	Belgium	B
14	Netherlands	B
15	Canada	C
16	U.S.	D
17	Australia	D

Note: Data for the most recent year available used.  
Source: The Conference Board of Canada.



# Report Card on the Environment

Canada's performance is above average on five indicators:

- use of forest resources
- low-emitting electricity production
- Water Quality Index
- threatened species
- particulate matter concentration

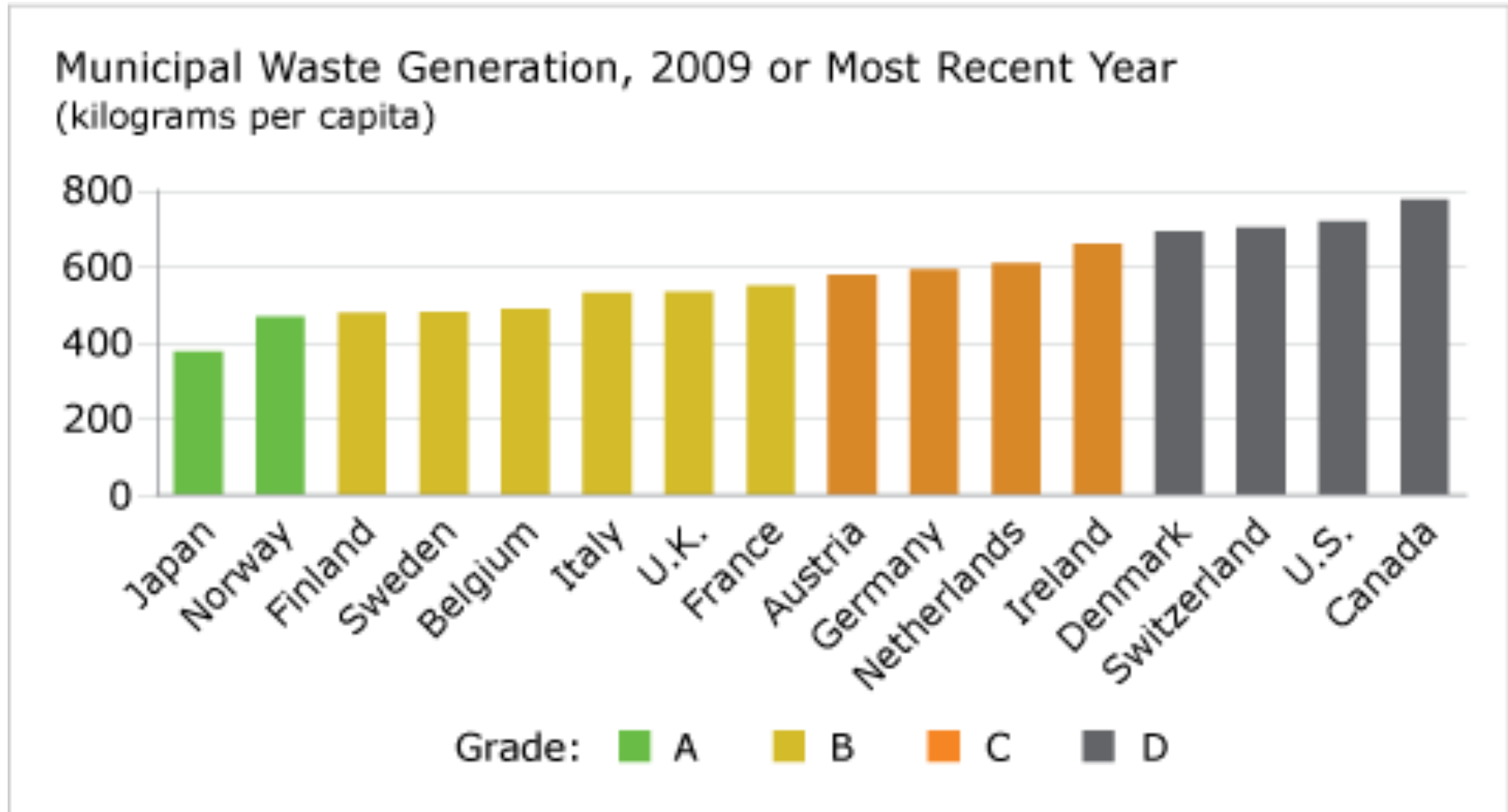


# Report Card on the Environment

Canada's performance is below average on nine indicators:

- forest cover change
- nitrogen oxides emissions
- sulphur oxides emissions
- Marine Trophic Index
- greenhouse gas (GHG) emissions
- water withdrawals
- volatile organic compound (VOC) emissions
- energy intensity
- municipal waste generation

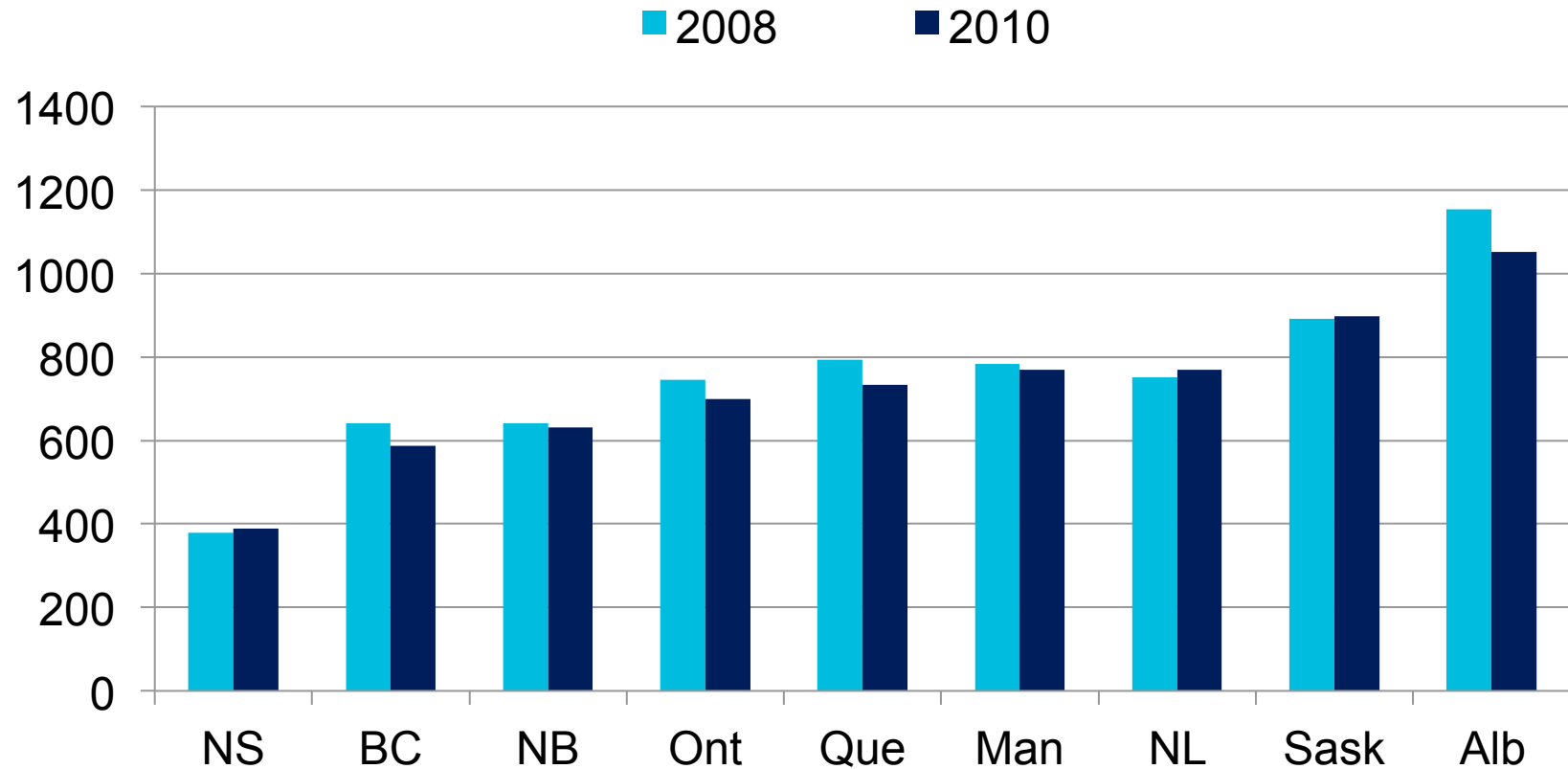
# Report Card on Innovation



Sources: The Conference Board of Canada; OECD.

