

REPORT OF THE FINANCE, TRANSACTIONS AND INVESTMENTS COMMITTEE

This report summarizes developments in international energy law between January 1, 2021, and June 30, 2022.*

I.	U.S. and North America Energy Supply & Trade Developments.....	2
	A. Executive Order 14008: Tackling the Climate Crisis at Home and Abroad.....	2
	B. The Department of Commerce.....	2
	1. Inquiry into Imports of Solar Panels	2
	2. Biden Administration’s Proclamation on Tariffs	3
II.	War in Ukraine and the Aftershocks to the Oil and Natural Gas Markets.....	4
	A. Import Bans on Russian Oil	4
	1. United States	4
	2. European Union.....	5
	3. Russian Markets	6
	B. Export Controls	7
	1. United States	7
	2. European Union.....	7
	C. Russian Natural Gas.....	7
	D. Nord Stream 2 Pipeline	10
III.	Climate Change: Impacts and Adaptation.....	10
	A. Paris Agreement Greenhouse Gas Emissions Goals	11
	B. COP26.....	12
	1. Emissions Reduction	12
	2. China and the United States Substantive Cooperation	12
	3. Developing Country Assistance	13
	4. Countries Pledge to Stop Deforestation by 2030	13
	5. Financial Organizations Backing Clean Technology	13
	C. Further Meetings on Climate Change	14
	D. Renewable Energy Developments in Africa and Latin America.....	14
	1. Africa.....	14
	2. Latin America.....	15

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I. U.S. AND NORTH AMERICA ENERGY SUPPLY & TRADE DEVELOPMENTS

A. *Executive Order 14008: Tackling the Climate Crisis at Home and Abroad*

In January 2021, President Biden issued an executive order intended to address climate change.¹ Executive Order 14008 sets out several initiatives including making “climate change considerations” an integral part of “United States foreign policy and national security.”² The Executive Order also addresses steps to take domestically to deliver a “clean energy future” and endeavor “to achieve net-zero emissions by 2050.”³ Those steps include creating more clean energy infrastructure projects built by union members and accelerating the deployment of renewable energy on public lands and waters, including actions to advance offshore wind.⁴ The approaches outlined in the Executive Order seek to “combat the climate crisis” both at home and across the world, including proposals to rebuild infrastructure for a sustainable economy, advancement of reforestation and agriculture, and “revitalizing energy communities.”⁵

B. *The Department of Commerce*

1. Inquiry into Imports of Solar Panels

On March 28, 2022, the U.S. Department of Commerce (DOC) announced it is investigating whether imports of solar panels assembled in “Cambodia, Malaysia, Thailand and Vietnam” are circumventing duties intended to limit imports of solar cells and panels from China, in violation of anti-dumping rules, which could ultimately result in retroactively applied tariffs on up to 80% of solar imports.⁶ “The Department of Commerce’s investigation is being launched in response to a complaint filed by Auxin Solar, a photovoltaic solar manufacturer based in California’s Silicon Valley.”⁷ “Auxin Solar claims that the solar cells imported from Cambodia, Malaysia, Thailand, and Vietnam are identical to those from China that are subject to tariffs.”⁸ The uncertainty caused by the inquiry is impacting the U.S. solar industry.⁹

1. Exec. Order No. 14,008, 86 Fed. Reg. 7,619 (Feb. 1, 2021).

2. *Id.*

3. *Id.*

4. *FACT SHEET: President Biden Takes Executive Actions to Tackle the Climate Crisis at Home and Abroad, Create Jobs, and Restore Scientific Integrity Across Federal Government*, WHITE HOUSE (Jan. 27, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/27/fact-sheet-president-biden-takes-executive-actions-to-tackle-the-climate-crisis-at-home-and-abroad-create-jobs-and-restore-scientific-integrity-across-federal-government/>.

