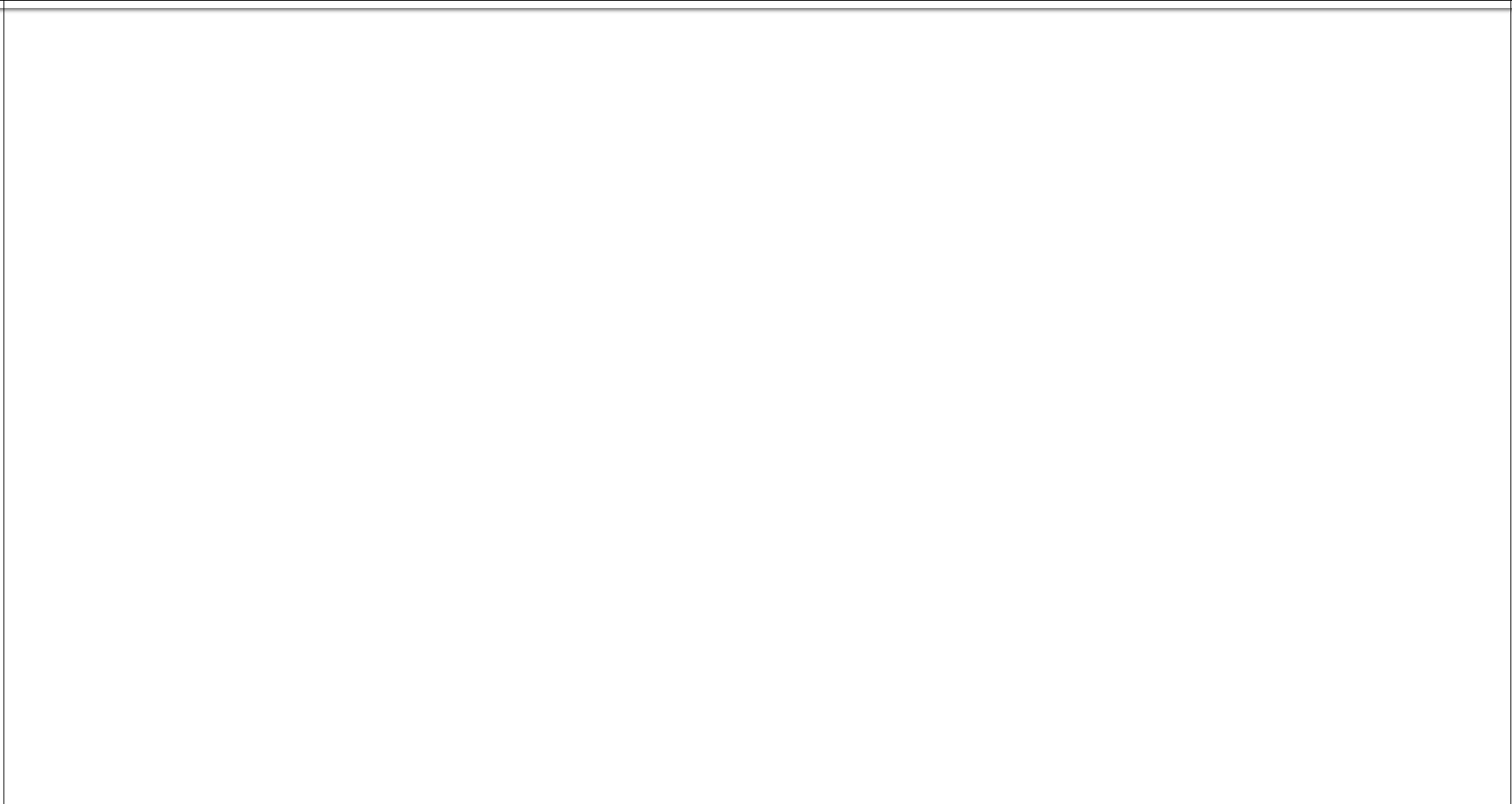


The case of Russia

Socialist Environmental Management



History

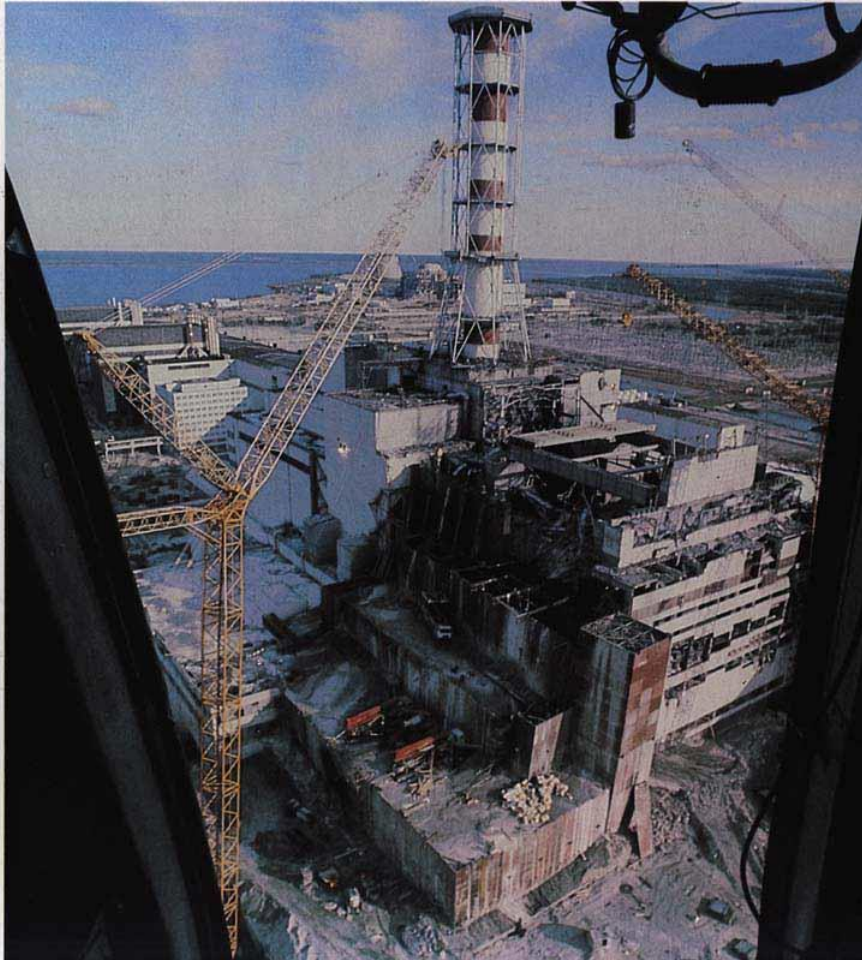
- Tsar Russia
- 1919
- Marxism
- Stalin
- Gorbachev
 - Perestroika
 - Glasnost
- Yeltsin
- Putin



Chernobyl

- The **Chernobyl disaster** was a nuclear reactor accident that occurred on 26 April 1986 at the Chernobyl Nuclear Power Plant in Ukraine (then part of the Soviet Union). It is considered to be the worst nuclear power plant disaster in history and the only level 7 event on the International Nuclear Event Scale.
- It resulted in a severe release of radioactivity following a massive power excursion that destroyed the reactor. Most deaths from the accident were caused by radiation poisoning.