# Waste Generation

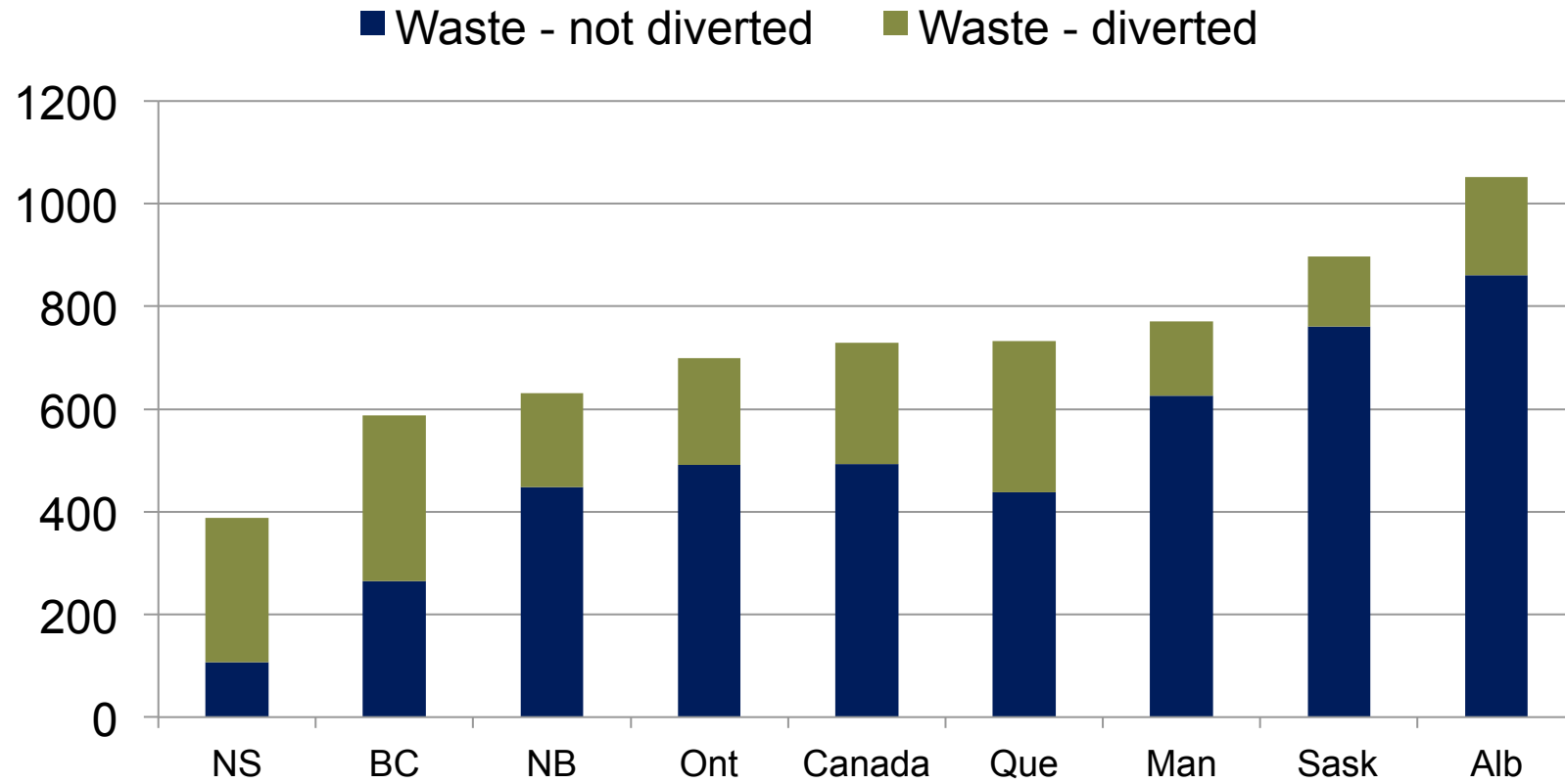
kg per capita.



Source: Statistics Canada, Waste Management Survey.

# Waste Generation and Diversion, 2010

kg per capita.