5. *Id.*

6. George Strobel, *Department of Commerce Decision Puts Fate of U.S. Solar Industry in Jeopardy*, FORBES (May 27, 2022), <https://www.forbes.com/sites/forbesfinancecouncil/2022/05/27/department-of-commerce-decision-puts-fate-of-us-solar-industry-in-jeopardy/?sh=776548b4a67b>.

7. Peter Maloney, *Commerce Department to Investigate Solar Imports*, AM. PUB. POWER ASS’N (Mar. 29, 2022), <https://www.publicpower.org/periodical/article/commerce-department-investigate-solar-imports>.

8. *Id.*

9. Strobel, *supra* note 6.

Proponents of the DOC investigation argue that the alleged circumvention makes it impossible for U.S. based manufacturers to compete against solar panels in Asia and that increased tariffs would support domestic solar panel production. However, opponents of the DOC inquiry fear that the investigation will cause significant harm to U.S. crystalline silicon module producers, as these companies depend on imports of solar cells due to the lack of production capacity within the United States.¹⁰

2. Biden Administration's Proclamation on Tariffs

On June 6, 2022, President Biden issued a Proclamation ensuring that no new tariffs can be enforced on solar imports for 24 months to temporarily allow the importation of crystalline silicon photovoltaic cells and modules from Cambodia, Malaysia, Thailand, and Vietnam free from collection of antidumping and countervailing (AD/CVD) duties or estimated duties.¹¹ The Proclamation refers specifically to the circumvention provision,¹² new investigations¹³ and administrative reviews,¹⁴ and paves the way for imports of crystalline silicon photovoltaic cells and modules free of AD/CVD duties for 24 months, or until June 6, 2024.¹⁵

The President issued the Proclamation as the U.S. Department of Commerce (Commerce) investigated whether to impose AD/CVD duties on imports of solar cells and modules from Southeast Asia.¹⁶ The duties – that could be over 238.95% – originally targeted imports from China, but one module assembler in the United States (Auxin Solar) petitioned for expansion of the China duties, alleging that Chinese companies set up production in Southeast Asia to circumvent the AD/CVD duties by producing cells and modules with Chinese inputs.¹⁷

The China duties were imposed in 2012, but since then, supply chains have shifted, resulting in approximately 80% of imports originating from Cambodia, Malaysia, Thailand and Vietnam, totaling over \$5 billion in trade annually.¹⁸ At the same time, U.S. cell production has shut down and only solar modules are assembled domestically.¹⁹ “As the U.S. module industry has grown, they remain reliant on imported cells, leading domestic producers to openly oppose the circumvention inquiries that threaten their supply of a key component.”²⁰

10. *Id.*; *U.S. Department of Commerce Investigation of Solar Panel Imports Puts Solar Projects at Risk*, MCGUIRE WOODS (Apr. 15, 2022), <https://www.mcguirewoods.com/client-resources/Alerts/2022/4/us-department-commerce-investigation-solar-panel-imports-puts-solar-projects-risk>.

11. *See* Proclamation No. 10414, 87 FR 35,067 (June 6, 2022) (citing Tariff Act of 1930 § 318(a), 19 U.S.C. § 1318(a) (1930) to grant the Secretary of Commerce additional authority to respond to the issues raised in the Proclamation).

12. 19 U.S.C. § 1677j (1930).

13. 19 U.S.C. § 1671 (2012). *See* 19 U.S.C. § 1673 (1994).

14. 19 U.S.C. § 1675 (2016).

15. *See* Proclamation No. 10414, *supra* note 11.

16. NORTON ROSE FULBRIGHT, *TARIFFS, INFLATION AND OTHER CHALLENGES* (2022), https://www.projectfinance.law/media/5762/pfn_0622a.pdf.

17. *Id.* at 9.

18. *Id.* at 5, 9.

