

PERSONAL INFORMATION

LEONOR TARRASON



📍 Vækerøveien 108, 0383 Oslo, Norway

☎ +47 63 89 80 70 📠 + 47 95 19 3 71

✉ lta@nilu.no

Sex Female | Date of birth 01/01/1961 | Nationality Spanish

POSITION

Research director, scientific expert

WORK EXPERIENCE

2017 -present

Research Director for Environmental Solutions

Norwegian Institute for Air Research, PO Box 100, NO-2027 Kjeller, Norway (<http://www.nilu.no>)

- Strategy development on the role of research for environmental solutions
- Implementation of transdisciplinary research strategies to support green transitions
- Evaluation of FN sustainable goals in industrial sectors and the environmental impact of alternative energies/technologies

Business or sector Research Institute

2010 -2017

Research Director for Urban Environment and Industry

Norwegian Institute for Air Research, PO Box 100, NO-2027 Kjeller, Norway (<http://www.nilu.no>)

- Strategy development on the role of air pollution in smart cities and socially responsible industrial assessments
- Personal and economic responsibility for 25 scientists and annual turnover of 35 mill NOK
- Co-creation for urban sustainability: use of crowdsourcing, citizen observatories and urbanlabs in air quality management at urban level
- Responsibility for air quality monitoring systems, forecasting in Norwegian Cities and development of planning tools for urban development
- Evaluation of environmental impact of alternative energies/ industrial technologies

Business or sector Research Institute

2009-2010

Senior Scientist

Norwegian Institute for Air Research, PO Box 100, NO-2027 Kjeller, Norway (<http://www.nilu.no>)

- Steering Committee Member of the Copernicus – Monitoring Atmospheric Composition and Climate (MACC) - Project leader for Observation Acquisition
- Support to EEAs Topic Centre on Air quality and Climate mitigation, advise to GEMS IN-Situ Coordination GISC project
- Development of Norwegian reference tools for air quality modelling for policy applications

Business or sector Research Institute

1998-2009

Head, air pollution section at Research department

The Norwegian Meteorological Institute (MET) P.O. Box 43, Blindern, Norway (<http://www.met.no>)

- Personal and economic responsibility for 15 scientists and annual turnover of 16 mill NOK
- Leader of the EMEP Meteorological Synthesizing Center-West under UNECE LTRAP Convention
- Responsibility for the development, application and validation of the EMEP chemical air transport models for particulate matter and photo-oxidant pollution to support the development of air emission control policies in Europe.
- Main achievements are: 1) the development of scale-bridging modelling tools and 2) the establishment of international cooperation for benchmarking and developing air pollution transport models in support to policy EURODELTA. 3) involvement of national expertise for reproducing the EMEP system at national level
- Responsibility for the development of databases and websites to distribute of air emissions, concentrations and deposition data compiled under EMEP.

Business or sector Governmental

EDUCATION AND TRAINING

1995 PhD on Meteorology

Geophysics Institute, University of Oslo, Norway

- Atmospheric chemistry, intercontinental long-range transport of air pollution

1990 Master of Science degree in Meteorology,

Geophysics Institute, University of Oslo, Norway. Thesis entitled: "Trans-Atlantic Transport of Sulphur: a Study with a 3-dimensional Eulerian Model"

1987 Masters on Environmental Engineering

2 year - Catalanian Institute of Technology, Spain

1985 Master of Science in Physics

5-year University degree in Physics with Honours, University of Barcelona, Spain

PERSONAL SKILLS

Mother tongue(s) Spanish, Catalan

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
French	C2	C1	B2	B1	B2
Norwegian	C1	C1	C1	C1	C1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills Strategic communication skills gained through 20 years experience in international cooperation

- Co-Chair of the Urban Emission Working Group under FAIRMODE (Forum for Air Quality Modelling in Europe) (2007-present)
- Co-Chair of the Global Emission Inventory Activity (GEIA) under the International Geosphere-Biosphere program (IGBP-IGAC). (2011- present)
- Chairman of the EURODELTA inter-comparison exercise and responsible for co-operation with CONCAWE. Member of the Steering Committee of the CITY DELTA inter-comparison of atmospheric dispersion models (2001-2009)
- Co-Chair of Steering Committee for the "Coordinated European programme on Particulate Matter Emissions, Projections and Guidance" CEPMEIP project (2000-2001)
- Member of the Expert Group on Near real time Data exchange at the World Meteorological Organization (WMO) (2010-)
- Technical Analysis Group for support of the activities of the European Commission under the Clear Air for Europe (CAFÉ) Programme. (Member 2001-2006)
- Technical expert – scientific member of the CAFÉ Steering Group, contributing to the establishment of EUs Thematic Strategy on Air Pollution. (Member 2001-2006)
- Member of the Steering Committee for the IPCC Expert Group on Comparison of Top-Down with Bottom-up Green House Gas Emission Inventories (1997-1998)

