

## **Publications relevant to IIASA-Republic of Korea collaborations (2008-2016)**

The publication list contains only publications authored by IIASA-affiliated researchers and:

1. About the Republic of Korea, or
2. the IIASA author is a national of the Republic of Korea, or
3. the IIASA author has collaborated with a researcher based at an institute in the Republic of Korea

### **2016**

1. Smith P., Davis S.J., Creutzig F., Fuss S., Minx J., Gabrielle B., Kato E., Jackson R.B., Cowie A., Kriegler E., Van Vuuren D.P., Rogelj J., Ciais P., Milne J., Canadell J.G., McCollum D., Peters G., Andrew R., Krey V., Shrestha G., Friedlingstein P., Gasser T., Grübler A., Heidug W.K., Jonas M., Jones C.D., Kraxner F., Littleton E., Lowe J., Moreira J.R., Nakicenovic N., Obersteiner M., Patwardhan A., Rogner M., Rubin E., Sharifi A., Torvanger A., Yamagata Y., Edmonds J., Yongsung C. Biophysical and economic limits to negative CO<sub>2</sub> emissions (2016) *Nature Climate Change*, 6(1):42-50

### **2015**

2. Bertram C., Johnson N., Luderer G., Riahi K., Isaac M., Eom J. (2015). Carbon lock-in through capital stock inertia associated with weak near-term climate policies. *Technological Forecasting and Social Change*, 90(PA):62-72
3. Campana PE, Leduc S, Kim M, Liu J, Kraxner F, McCallum I, Li H & Yan J (2015). Optimal grassland locations for sustainable photovoltaic water pumping systems in China. *Energy Procedia*, 75:301-307
4. Eom J., Edmonds J., Krey V., Johnson N., Longden T., Luderer G., Riahi K., Van Vuuren D.P. (2015) The impact of near-term climate policy choices on technology and emission transition pathways. *Technological Forecasting and Social Change* 90(PA):73-88
5. Jewell J & Ates SA (2015). Introducing nuclear power in Turkey: A historic state strategy and future prospects. *Energy Research and Social Science*, 10:273-282
6. Mazzucco R., Van Nguyen T., Kim D.-H., Chon T.-S., Dieckmann U. (2015). Adaptation of aquatic insects to the current flow in streams. *Ecological Modelling*, 309-310:143-152

### **2014**

7. Jeong S, Choi JY & Kim J-Y (2014). On the drivers of international collaboration: The impact of informal communication, motivation, and research resources. *Science and Public Policy*, 41(4):520-531

8. Kraxner F, Aoki K, Leduc S, Kindermann G, Fuss S, Yang J, Yamagata Y, Tak K & Obersteiner M (2014). BECCS in South Korea - Analyzing the negative emissions potential of bioenergy as a mitigation tool. *Renewable Energy*, 61:102-108
9. Lee Ji-Hee & Kim D (2014). Developing heat flux evaluation and fire risk map for forest fires in Yangdong Villages. *Journal of Korean Society of Hazard Mitigation*, 14(5):19-25
10. Roelfsema M, den Elzen M, Hoehne N, Hof AF, Braun N, Fekete H, Bottcher H, Brandsma R & Larkin J (2014). Are major economies on track to achieve their pledges for 2020? An assessment of domestic climate and energy policies. *Energy Policy*, 67:781-796
11. Wang SX, Zhao B, Cai SY, Klimont Z, Nielsen CP, Morikawa T, Woo J-H, Kim Y, Fu X, Xu JY, Hao JM & He KB (2014). Emission trends and mitigation options for air pollutants in East Asia. *Atmospheric Chemistry and Physics*, 14(13):6571-6603
12. Yoo SH (2014). Educational differentials in cohort fertility during the fertility transition in South Korea. *Demographic Research*, 30(53):1463-1494

## 2013

13. Eom J, Edmonds J, Krey V, Johnson N, Longden T, Luderer G, Riahi K, van Vuuren DP (2013) The impact of near-term climate policy choices on technology and emission transition pathways. *Technological Forecasting and Social Change*
14. Lee J-H & Kim D (2013). Combustion properties for tree species of major structural components of traditional wooden buildings. *Journal of KOSHAM (Korean Society of Hazard Mitigation)*, 13(3):17-22 (June 2013).
15. Riahi K, Kriegler E, Johnson N, Bertram C, den Elzen M, Eom J, Schaeffer M, Krey V, Luderer G, McCollum DL, van Vuuren DP, Kainuma M et al. (2013) Locked into Copenhagen pledges - Implications of short-term emission targets for the cost and feasibility of long-term climate goals. *Technological Forecasting and Social Change*,
16. Watanabe C & Shin J-H (2013). Utmost fear hypothesis explores green technology driven energy for sustainable growth. In: Cuaresma J Crespo, Palokangas T & (Eds) A Tarasyev (eds), *Green Growth and Sustainable Development*. Springer Berlin Heidelberg pp.191-216.

