

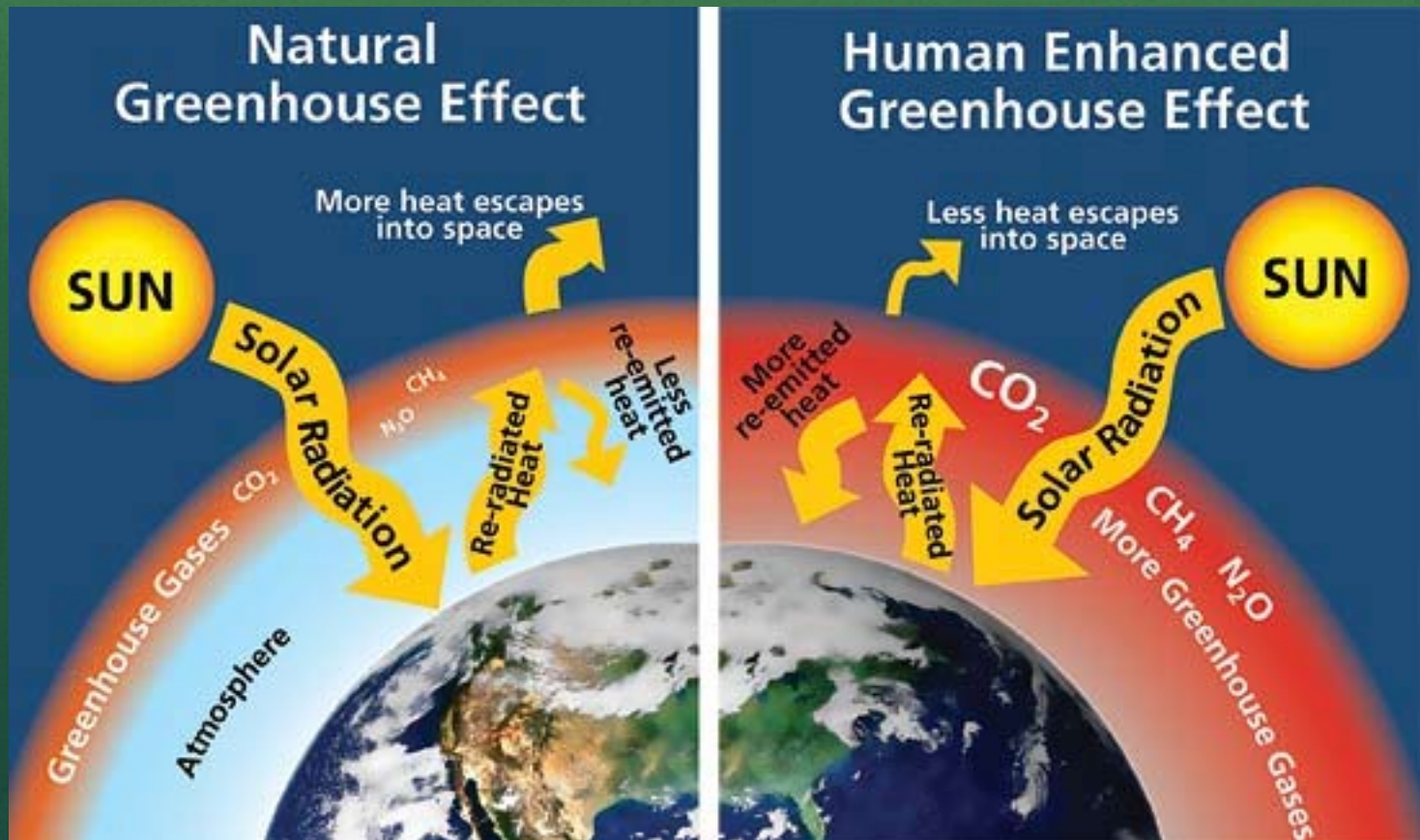


“The Climate Change
Challenge” ... engaging
the Environmental
Health Practitioner