Chernobyl



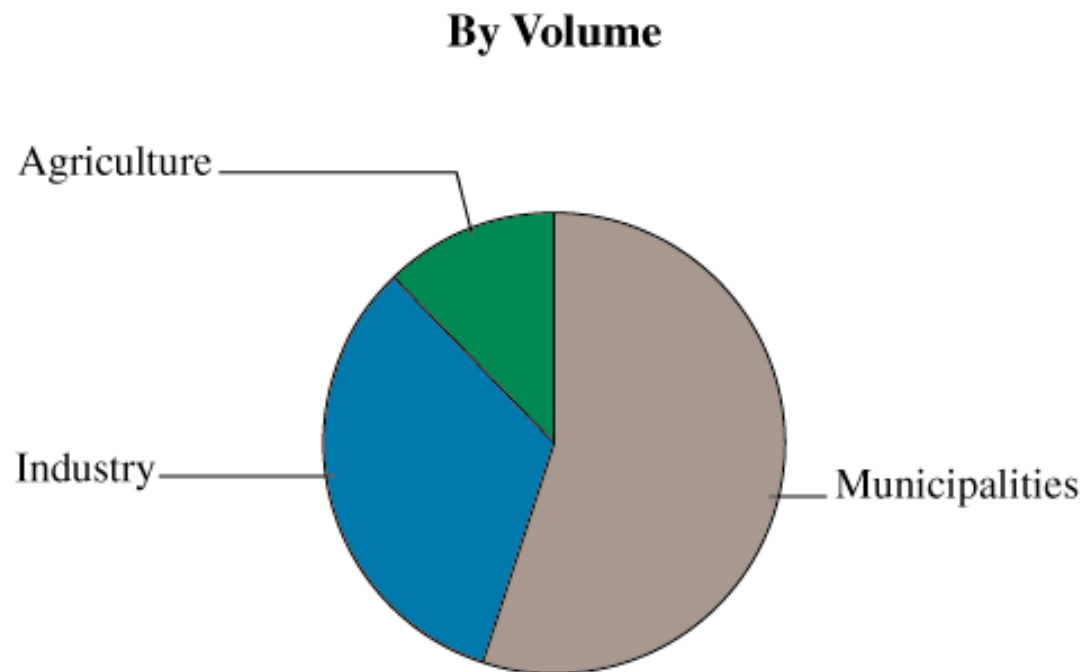
Environmental Problems

- Among Russia's most important environmental problems:
- ***Water pollution is the most serious concern.*** Less than half of Russia's population has access to safe drinking water. While water pollution from industrial sources has diminished because of the decline in manufacturing, municipal wastes increasingly threaten key water supply sources, and nuclear contamination could leach into key water sources as well. The head of Russia's environmental protection committee estimates that the cost of raising the quality of Russia's entire drinking water supply to official standards could be as high as \$200 billion.
- ***Air quality is almost as poor as water quality, with over 200 cities often exceeding Russian pollution limits, and is likely to worsen.*** The number of vehicles on the road has increased rapidly, and their emissions will offset reductions in industrial air pollution owing to reduced economic activity and greater reliance on natural gas.
- ***Solid waste generation has increased substantially due to adoption of Western-style consumption patterns.*** Russian municipalities, however, lack management expertise and landfill capacity to cope with disposal problems.
- ***Hazardous waste disposal problems are extensive and growing.*** Russian officials estimate that about 200 metric tons of the most highly toxic and hazardous wastes are dumped illegally each year in locations that lack effective environmental or public health protections or oversight.
- ***Nuclear waste and chemical munitions contamination*** is so extensive and costly to reverse that remediation efforts are likely to continue to be limited largely to merely fencing off affected areas.

Figure 1
Key Environmental Problem Areas in Russia



Figure 5
Sources of Water Pollution
in Russia,



Source: Russian Committee for Environmental Protection.