19. *Id.*

20. *President Biden Allows Duty-Free Importation of Solar Panels from Southeast Asia and Funding for Domestic Manufacturing*, AKIN GUMP (June 10, 2022), <https://www.akingump.com/en/news-insights/president->

II. WAR IN UKRAINE AND THE AFTERSHOCKS TO THE OIL AND NATURAL GAS MARKETS

On February 24, 2022, after months of troop build-up, Russia “launched a full-scale invasion of Ukraine.”²¹ In response to Russia’s attack, the United States, the European Union (“EU”), and other allied countries have imposed wide-ranging sanctions on Russia.²² As revenue from fossil fuel exports is a huge component of Russia’s federal budget, many of the imposed sanctions target Russia’s oil and natural gas sectors.²³ But, as certain countries, especially those in central and eastern Europe, rely heavily on Russian oil and natural gas, the sanctions aim to punish Russia and deter Russian aggression in Ukraine while also trying to limit the impact of those sanctions on domestic energy security, reliability, and affordability.²⁴ A summary of the main European Union and American oil and natural gas sanctions against Russia, and responses to those sanctions, is below.²⁵

A. *Import Bans on Russian Oil*

1. United States

On March 8, 2022, amid increasing energy prices, the Biden Administration issued Executive Order 14066, which imposed an immediate ban on imports into the United States of Russian oil, liquefied natural gas, and coal.²⁶ The executive order also prohibited any “new investments in the energy sector in the Russian Federation by a United States person.”²⁷ Although “Russia is one of the three largest crude oil producers in the world,” the United States has less dependence on Russian oil than many other countries.²⁸ In fact, “only 8% of all U.S. petroleum imports” in 2021 were from Russia (“include[ing] a 3% share of crude oil imports and [a] 20% share of petroleum product imports”).²⁹

biden-allows-duty-free-importation-of-solar-panels-from-southeast-asia-and-funding-for-domestic-manufacturing.html.

21. *Russia has launched full-scale invasion of Ukraine, Kyiv says*, REUTERS (Feb. 23, 2022, 10:35 PM), <https://www.reuters.com/world/europe/russia-has-launched-full-scale-invasion-ukraine-kyiv-says-2022-02-24/>.

22. *FACT SHEET: Joined by Allies and Partners, the United States Imposes Devastating Costs on Russia*, WHITE HOUSE (Feb. 24, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/24/fact-sheet-joined-by-allies-and-partners-the-united-states-imposes-devastating-costs-on-russia/>.

23. *FACT SHEET: United States Bans Imports of Russian Oil, Liquefied Natural Gas, and Coal*, WHITE HOUSE (Mar. 8, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/08/fact-sheet-united-states-bans-imports-of-russian-oil-liquefied-natural-gas-and-coal/>.

24. Mike Fulwood, *Russian gas to the EU: to sanction or not to sanction*, OXFORD INST. FOR ENERGY STUD. (Apr. 2022), <https://www.oxfordenergy.org/publications/russian-gas-to-the-eu-to-sanction-or-not-to-sanction/>.

25. *See Russia’s War on Ukraine: A Sanctions Timeline*, PETERSON INST. FOR INT’L ECON., <https://www.piie.com/blogs/realtime-economic-issues-watch/russias-war-ukraine-sanctions-timeline> (last updated Oct. 7, 2022).

26. Exec. Order No. 14,066, 87 Fed. Reg. 13,625 (Mar. 8, 2022).

27. *Id.*

28. *The United States Imports More Petroleum Products Than Crude Oil From Russia*, U.S. ENERGY INFO. ADMIN. (Mar. 22, 2022), <https://www.eia.gov/todayinenergy/detail.php?id=51738>.