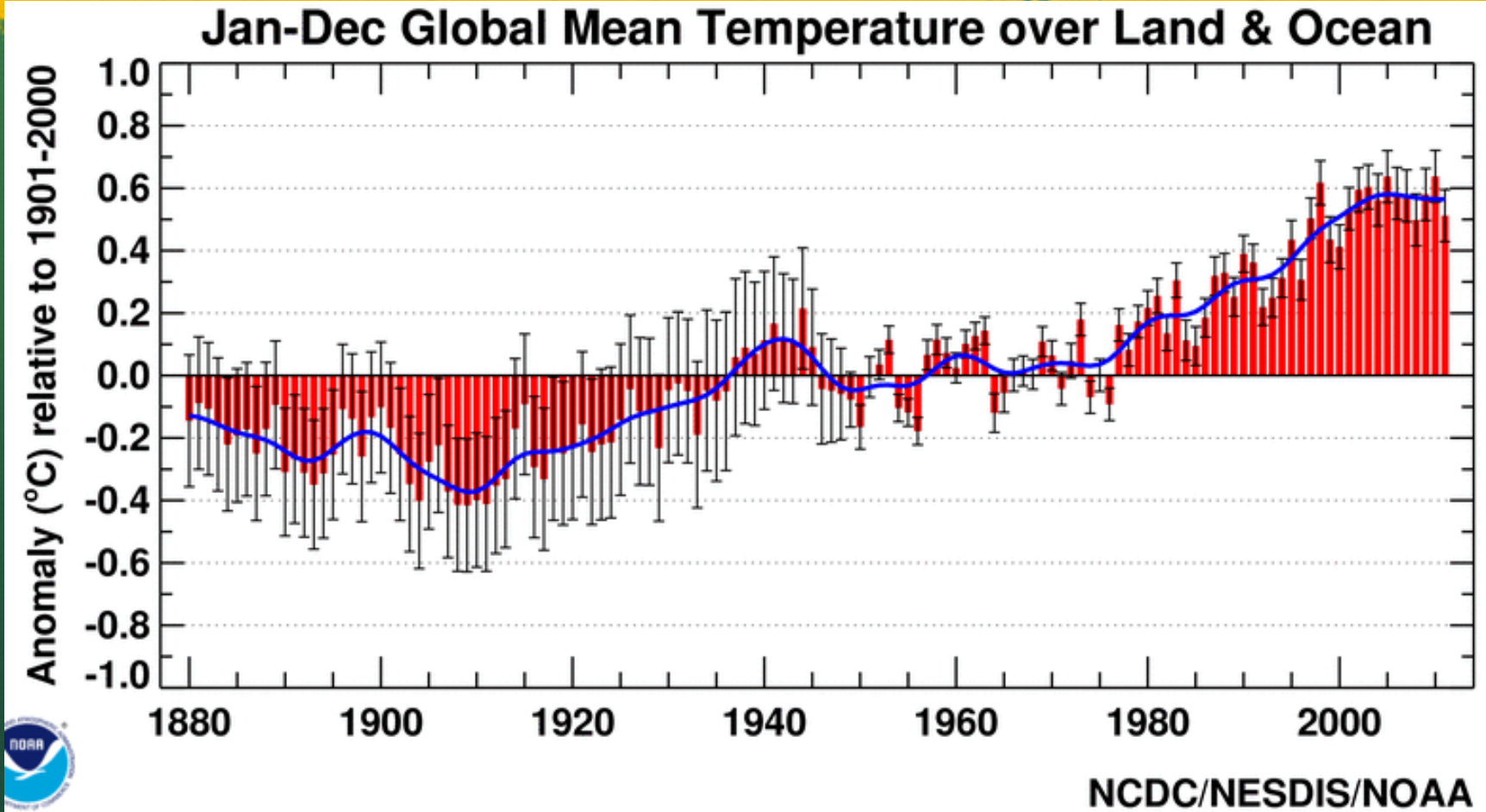
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Global Warming

- Increase in the global earth temperatures mainly due to increase emission of greenhouse gases (Friis 2012).