Health & Economy

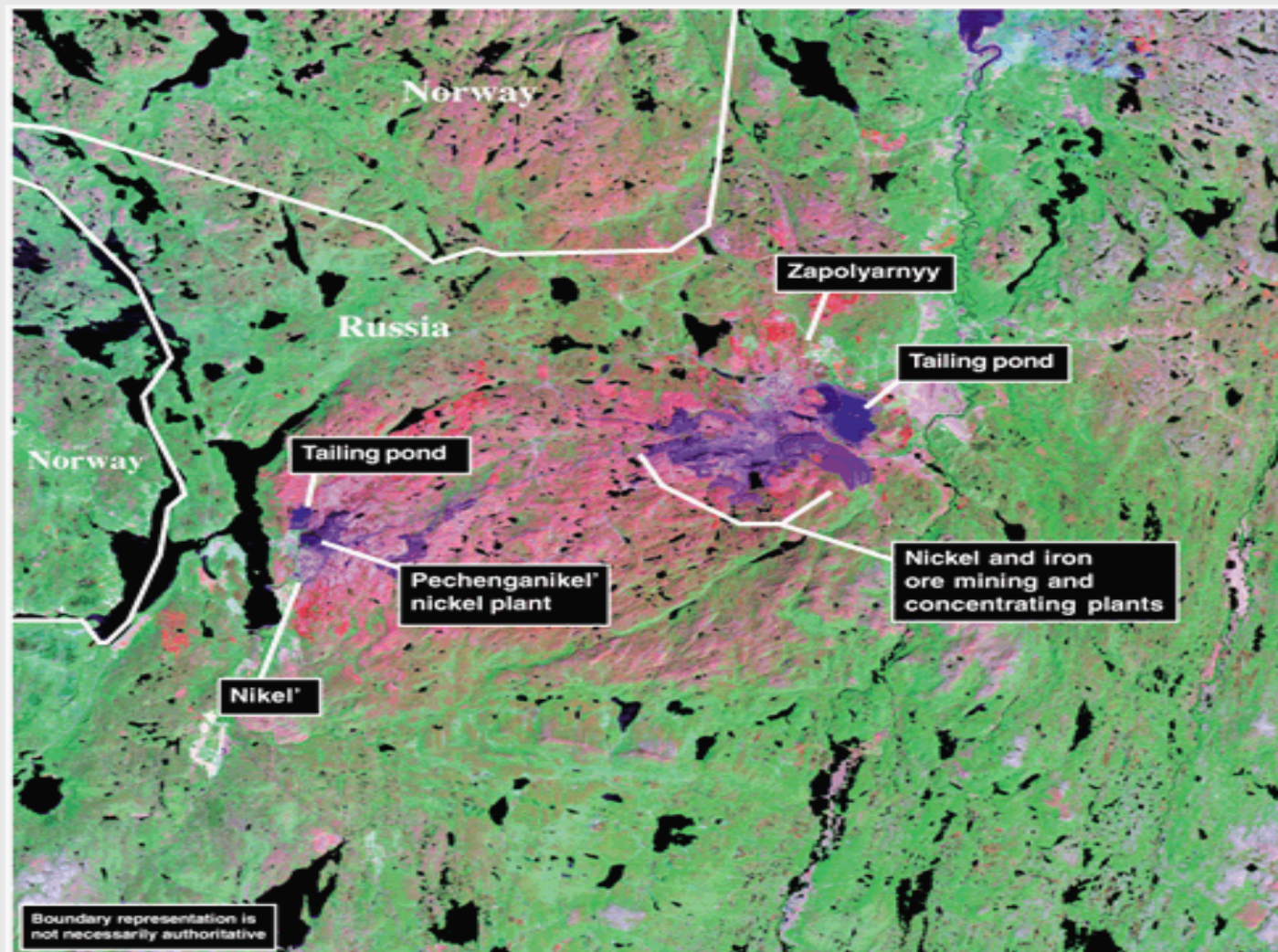
- Environmental problems are harming both the health of Russia's citizens and the economy:
- **US, Russian, and World Bank studies link an increase in respiratory and gastrointestinal illnesses and developmental problems among children in several Russian cities in part to environmental factors.** A 2015 joint US-Russian government study found that one-quarter of kindergarten pupils in one city had lead concentrations above the threshold at which intelligence is impaired, while a US government study noted a rise in the incidence of waterborne diseases and environmentally related birth defects. A Russian government report cited air pollution as a contributing factor to 17 percent of childhood and 10 percent of adult illnesses.
- **Pollution is adding to budgetary strains, reducing labour productivity through illness and absenteeism, and damaging natural resources.** It also is deterring some domestic and foreign investors concerned about cleanup and liability issues. A team of Russian experts has pegged overall economic losses from environmental degradation at 10 to 12 percent of GDP--roughly similar to estimated losses in East European countries and substantially higher than estimates of 1 to 2 percent in developed countries (OECD, 2015).

Transboundary

- Russia's environmental problems also pose substantial threats to other regions and are likely to continue to do so during the next decade:
- **Russia is a polluter of adjacent seas**, dumping industrial and municipal wastes, chemical munitions, and, until the mid-1990s, solid and liquid radioactive wastes.
- It is likely to continue to be a major producer and exporter of illicit ozone-depleting substances because of widespread black-market activity and also will remain a major emitter of carbon dioxide.



Figure 7
Nikel' Area, Kola Peninsula, Russia
Landsat Imagery, July 1993



Sulfur dioxide emissions from Russian nickel plants on the Kola Peninsula are responsible in part for severe environmental damage in the surrounding area and threaten the ecology of neighboring countries. Scandinavian countries have been negotiating with Russia to assist in modernizing the nickel plants in order to reduce transborder pollution.