29. *Id.*

On April 8, 2022, following up on Executive Order 14066, President Biden signed into law H.R. 6968 (Ending Importation of Russian Oil Act), which statutorily “prohibit[s] the importation of energy products from Russia.”³⁰ President Biden also signed into law the companion bill H.R. 7108 (Suspending Normal Trade Relations with Russia and Belarus).³¹

2. European Union

As compared to the United States, European countries are much more dependent on Russian oil.³² For example, in 2021, numerous European Union countries such as Slovakia, Lithuania, and Poland received over 50% of their oil imports from Russia.³³

On June 3, 2022, after months of negotiations, the EU agreed to a sixth major package of sanctions, which included an embargo on Russian crude oil and petroleum products but made an exception for crude oil delivered by pipeline.³⁴ The oil embargo did not take effect immediately, and instead will be introduced in phases.³⁵ “Seaborne imports of Russian crude oil [are banned] as of December 5, 2022,” and Russia “petroleum product imports [are banned] as of February 5, 2023.”³⁶ But, “in a compromise with [countries such as] Hungary, Slovakia and the Czech Republic” that are dependent on Russian crude oil imports from the Druzhba pipeline, the embargo does not cover pipeline imports of Russian crude oil and petroleum products although such oil is prohibited from being resold to other EU member states.³⁷ In addition, Bulgaria was allowed to continue importing Russian “seaborne crude oil” through the end of 2024 and Croatia was permitted to continue “import[ing] Russian vacuum gas oil (a refinery feedstock) [through] the end of 2023.”³⁸

In addition to the EU measures in the sixth sanctions package, Germany and Poland have also voluntarily agreed to halt pipeline imports of Russian crude oil

30. Ending Importation of Russian Oil Act, H.R. 6968, 117th Cong. (2022).

31. Suspending Normal Trade Relations with Russia and Belarus Act, H.R. Res. 7108, 117th Cong. (2022).

32. Charlotte Edmond, *How much energy does the EU import from Russia?*, WORLD ECON. F. (Mar. 17, 2022), <https://www.weforum.org/agenda/2022/03/eu-energy-russia-oil-gas-import/>.

33. *Infographic: How much of your country's oil comes from Russia?*, AL JAZEERA, (Mar. 10, 2022), <https://www.aljazeera.com/news/2022/3/10/infographic-how-much-of-your-countrys-oil-comes-from-russia-interactive>.

34. *Russia's aggression against Ukraine: EU adopts sixth package of sanctions*, COUNCIL OF THE EUROPEAN UNION (June 3, 2022), <https://www.consilium.europa.eu/en/press/press-releases/2022/06/03/russia-s-aggression-against-ukraine-eu-adopts-sixth-package-of-sanctions/>.

35. *Id.*

36. Ben Cahill, *European Union Imposes Partial Ban on Russian Oil*, CTR. FOR STRATEGIC & INT'L STUD. (June 8, 2022), <https://www.csis.org/analysis/european-union-imposes-partial-ban-russian-oil>.

37. *Id.*

38. Council Regulation 2022/879 of June 3, 2022, Amending Regulation (EU) No 833/2014 Concerning Restrictive Measures in View of Russia's Actions Destabilizing the Situation in Ukraine, 2022 O.J. (L 153) 57; see Cahill, *supra* note 36.

by the end of 2022.³⁹ The combined Polish and German stoppage and the European Union embargo are anticipated to cut 90% of Russian oil imports to the EU.⁴⁰

3. Russian Markets

As the EU, the U.S. and certain other allied countries have shunned Russian oil; countries such as China and India have been stepping in, as global oil prices soar, to purchase additional Russian oil, often at steep discounts.⁴¹ For example, India has become a significant importer of Russian crude oil and now accounts for 18% of Russia's crude oil exports.⁴² While India imported "12 million barrels" of Russian oil "in all of 2021," India has already imported almost "60 million barrels of Russian oil" through mid-2022.⁴³ China is now the single largest importer of oil from Russia, overtaking Germany.⁴⁴ In addition, as compared to the first couple of months of 2022, "Russian crude [oil] export to Turkey have also doubled to 260,000 barrels per day and Bulgaria imports have also more than trebled to over 200,000 barrels per day."⁴⁵