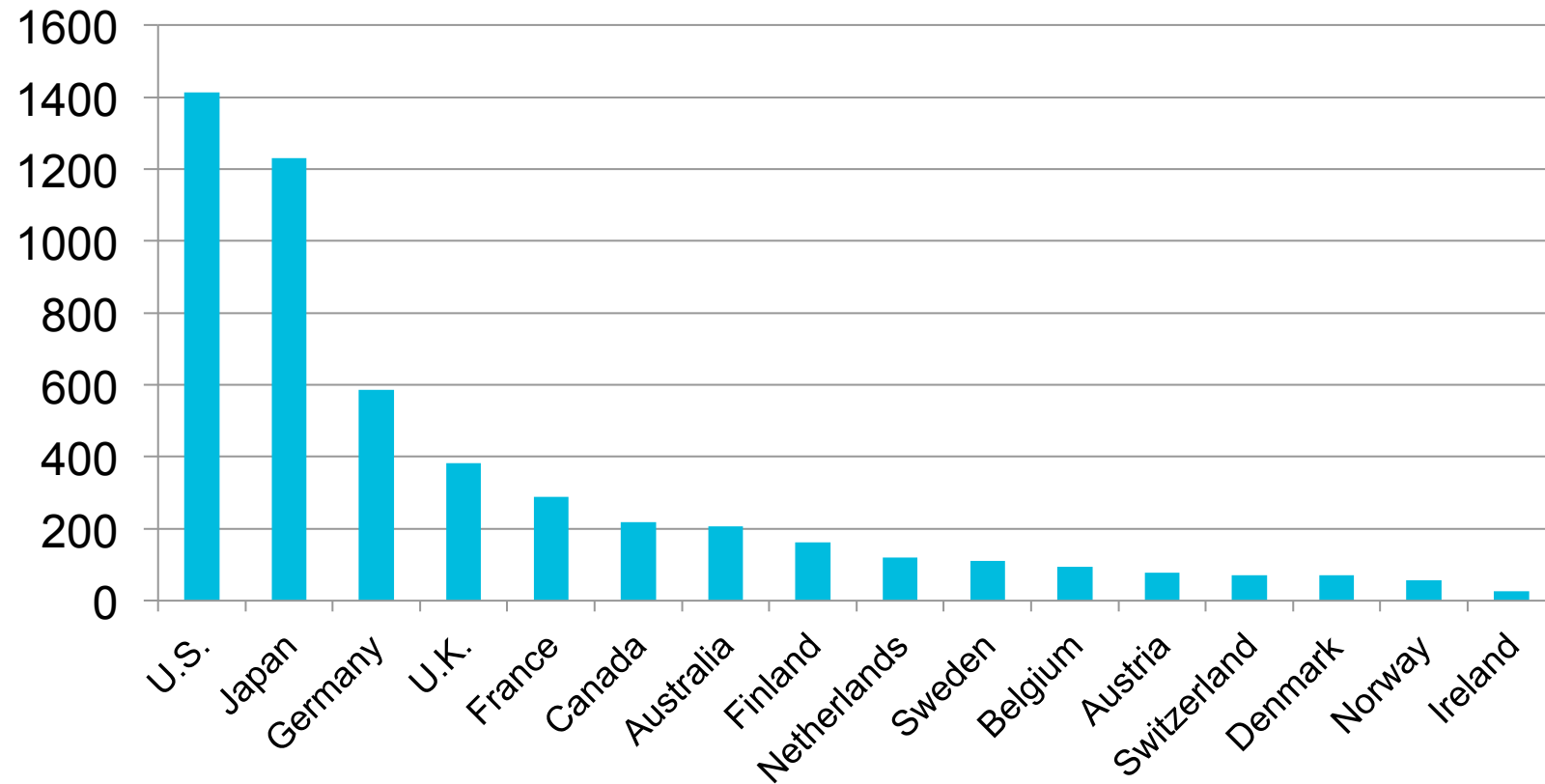
Source: Statistics Canada, Waste Management Survey.

# Innovation and Environment

- Innovation supports the achievement of both economic and environmental objectives.
- Innovation applies to environmental policies and policy instruments
- Are we creating the right incentives for the development and diffusion of innovative environmental technologies?