## 2012

17. Cutlip L & Fath BD (2012). Relationship between carbon emissions and economic development: Case study of six countries. *Environment, Development and Sustainability*, 14(3):433-453 (June 2012) (Published online 5 October 2011).
18. Kim D (2012). Research on fire management technology against mega fire due to climate change. In: *Proceedings, 2012 Winter Conference of Fire Disaster Prevention Research Center (FDPRC), University of Incheon. Republic of Korea.*
19. Kim D (2012). Study on the numerical model of 2-dimensional surface flame spread due to wind and slope in forest fire. In: *Proceedings of the 4th Asian Joint Workshop on Thermophysics and Fluid Science. 14-17 October 2012, Busan, Korea.*
20. Kim D, Kang Y & Kim C (2012). Study on a policy for forest fire during Joseon Dynasty during 1392-1910). *Journal of KOSHAM (Korean Society of Hazard Mitigation)*, 12(6):217-221 (December 2012).

21. Kim D & Kim B-Y (2012). Development and validation of computational wind field model (Wind scape). In: Proceedings of 4th Asian Joint Workshop on Thermophysics and Fluid Science. 14-17 October 2012, Busan, Korea.
22. Urbach D, Kang M, Kang S, Seong KB, Kim S, Dieckmann U & Heino M (2012). Growth and maturation of Korean chum salmon under changing environmental conditions. *Fisheries Research*, 134-136:104-112(December 2012).

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23. Lim, S.S., Vos, T., Flaxman, A.D., Danaei, G., Shibuya, K., Adair-Rohani, H., Amann, M., Anderson, H.R., Andrews, K.G., Aryee, M., Atkinson, C., Bacchus, L.J., Bahalim, A.N., Balakrishnan, K., Balmes, J., Barker-Collo, S., Baxter, A., Bell, M.L., Blore, J.D., Blyth, F., Bonner, C., Borges, G., Bourne, R., Boussinesq, M., Brauer, M., Brooks, P., Bruce, N.G., Brunekreef, B., Bryan-Hancock, C., Bucello, C., Buchbinder, R., Bull, F., Burnett, R.T., Byers, T.E., Calabria, B., Carapetis, J., Carnahan, E., Chafe, Z., Charlson, F., Chen, H., Chen, J.S., Cheng, A.T.-A., Child, J.C., Cohen, A., Colson, K.E., Cowie, B.C., Darby, S., Darling, S., Davis, A., Degenhardt, L., Dentener, F., Des Jarlais, D.C., Devries, K., Dherani, M., Ding, E.L., Dorsey, E.R., Driscoll, T., Edmond, K., Ali, S.E., Engell, R.E., Erwin, P.J., Fahimi, S., Falder, G., Farzadfar, F., Ferrari, A., Finucane, M.M., Flaxman, S., Fowkes, F.G.R., Freedman, G., Freeman, M.K., Gakidou, E., Ghosh, S., Giovannucci, E., Gmel, G., Graham, K., Grainger, R., Grant, B., Gunnell, D., Gutierrez, H.R., Hall, W., Hoek, H.W., Hogan, A., Hosgood III, H.D., Hoy, D., Hu, H., Hubbell, B.J., Hutchings, S.J., Ibeanusi, S.E., Jacklyn, G.L., Jasrasaria, R., Jonas, J.B., Kan, H., Kanis, J.A., Kassebaum, N., Kawakami, N., Khang, Y.-H., Khatibzadeh, S., Khoo, J.-P., Kok, C., Laden, F., Lalloo, R., Lan, Q., Lathlean, T., Leasher, J.L., Leigh, J., Li, Y., Lin, J.K., Lipshultz, S.E., London, S., Lozano, R., Lu, Y., Mak, J., Malekzadeh, R., Mallinger, L., Marcenes, W., March, L., Marks, R., Martin, R., McGale, P., McGrath, J., Mehta, S., Mensah, G.A., Merriman, T.R., Micha, R., Michaud, C., Mishra, V., Hanafiah, K.M., Mokdad, A.A., Morawska, L., Mozaffarian, D., Murphy, T., Naghavi, M., Neal, B., Nelson, P.K., Nolla, J.M., Norman, R., Olives, C., Omer, S.B., Orchard, J., Osborne, R., Ostro, B., Page, A., Pandey, K.D., Parry, C.D.H., Passmore, E., Patra, J., Pearce, N., Pelizzari, P.M., Petzold, M., Phillips, M.R., Pope, D., Pope III, C.A., Powles, J., Rao, M., Razavi, H., Rehfuess, E.A., Rehm, J.T., Ritz, B., Rivara, F.P., Roberts, T., Robinson, C., Rodriguez-Portales, J.A., Romieu, I., Room, R., Rosenfeld, L.C., Roy, A., Rushton, L., Salomon, J.A., Sampson, U., Sanchez-Riera, L., Sanman, E., Sapkota, A., Seedat, S., Shi, P., Shield, K., Shivakoti, R., Singh, G.M., Sleet, D.A., Smith, E., Smith, K.R., Stapelberg, N.J.C., Steenland, K., Stöckl, H., Stovner, L.J., Straif, K., Straney, L., Thurston, G.D., Tran, J.H., Van Dingenen, R., Van Donkelaar, A., Veerman, J.L., Vijayakumar, L., Weintraub, R., Weissman, M.M., White, R.A., Whiteford, H., Wiersma, S.T., Wilkinson, J.D., Williams, H.C., Williams, W., Wilson, N., Woolf, A.D., Yip, P., Zielinski, J.M., Lopez, A.D., Murray, C.J.L., Ezzati, M. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: A systematic analysis for the Global Burden of Disease Study 2010 (2012) *The Lancet*, 380 (9859), pp. 2224-2260.
24. Riahi K, Rao S, Krey V, Cho C, Chirkov V, Fischer G, Kindermann G, Nakicenovic N & Rafaj P (2011). RCP 8.5 - A scenario of comparatively high greenhouse gas

