United Nations
ESCAP

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

North East Asian Subregional Programme for Environmental Cooperation (NEASPEC)

Participation of the Russian Federation in regional co-operation mechanisms on transboundary air pollution: work within the UNECE LRTAP Convention

Scientific Research Institute for Atmospheric Air Protection
St.Petersburg, Russia

Mr. Alexander Romanov,
Head of International cooperation on behalf of
Mr. Andrey Nedre,
Director General

NEASPEC Expert Consultation Meeting

January 20, 2011

Incheon, Republic of Korea

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Outline

- Air pollution in the Russian Federation
- Implementation of the UNECE Convention on Long-Range Transboundary Air Pollution
  - Short Overview
  - Achieved results
  - Challenges
  - Opportunities

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LRTAP Convention implementation: Short overview

- International Treaty since 1979
- Europe and North America covered
- Emissions of SOx, NOx, CO, VOCs, PM, heavy metals, POPs, ozone regulated
- EMEP Programme in place
- Reporting system established

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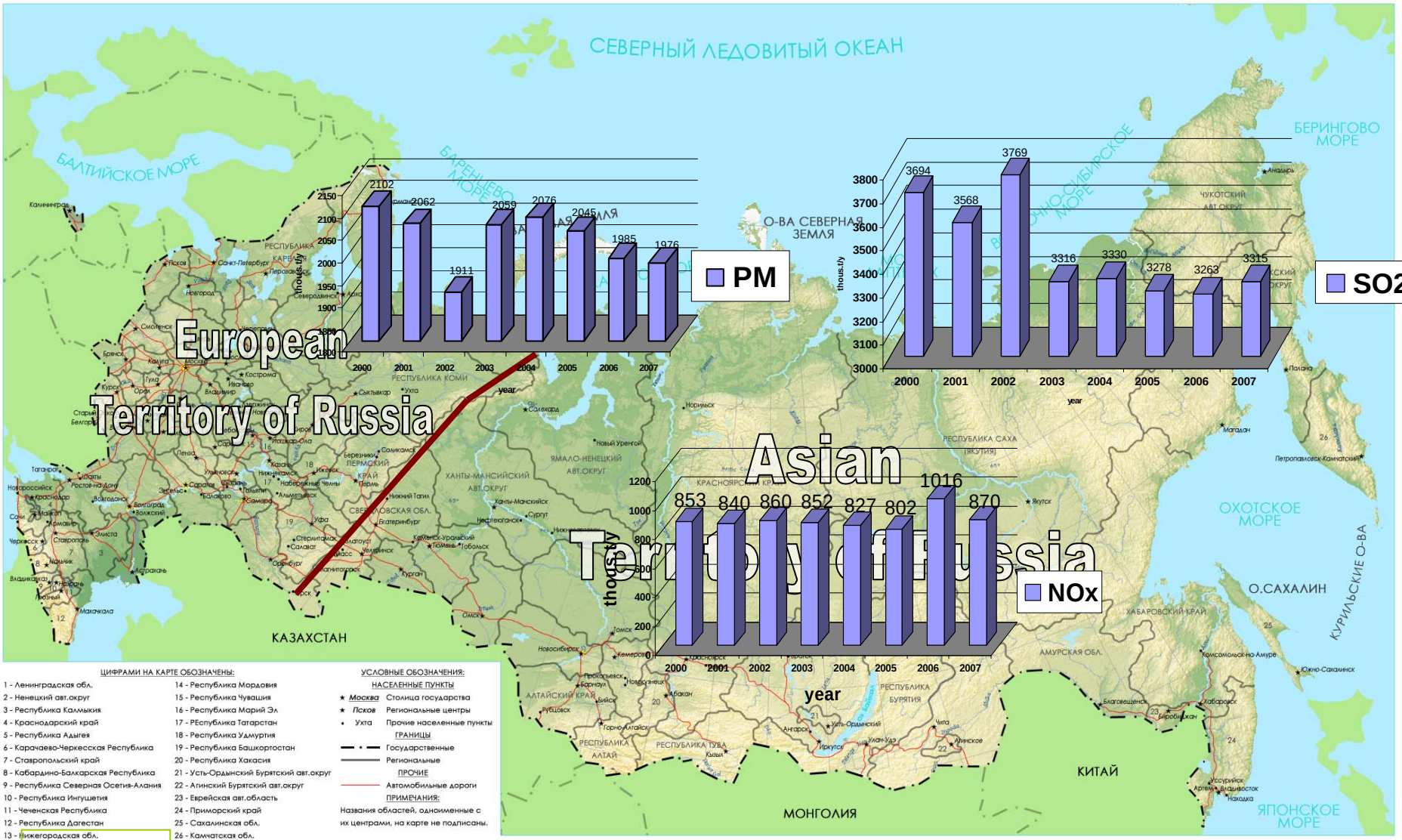
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СЕВЕРНЫЙ ЛЕДОВИТЫЙ ОКЕАН
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БАРЕНЦЕВО МОРЕ
КАРСКОЕ МОРЕ
О-ВА СЕВЕРНАЯ ЗЕМЛЯ