# Waste Management Patents, 2001-11

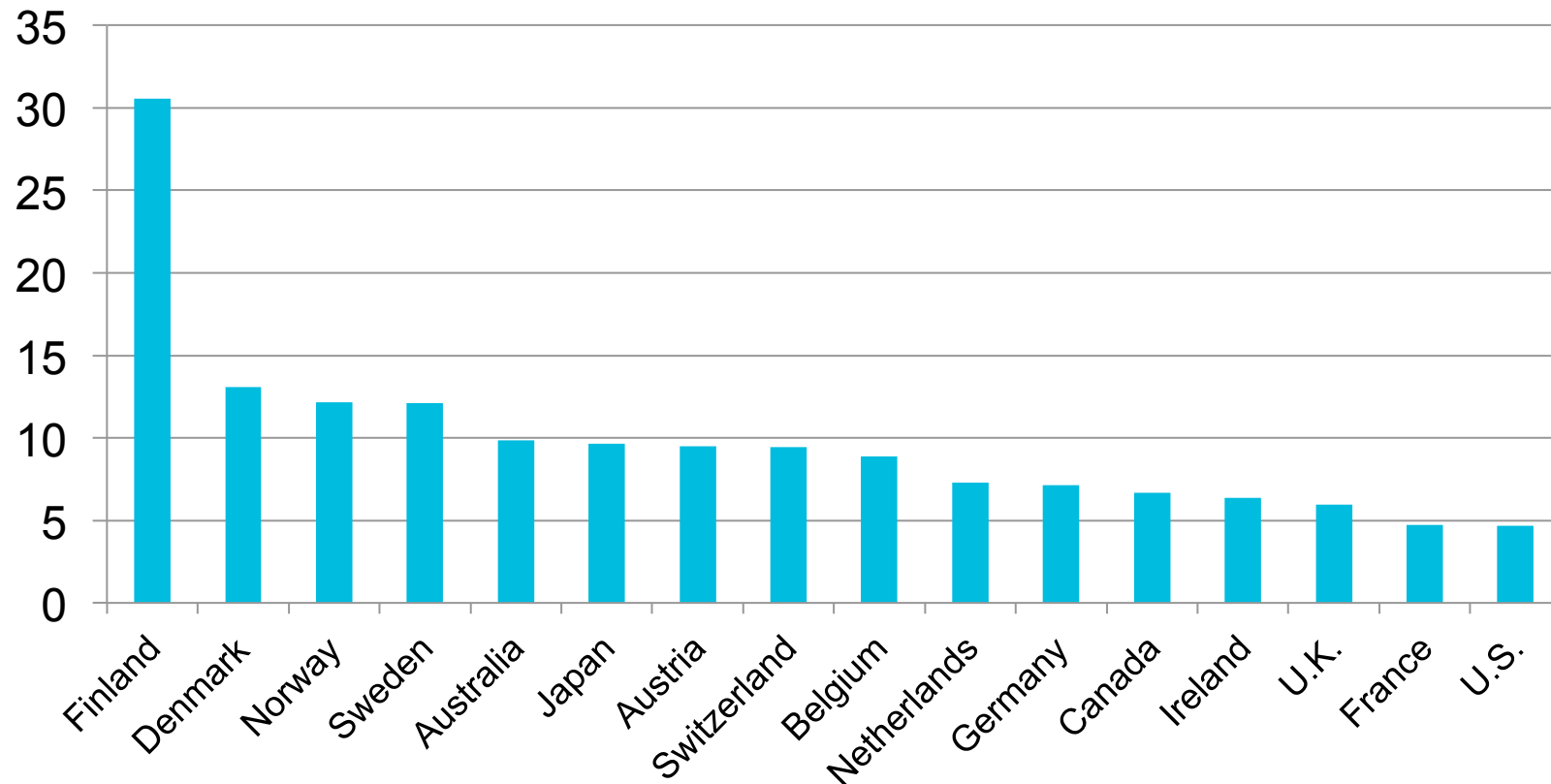


Sources: OECD; European Patent Office's World Patent Statistical (PATSTAT) Database.



# Waste Management Patents, 2001-11

per million population



Sources: OECD; European Patent Office's World Patent Statistical (PATSTAT) Database.