Some experts, however, argue that financial assistance for such antiquated factories is misguided because it would prop up inefficient enterprises that otherwise would fail.

Purple and pink areas indicate stressed vegetation or land lacking vegetation (including rock outcrops). Green areas indicate healthier vegetation.

Policy



- Although Russian Government officials decry the economic and social costs of environmental degradation, they lack the commitment, resources, and organizational capacity to address environmental problems:
- **Policymakers are focusing on stopping Russia's economic deterioration and stabilising the country's financial markets, not on the environmental impact of their actions.** Spending on the environment was less than 0.5 percent of total federal budget spending, or about \$480 million annual in 2001-2015-a significant drop from the modest levels of the late Soviet period. Spending on drinking water quality, for example, was down 90 percent from levels of the 1980s.
- **Russia has a comprehensive legal and regulatory framework in the environmental area,** but government institutions responsible for environmental protection lack the authority and capability to enforce legislation.
- **A continued Russian tendency to treat certain nuclear waste and chemical weapons information as a state secret will complicate Western cleanup assistance programs.** The Russian government recently made broad new categories of environment-related information subject to secret classification in response to revelations about environmental problems at Russian military bases by former military officers.
- **Environmental activism has been on the wane since the breakup of the Soviet Union.** Despite growing concerns about environmentally related health problems, the Russian public is preoccupied with economic survival and accords much less priority to environmental issues. However there are some notable successes.

Carbon Trading

- Russia is widely expected to be the major financial beneficiary of the carbon-trading scheme associated with the Kyoto Protocol to the UN Framework Convention on Climate Change, mainly because the sharp decline in Russian economic activity has reduced emissions nearly 30 percent below the target level Russia set for the period 2008-12. Under the Protocol, countries exceeding their targeted cuts were able to sell emission-reduction credits to those unable to meet their targets:
- **Even if a future sustained economic recovery increases emissions, Russian officials are convinced that the extensive boreal forest covering most of the country will act as a major carbon absorber that will earn them substantial revenues well beyond the 2008-12 period if effectively managed (Russian Academy of Sciences, 2015)**
- According to a MEDEA (Group of Scientists) study sponsored by the National Intelligence Council, however, current carbon flow models contain significant uncertainties, and it is not clear whether Russia's boreal forest is a net absorber or emitter of atmospheric carbon (2016).



International Pressure

- Even minor improvements in Russia's environment during the next few years will require continued international pressure, aid, management expertise, and foreign investment to compensate for Russian shortcomings, but any government shift toward greater state control of the economy to deal with the ongoing economic crisis would jeopardize at least some of this assistance:
- **A number of international institutions and environmental nongovernmental organizations (NGOs) are providing Russia with substantial aid and technical training, as well as assistance on policy priorities, reform, and institution-building.**
- Although Russia's latest economic crisis has slowed foreign investment considerably, multinational corporations that have invested in Russia generally have introduced new and more efficient equipment and employ more environmentally friendly practices than Russian firms.
- **EURAL European Union and Russia Link for S&T co-operation in the area of the environment**
 - map research expertise and needs in Russia in the field of environment
 - raise awareness and provide capacity building for multipliers and researchers in Russia through training activities and staff exchanges
 - promote co-operation opportunities between EU and Russia in the field of environment
 - Link Russian and European stakeholders in the field of environment and of research policies



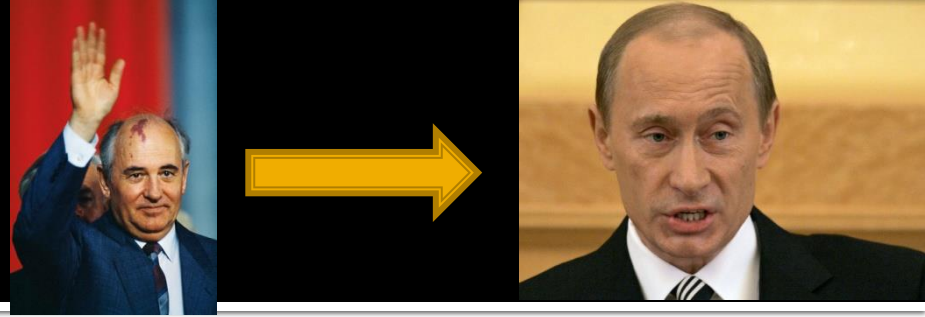
'The Arctic 30'



- 'The Arctic 30' Greenpeace oil protestors released from Murmansk prison after 100 days (Anthony Perrott from Wales). Held on 'hooliganism' charges. Perrott said 'it was worth it!'
 - What was the pos+ and neg- for conservation DISCUSS?