Organisational / managerial skills

Strategic leadership and management skills demonstrated by 19 years leading scientific teams in research institutes and co-chairing international scientific activities.

- Research Director, NILU (2010- present)
- Head air pollution section, Norwegian Meteorological Institute (1998-2009)

- Member of the Scientific Steering Group of the Oslo Centre for Interdisciplinary Environmental and Social Research CIENS (2014-2016)
- Member of the Board of the Norwegian Institute for Water Research (NIVA). (Member 2001-2006)

Job-related skills Good understanding of the role of air pollution and implications for policy design as demonstrated by various review activities and participation in review and scientific Committees.

- Member of the Scientific Committee of the European Environment Agency (2017-present)
- Member of the International Advisory Committee of the International Symposiums for the European Federation of Clean Air and Environmental Protection Associations (EFCA) (2014-present)
- Committee Review Committee for the CLEO program (Interaction between climate change environmental goals and measures) for the Swedish Environmental Protection Agency (Member 2009-2011)
- Review Committee for the air quality modelling activities of the Netherlands Environmental Assessment Agency (MNP) (Member 2006)

Computer skills Understanding of MPI activities - Experienced programming skills (fortran 90, script languages C-shell)
Very good command of Microsoft Office™ tools, preparing many documents and presentations

ADDITIONAL INFORMATION

Publications
Presentations
Projects
Conferences
Seminars
Honours and awards
Memberships
References

- Author of over 70 reports and articles on air pollution and its implications for policy applications – EMEP publications

Thunis, P., Degraeuwe, B., Cuvelier, K., Guevara, M., Tarrason, L. & Clappier, A. (2016). A novel approach to screen and compare emission inventories. *Air Quality, Atmosphere & Health*, 9, 325-333. doi:10.1007/s11869-016-0402-7

Guevara, M., Lopez-Aparicio, S., Cuvelier, C., Tarrason, L., Clappier, A., & Thunis, P. (2017). A benchmarking tool to screen and compare bottom-up and top-down atmospheric emission inventories. *Air Quality, Atmosphere & Health*, 10, 627-642. doi:10.1007/s11869-016-0456-6

Grigas, T., Hervo, M., Gimmestad, G., Forrister, H., Schneider, P., Preißler, J., Tarrason, L., O'Dowd, C. (2015) CALIOP near-real-time backscatter products compared to EARLINET data. *Atmos. Chem. Phys. Discuss.*, 15, 6041-6075. doi:10.5194/acpd-15-6041-2015.

Marecal, V., Peuch, V.-H., Andersson, C., Andersson, S., Arteta, J., Beekmann, M., Benedictow, A., Bergstrom, R., Bessagnet, B., Cansado, A., Cheroux, F., Colette, A., Coman, A., Curier, R. L., Denier van der Gon, H. A. C., Drouin, A., Elbern, H., Emili, E., Engelen, R. J., Eskes, H. J., Foret, G., Friese, E., Gauss, M., Giannaros, C., Guth, J., Joly, M., Jaumouille, E., Josse, B., Kadyrov, N., Kaiser, J. W., Krajsek, K., Kuenen, J., Kumar, U., Liora, N., Lopez, E., Malherbe, L., Martinez, I., Melas, D., Meleux, F., Menut, L., Moinat, P., Morales, T., Parmentier, J., Piacentini, A., Plu, M., Poupkou, A., Queguiner, S., Robertson, L., Rouil, L., Schaap, M., Segers, A., Sofiev, M., Thomas, M., Timmermans, R., **Tarrason, L.**, Valdebenito, A., van Velthoven, P., van Versendaal, R., Vira, J., and Ung, A.: A regional air quality forecasting system over Europe: the MACC-II daily ensemble production, *Geosci. Model Dev. Discuss.*, 8, 2739-2806, doi:10.5194/gmdd-8-2739-2015, 2015.