emissions. *Climatic Change*, 109(1-2):33-57 (November 2011) (Published online 13 August 2011).

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25. Fujisawa S, Krey V & Cho C (2010). Investigation of Emission Reduction and Uncertainties of Global Electrification Scenarios. Final Report: TEPCO-IIASA Collaborative Study.
26. Manning, M.R., Edmonds, J., Emori, S., Grubler, A., Hibbard, K., Joos, F., Kainuma, M., Keeling, R.F., Kram, T., Manning, A.C., Meinshausen, M., Moss, R., Nakicenovic, N., Riahi, K., Rose, S.K., Smith, S., Swart, R., Van Vuuren, D.P. Misrepresentation of the IPCC CO2 emission scenarios (2010) *Nature Geoscience*, 3 (6), pp. 376-377.
27. Tanaka K, Cho C, Krey V, Patt A, Rafaj P, Rao-Skirbekk S & Wagner F (2010). Geengineering to avoid overshoot: An analysis of uncertainty. *Geophysical Research Abstracts*, 12:EGU2010-12796.

## 2009

28. Klimont Z, Amann M, Cofala J, Borken-Kleefeld J, Purohit P & Hoeglund-Isaksson L (2009). Reduction of Energy Consumption / CO2 Emission and Improvement of Air Quality in Asia. Final Report to Sponsor (Research Agreement Phase I): Toyota Motor Corporation, Japan (March 2009).

## 2008

29. Carmichael, G.R., Sakurai, T., Streets, D., Hozumi, Y., Ueda, H., Park, S.U., Fung, C., Han, Z., Kajino, M., Engardt, M., Bennet, C., Hayami, H., Sartelet, K., Holloway, T., Wang, Z., Kannari, A., Fu, J., Matsuda, K., Thongboonchoo, N., Amann, M. MICS-Asia II: The model intercomparison study for Asia Phase II methodology and overview of findings (2008) *Atmospheric Environment*, 42 (15), pp. 3468-3490.
30. Han, Z., Sakurai, T., Ueda, H., Carmichael, G.R., Streets, D., Hayami, H., Wang, Z., Holloway, T., Engardt, M., Hozumi, Y., Park, S.U., Kajino, M., Sartelet, K., Fung, C., Bennet, C., Thongboonchoo, N., Tang, Y., Chang, A., Matsuda, K., Amann, M. MICS-Asia II: Model intercomparison and evaluation of ozone and relevant species (2008) *Atmospheric Environment*, 42 (15), pp. 3491-3509.
31. Hayami, H., Sakurai, T., Han, Z., Ueda, H., Carmichael, G.R., Streets, D., Holloway, T., Wang, Z., Thongboonchoo, N., Engardt, M., Bennet, C., Fung, C., Chang, A., Park, S.U., Kajino, M., Sartelet, K., Matsuda, K., Amann, M. MICS-Asia II: Model intercomparison and evaluation of particulate sulfate, nitrate and ammonium (2008) *Atmospheric Environment*, 42 (15), pp. 3510-3527.
32. Holloway, T., Sakurai, T., Han, Z., Ehlers, S., Spak, S.N., Horowitz, L.W., Carmichael, G.R., Streets, D.G., Hozumi, Y., Ueda, H., Park, S.U., Fung, C., Kajino, M., Thongboonchoo, N., Engardt, M., Bennet, C., Hayami, H., Sartelet, K., Wang, Z., Matsuda, K., Amann, M. MICS-Asia II: Impact of global emissions on regional air quality in Asia (2008) *Atmospheric Environment*, 42 (15), pp. 3543-3561.
33. Lutz W (2008). Has Korea's fertility reached the bottom? The hypothesis of a 'Low Fertility Trap' in parts of Europe and East Asia. *Asian Population Studies*, 4(1):1-4 (March 2008) (Published online 20 March 2008).

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35. Wang, Z., Xie, F., Sakurai, T., Ueda, H., Han, Z., Carmichael, G.R., Streets, D., Engardt, M., Holloway, T., Hayami, H., Kajino, M., Thongboonchoo, N., Bennet, C., Park, S.U., Fung, C., Chang, A., Sartelet, K., Amann, M. MICS-Asia II: Model inter-comparison and evaluation of acid deposition (2008) Atmospheric Environment, 42 (15), pp. 3528-3542.