ЛАПТЕВЫХ МОРЕ
ВОСТОЧНО-СИБИРСКОЕ МОРЕ
БЕРИНГОВО МОРЕ
ЧУКОТСКИЙ АВТ.ОКРУГ
ОХОТСКОЕ МОРЕ
О.САХАЛИН
КУРИЛЬСКИЕ О-ВА
ЯПОНСКОЕ МОРЕ
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КИТАЙ
РЕСПУБЛИКА КОМИ
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ХАНТЫ-МАНСИЙСКИЙ АВТ.ОКРУГ
РЕСПУБЛИКА САХА (ЯКУТИЯ)
ХАБАРОВСКИЙ КРАЙ
АМУРСКАЯ ОБЛ.
АЛТАЙСКИЙ КРАЙ
РЕСПУБЛИКА АЛТАЙ
РЕСПУБЛИКА ТЫВА
РЕСПУБЛИКА БУРЯТИЯ
ЦИФРАМИ НА КАРТЕ ОБОЗНАЧЕНЫ:
1 - Ленинградская обл.
2 - Ненецкий авт.округ
3 - Республика Калмыкия
4 - Краснодарский край
5 - Республика Адыгея
6 - Карачаево-Черкесская Республика
7 - Ставропольский край
8 - Кабардино-Балкарская Республика
9 - Республика Северная Осетия-Алания
10 - Республика Ингушетия
11 - Чеченская Республика
12 - Республика Дагестан
13 - Нижегородская обл.
14 - Республика Мордовия
15 - Республика Чувашия
16 - Республика Марий Эл
17 - РЕспублика Татарстан
18 - Республика Удмуртия
19 - Республика Башкортостан
20 - Республика Хакасия
21 - Усть-Ордынский Бурятский авт.округ
22 - Агинский Бурятский авт.округ
23 - Еврейская авт.область
24 - Приморский край
25 - Сахалинская обл.
26 - Камчатская обл.
УСЛОВНЫЕ ОБОЗНАЧЕНИЯ:
НАСЕЛЕННЫЕ ПУНКТЫ
Москва Столица государства
Псков Региональные центры
Ухта Прочие населенные пункты
ГРАНИЦЫ
Государственные
Региональные
ПРОЧИЕ
Автомобильные дороги
ПРИМЕЧАНИЯ:
Названия областей, одноименные с их центрами, на карте не подписаны.