Frost, G.J., Middleton, P., Tarrason, L., Granier, C., Guenther, A., Cardenas, B., Denier van der Gon, H., Janssens-Maenhout, G., Kaiser, J.W., Keating, T., Klimont, Z., Lamarque, J.F., Liousse, C., Nickovic, S., Ohara, T., Schultz, M.G., Skiba, U., van Aardenne, J., Wang, Y. (2013) New directions: GEIA's 2020 vision for better air emissions information. *Atmos. Environ.*, 81, 710-712. doi:10.1016/j.atmosenv.2013.08.063

Vestreng, V., Ntziachristos, L., Semb, A., Reis, S., Isaksen, I. S. A., and Tarrason, L. Evolution of NOx emissions in Europe with focus on road transport control measures- *Atmos. Chem. Phys.*, Vol 9, Issue 4, 1503-1520, 2009

R. Vautard, M. Schaap, R. Bergström, B. Bessagnet, J. Brandt, P.J.H. Builtjes, J.H. Christensen, C. Cuvelier, V. Foltescu, A. Graff, A. Kerschbaumer, M. Krol, P. Roberts, L. Rouil, R. Stern, L. Tarrason, P. Thunis, E. Vignati, P. Wind, Skill and uncertainty of a regional air quality model ensemble, *Atmospheric Environment*, Volume 43, Issue 31, Pages 4822-4832, 2009

Cuvelier, C., Thunis, P., Vautard, R., Amann, M., Bessagnet, B., Bedogni, M., Berkowicz, R., Brandt, J., Brocheton, F., Builtjes, P., Carnavale, C., Coppalle, A., Denby, B., Douros, J., Graf, A., Hellmuth, O., Hodzic, A., Honore, C.,

Jonson, J., Kerschbaumer, A., de Leeuw, F., Minguzzi, E., Moussiopoulos, N., Pertot, C., Peuch, V. H., Pirovano, G., Rouil, L., Sauter, F., Schaap, M., Stern, R., Tarrason, L., Vignati, E., Volta, M., White, L., Wind, P. and Zuber, A.), CityDelta: A model intercomparison study to explore the impact of emission reductions in European cities in 2010, *Atmos. Environm.* 41 (1): 189-207, JAN 2007

Thunis, P., Rouil, L., Cuvelier, C., Stern, R., Kerschbaumer, A., Bessagnet, B., Schaap, M., Builtjes, P., Tarrason, L., Douros, J., Moussiopoulos, N., Pirovano, G., and Bedogni, M., Analysis of model responses to emission-reduction scenarios within the CityDelta project. *Atmos. Environm.* 41 (1): 208-220, JAN 2007.

Tsyro S., D. Simpson, L. Tarrasón, Z. Klimont, K. Kupiainen, C. Pio, K. E. Yttri (2007) Modeling of elemental carbon over Europe. *J Geophys Res*, 112, D23S19, doi:10.1029/2006JD008164.

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Vestreng, V., Myhre, G., Fagerli, H., Reis, S., and Tarrasón, L. (2007) Twenty-five years of continuous sulphur dioxide emission reduction in Europe, *Atmos. Chem. Phys.*, 7, 3663-3681.

Vautard, R., Van Loon, M., Schaap, M., Bergstroem, R., Bessagnet, B., Brandt, J., Builtjes, P. J. H., Christensen, J. H., Cuvelier, C., Graff, A., Jonson, J. E., Krol, M., Langner, J., Roberts, P., Rouil, L., Stern, R., Tarrason, L., Thunis, P., Vignati, E., White, L. and Wind, P. Is regional air quality model diversity representative of uncertainty for ozone simulation? *Geophys. Res. Lett.*, 33 (24): Art. No. L24818 DEC 30 2006

Tarrasón, L., Jonson, J.E., Berntsen, T. K. and Rypdal, K. (2004) Study on air quality impacts of non-LTO emissions from aviation, met.no report no. 3 Air pollution. Norwegian Meteorological Institute, Oslo, Norway.

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Tarrasón, L. Turner, S. M. And Fløisand, I. (1995) An estimation of Seasonal DMS Fluxes over the North Atlantic Ocean and their Contribution to European Pollution Levels, *J. Geophys. Res.*, 101, 11623-11639.

Tarrasón, L. and Iversen, T. (1992) The influence of North American anthropogenic sulphur emissions over Western Europe. *Tellus*, 44B, 114-132.