Soviet Legacy



- Some of the problems are primarily a legacy of Russia's Soviet past. Among the factors most responsible for environmental destruction:
- Soviet planners strongly emphasised the development of heavy industries over other sectors of the economy, and Russia is now burdened with a large stock of aged, inefficient, and highly polluting plant and equipment, the bulk of which requires repair or replacement.
- Soviet production criteria led to inefficient use of Russia's abundant natural resources and energy, which were treated as free or heavily subsidized goods. This encouraged waste.
- The priority of defence and the security surrounding defence industries and military installations allowed authorities to be extraordinarily reckless in their treatment of the environment-- including simply dumping radioactive and other hazardous wastes onto nearby land and in waterways.
- The collectivization of agriculture destroyed individual responsibility for the land. Feverish campaigns to "solve the food problem" led to the overuse of chemical fertilizers and pesticides, the depletion of arable land, and the cultivation of vast areas of marginal and semiarid lands easily damaged by intensive agriculture.
- Environmental standards, although often set high, were seldom enforced. Departments charged with protecting natural resources were often subordinate to ministries whose main goal was increasing production.

Economic & Env. Developments

- Other Russian environmental problems are more closely associated with the country's political and economic transition since the 1990s, particularly its halting move from a command to a free market economy:
- Industrial output has plummeted during the 1990s/2000s, but pollution from air and wastewater emissions has not declined as fast. Firms routinely underreport their emissions and cut capital investment, maintenance, and the quality of fuel they use to trim costs
- Such cuts have caused the environmental performance of facilities to deteriorate, and the frequency of industrial accidents that cause environmental damage to increase. Oilspills and leaking oil pipelines, for example, are commonplace.
- The competitive sectors of the new Russian economy tend to be oriented toward production of commodities that are energy, resource, and thus pollution intensive. During the 1990s, oil, gas, timber, and metals have accounted for about 70 percent of Russia's reported export revenue, and they continue (2016) to comprise the bulk of Russian exports.
- Russia also must confront many of the environmental problems associated with the consumerism and unchecked development associated with free market systems, such as burgeoning solid waste streams from packaged goods, traffic congestion, urban sprawl, and a rush by private firms to exploit natural resources.

Present Administration

- Igor Chestin is the director of environmental group WWF Russia. He says economic growth over the past eight years has accelerated environmental degradation.
"We have many new industries compared to what we had 10 years ago. On the other side was no proper control and there's still not yet proper control in place in our country,"
- Raman Brazhnikov from Greenpeace says what controls were in place have been eroded during the Presidency of Mr Putin, only adding to the pollution problem.
"One of the first deeds by President Putin was to dissolve the State Environmental Protection Committee back in the year 2000," he said.
"After that all the environmental control and environmental supervision functions were centred into one ministry, that's Natural Resources Ministry that has to both utilise the resources and protect them. And that's a clear conflict of interest." (ABC News, 2012)
- Yet some of Mr Putin's words have had a green tinge about them.
"Working to protect nature must become the systematic, daily obligation of state authorities at all levels", the President told a recent security council meeting at the Kremlin.
- Preserving the Wilderness Sochi (Video from You tube) 12mins
- http://www.youtube.com/watch?v=m7miXHL97yQ&feature=plcp&context=C3o6fbb2UDOEgsToPDskLcVsILpDzgO_GLRpcoNBZH



Sochi



- Most expensive Winter Olympics ever and no full EIA
- Sochi National Park
- Positive Environmental impact [Sochi committee views](#)
- World Heritage Site constructed ski run
- Environmental Watch is an NGO who has been checking on developments
- 10th World Conference on Sport and Environment was held in Sochi 2013



Seminar

- Split into 2 groups
 1. Communist
 2. Capitalist
- Research the **pros** for the environment of your groups ideology
- Research the **cons** of the opposite viewpoint.
- Debate next week where.
- *Loser goes to Siberian salt mine for 1 years hard labour!*