Global Average Temperature



Increase in Global Change- A Global Trend

- Amongst the most significant greenhouse gases are water vapor, methane and carbon dioxide, as there has been 35% more carbon dioxide in atmosphere compared to the last 650,000 years.
- In UK, about 40% of greenhouse gas emission comes from using energy at home, while driving and also traveling by plane.
- Since the end of 19th century, temperatures at the surface of the earth increased about 0.75 degree Celsius, and for the past 50 years the linear trend of increase has been about 0.13 degree Celsius.

Effects of Global Warming

- **Regional weather changes**

1. Heat Waves
2. Extreme weather
3. Temperature Precipitation

- **Health Effects**

1. Temperature-related illnesses and deaths
2. Extreme weather events-related health effects
3. Air-pollution related health effects
4. Water and foodborne diseases
5. Vector and rodent borne diseases



Individuals responsible for climate change challenge

- Environmental Health Practitioners (EHPs)
- Government
- Business
- Citizens



Meeting the Challenges of Climate Change

Public Agenda – 3 approaches for EHPs

- 1.They need decisive local, national, and international action to prevent and minimize the worst consequences of climate change
- 2.They need to make sure their most vulnerable communities adapt to the inevitable climate changes global warming will cause
- 3.They should trust the free market to lead the way in search for solutions

Public Agenda Approaches

Approach I- EHPs

1. Increase conservation and fuel efficiency
2. Increase federal funding for scientific research
3. Take a leading role in international efforts

Arguments for and against Approach I

Arguments in Favor	Arguments Against
Become less dependent on foreign sources of energy, especially oil	Expensive
Protect the overall economy from ecological disasters	Diversion from other problems such as health care and reducing federal deficit
Create new business opportunities in areas such as clean energy and “green” construction	Limit consumer choices while also raising prices as businesses pass their increasing costs on to consumers

Public Agenda Approaches

Approach II- EHPs

1. Adapt society to harsher weather conditions
2. Discourage people from living in areas that are likely to be hard-hit by floods and wildfires
3. Increase federal funding for scientific research

Arguments for and against Approach II

Arguments in Favor	Arguments Against
Saving lives rather than on unrealistic hopes of stopping global warming	Prevention and mitigation efforts are still crucial
Protect business from legislation that could harm productivity and prosperity	Adaptation strategy gives permission to polluters to continue to produce more greenhouse gases