LRTAP Convention implementation:

Russian Federation is a Party to:

- the 1984 EMEP,
- the 1985 on Sulphur,
- the 1988 on Nitrogen Oxides

Plans to accede to:

- The 1998 Protocol on Heavy Metals
- The 1998 Protocol on Persistent Organic Pollutants (POPs)
- The 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

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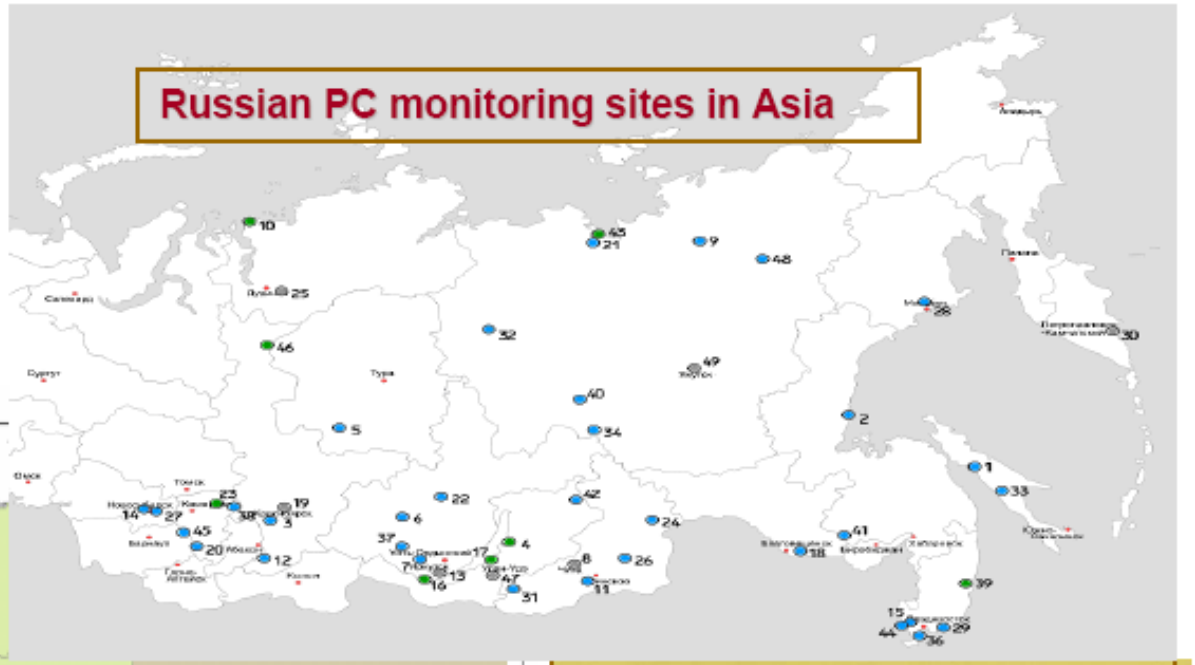
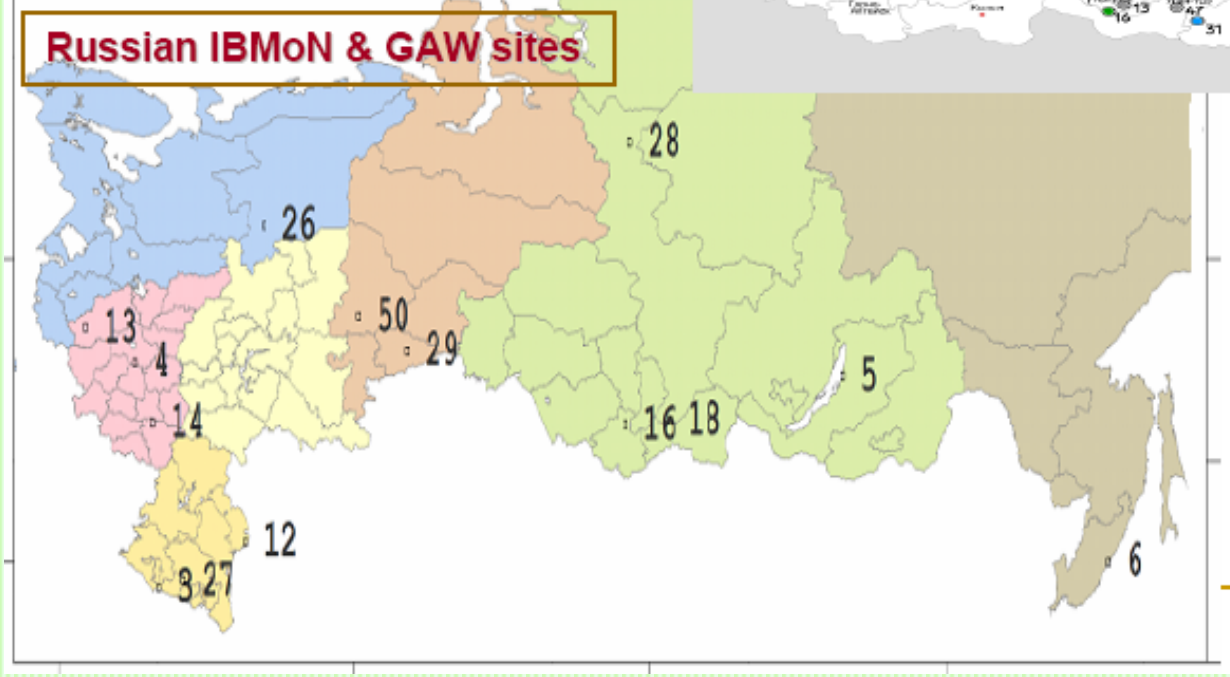
LRTAP Convention implementation:

- Currently national obligations on emission reductions for European territory are fulfilled
- Bottom-up emissions reporting established
- Air quality monitoring performed
- Modeling and assessment applied

Relevant Monitoring Networks in Russia





Adopted from S.Gromov, Institute of global climate and ecology, Dec. 17, 2008

LRTAP Convention implementation: intermediate results

Emissions decreased

Stationary sources (net) – 52%

SO_2 78% (1980)