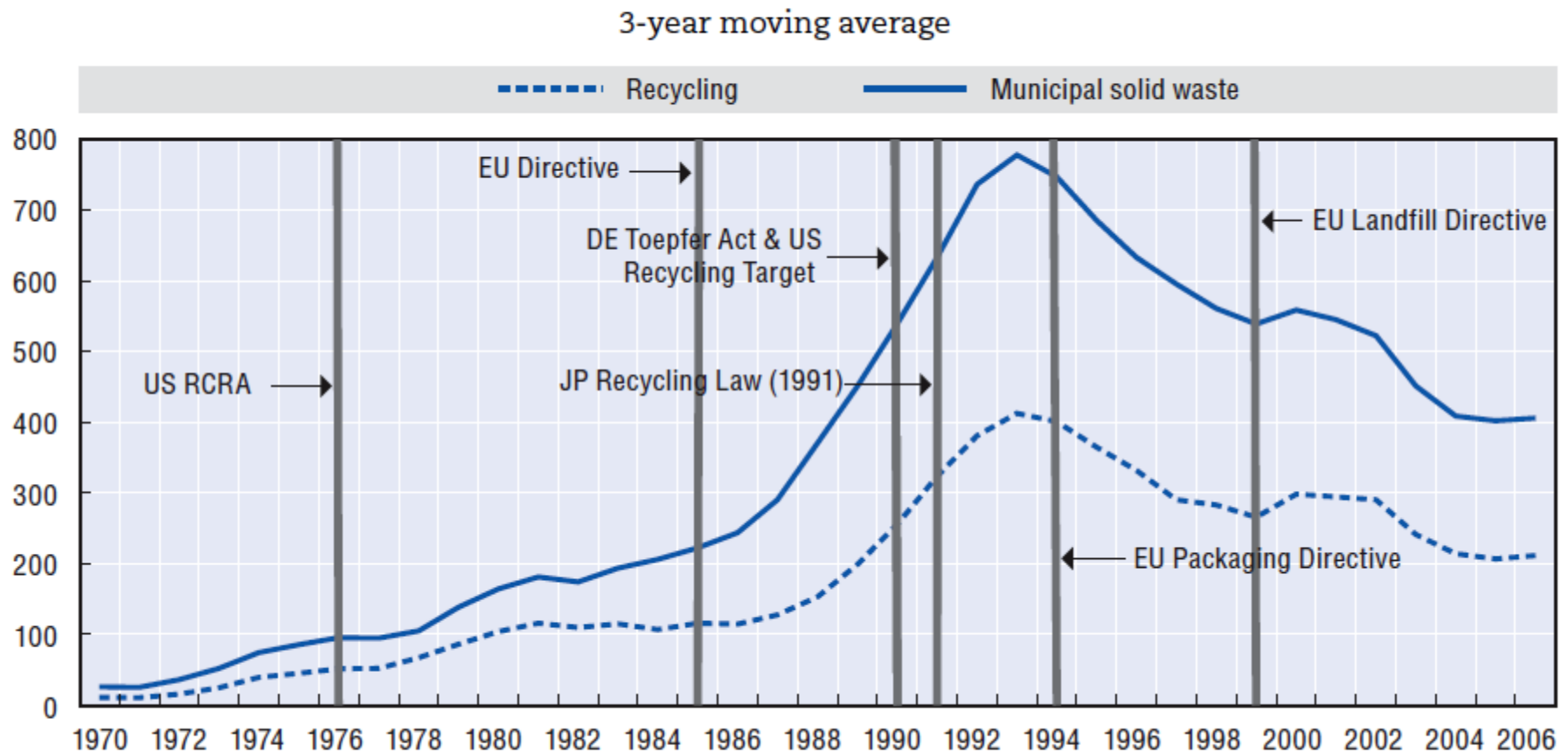
# Added analysis: OECD Report on Waste Management Innovation

- Regulation plays an important role in the promotion and diffusion of waste management innovation.
  - More stringent environmental policy increases the likelihood of using innovation to reduce environmental impacts.
  - The more “flexible” (or technology-neutral) a policy regime is, the more innovation takes place.

# OECD Report on Waste Management Innovation

- The waste sector in OECD countries has reached a degree of technological maturity
- Now experiencing a decreasing trend in patenting activities.
- There was a strong and positive link between policy action and innovation performance at the beginning of the 1990s.
- But this link is less clear in the last fifteen years.

# OECD Solid Waste Management and Recycling Patents



Source: OECD, *Invention and Transfer of Environmental Technologies*, 2011.



## Summary

- Canada gets a “C” grade on overall environmental performance and ranks 15th of 17 peer countries.
- “D” grade on the indicator measuring waste generation.

## Next Steps.

- Produce provincial report cards – Economy and Education in early 2014.
- Environment – Summer 2014.

[www.conferenceboard.ca/hcp](http://www.conferenceboard.ca/hcp)





The Conference Board  
of Canada

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