Public Agenda Approaches

Approach III- EHPs

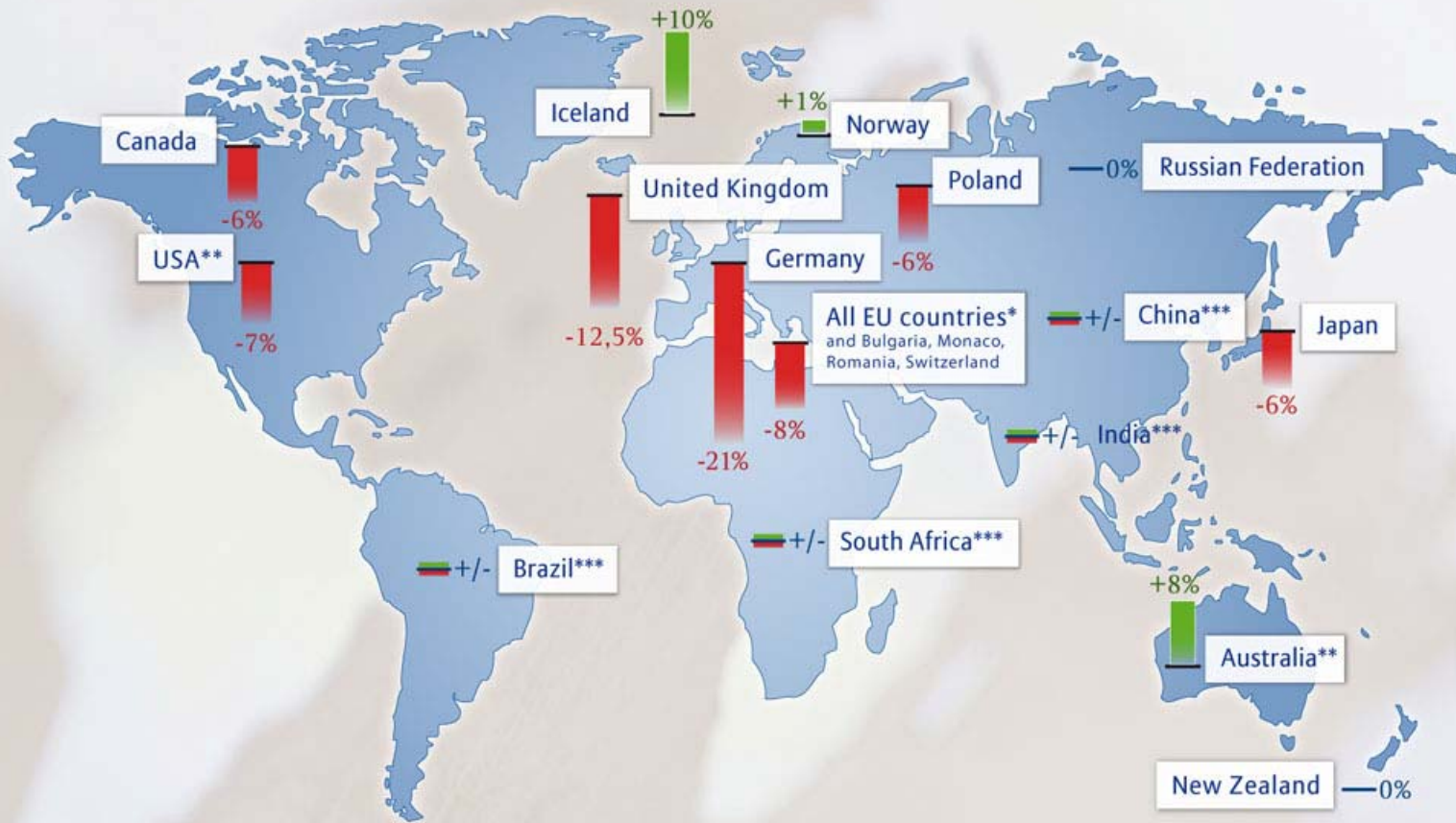
1. Cut back on regulation and red tape that might inhibit business from responding to new opportunities in alternative energy
2. Encouraging private sector research
3. Work toward international agreements

Arguments for and against Approach III

Arguments in Favor	Arguments Against
Help bring innovation and ingenuity of business to bear upon them	Free market wont solve all the problems
Avoid highly expensive government programs and intrusive regulations and policies that restrict the freedom of businesses and consumers	Business leaders can't make long-term, costly changes to bring about greater conservation and cleaner energy without significant government regulation and leadership