NH_3 76% (1990)

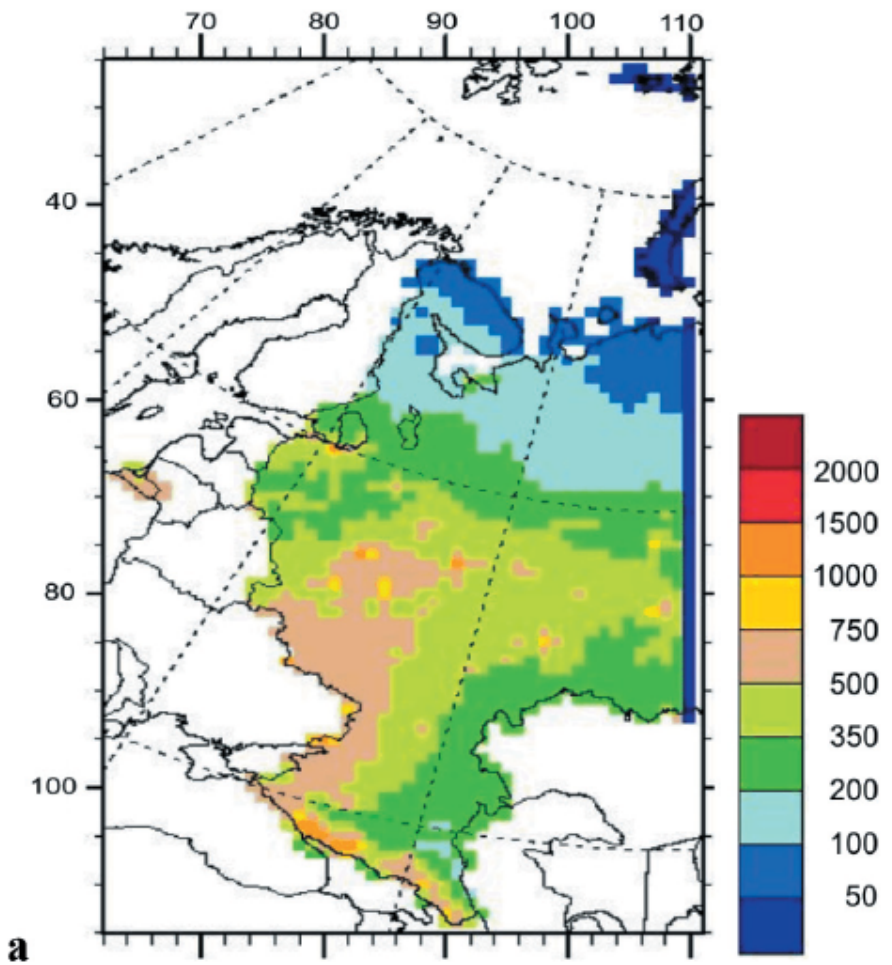
VOCs (NM) 40% (1990)

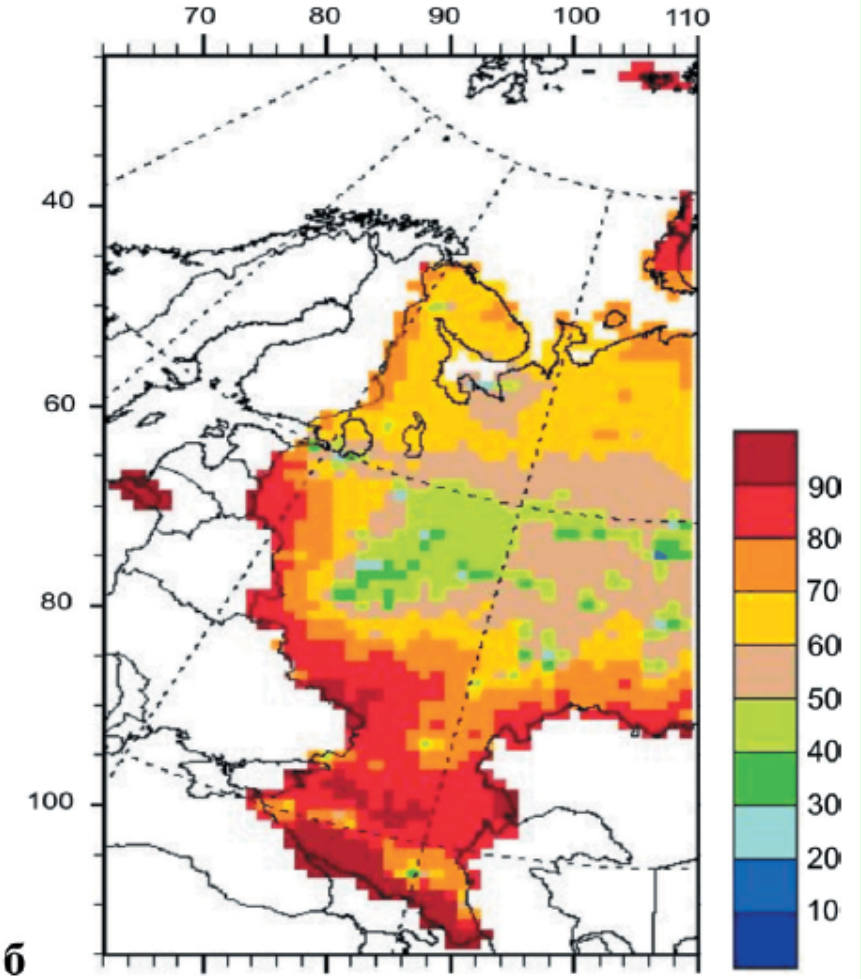
NO_x 1% (1987)