Kyoto Protocol

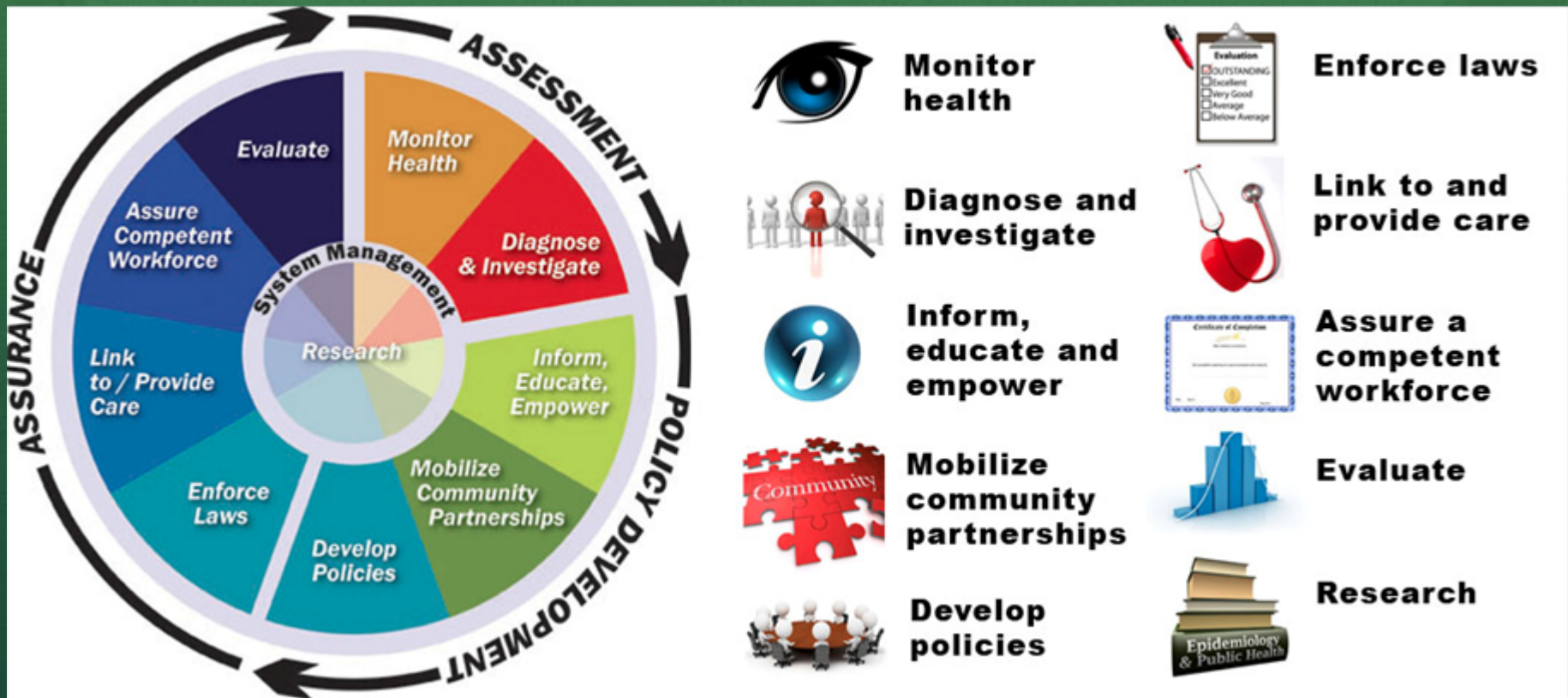
Emission Targets for Selected Countries (Kyoto Protocol)



■ Where to reduce emissions until 2012

■ Where an increase of emissions is permitted until 2012

10 essential services of public health by APHA in 1994



10 essential services of public health by APHA in 1994 useful by the EHPs for reduction of climate change

- 1. Monitor Health- Tracking of diseases and trends related to climate change**
- 2. Diagnose and Investigate - Investigation of infectious disease outbreaks**
- 3. Inform, educate, empower- Informing the public and policymakers about health impacts of climate change**
- 4. Mobilize community partnerships- Public health partnership with industry, other professional groups, etc. and implement solutions**
- 5. Develop policies- Municipal heat-wave preparedness plans**
- 6. Enforce Laws - Little role for public health**
- 7. Link to and provide care- Health care service provision following disasters**
- 8. Assure a competent workforce - Training of health care providers on health aspects of climate change**
- 9. Evaluate - Program assessment of preparedness efforts such as heat wave plans**
- 10. Research - Research on health effects of climate change.**

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Questions???

Thank you