LRTAP Convention implementation: challenges

- Mobile source emissions - 58%
- Transboundary air pollution affecting bordering regions;
- Interregional transport of air pollutants;
- Development of Asian territory of Russia and North-East Asian nations

LRTAP Convention implementation: challenges

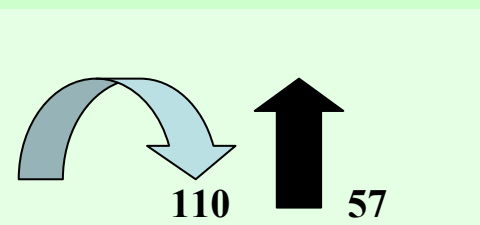




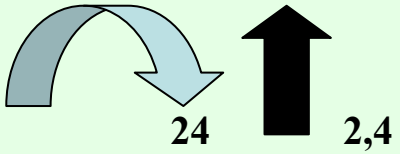
SOx deposition on European territory of Russia (mg/m2)

Contribution of transboundary SOx deposition, % (2008)

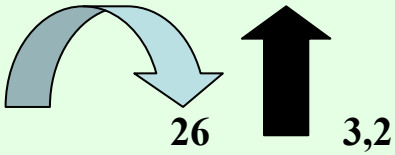
Inflow of sulphur in several Russian regions vs. regional sulphur emissions, thousand tonnes



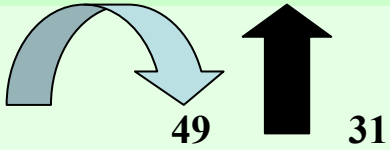
Arkhangelsk region



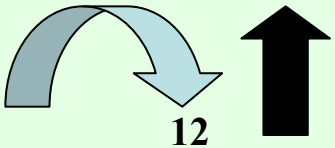
Novgorod region



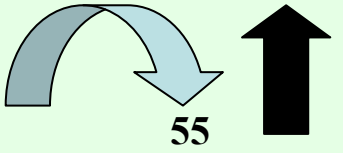
Pskov region



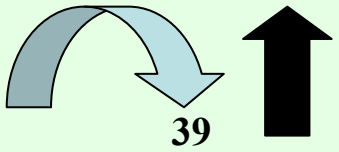
Volgograd region



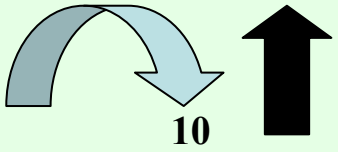
Kaliningrad region



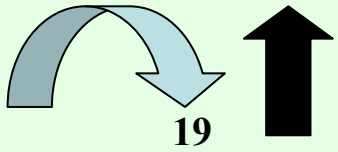
Republic of Karelia



Saratov region



Ivanovo region



Bryansk region

LRTAP Convention mechanisms: potential for further implementation

- Model for regional environmental cooperation in North-East Asia;
- Application of existing expertise in monitoring and integrated impact assessment – EMEP and GAINS;
- Potential application of critical loads/levels methodology for impact assessment on ecosystem – terrestrial, aquatic and mixed

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CONCLUSIONS

- LRTAP Convention – Successful mechanism applied in a diverse region;
- Similar environmental concerns addressed in Europe/North America and North-East Asia;
- Available established and transparent science-based mechanisms for environmental impact assessment across a wide group of countries
- Model platform for further environmental cooperation in the region of North-East Asia

THANK YOU FOR YOUR ATTENTION!