Russia's oil exports have shown to be resilient in the face of sanctions, with Russia maintaining its position as third largest oil producer in the world after Saudi Arabia and the United States.⁴⁶ In fact, in the first 100 days since Russia's invasion of Ukraine, Russia is estimated to have earned approximately "93 billion [euros] in revenue from fossil fuel exports," although the EU member states remain responsible for 61% of this total, "worth approximately 57 billion euros."⁴⁷ In the first half of June 2022, Russia's seaborne oil exports averaged approximately 3.88 million barrels per day, which represents the highest level for such imports since May 2019.⁴⁸ Crude oil prices are now approximately double the level from 2021,

39. Cahill, *supra* note 36.

40. *Id.* See *Russian oil deliveries via the southern Druzhba pipeline halted*, ENERDATA (Aug. 10, 2022), <https://www.enerdata.net/publications/daily-energy-news/russian-oil-deliveries-southern-druzhba-pipeline-halted.html#:~:text=When>.

41. Ben Cahill, *Big Challenges for Russian Oil Price Cap*, CTR. FOR STRATEGIC & INT'L STUD. (Sept. 9, 2022), <https://www.csis.org/analysis/big-challenges-russian-oil-price-cap>.

42. Manoj Sharma, *Russia now accounts for 18% of India's crude imports; up from 1%*, FORTUNE INDIA (June 13, 2022), <https://www.fortuneindia.com/macro/indias-crude-oil-imports-from-russia-rise-to-18-from-1-before-ukraine-war/108574>.

43. *India's imports of Russian Oil Grow*, ASSOCIATED PRESS (June 14, 2022), <https://www.nwaonline.com/news/2022/jun/14/indias-imports-of-russian-oil-grow/>.

44. *India and China increasingly welcome shunned Russian oil*, PBS (June 13, 2022, 8:33 AM), <https://www.pbs.org/newshour/world/india-and-china-increasingly-welcome-shunned-russian-oil>; see Lauri Myllyvirta et al., *Financing Putin's War: Fossil Fuel Imports from Russia in the First 100 Days of the Invasion*, CTR. FOR RSCH. ON ENERGY AND CLEAN AIR (June 12, 2022), <https://energyandcleanair.org/publication/russian-fossil-exports-first-100-days>

45. Robert Perkins, *Russian seaborne oil exports at 3-year highs despite sanctions shake-up*, S&P GLOBAL (June 16, 2022), <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/061522-russia-seaborne-oil-exports-at-3-year-highs-despite-sanctions-shake-up#:~:text=In%20the%20first%20two%20weeks,million%20b%2Fd%20in%20February>.

46. *Id.*

47. Myllyvirta et al., *supra* note 44, at 2.

48. Perkins, *supra* note 45.

and with the high commodity prices, Russian state revenues from fossil fuels are actually forecasted to be higher in 2022 than last year.⁴⁹

B. Export Controls

1. United States

Building upon export controls previously announced in other sectors after the Russian invasion of Ukraine, on March 3, 2022, the U.S. Department of Commerce announced stringent new export controls “target[ing] Russia’s oil refining sector.”⁵⁰ This action is intended to impede “Russia’s oil refining sector,” thereby limiting the revenue Russia would be able to generate through the sale of refined petroleum products, such as gasoline.⁵¹ These export controls build on existing restrictions the Department of Commerce enacted in 2014 after the Russian invasion of Crimea on “Russian deepwater oil and gas exploration and extraction industries.”⁵²

2. European Union

On March 15, 2022, as part of its fourth package of sanctions against Russia, the EU announced that it would “prohibit new investments in the Russian energy sector” and enact “comprehensive export restrictions on equipment, technology, and services for the [Russian] energy industry.”⁵³ In addition, as part of the sixth package of sanctions agreed to on June 3, 2022, the EU mandated that, after a six month phase in period, companies in the EU will be prohibited from providing shipping insurance for the transport of Russian oil.⁵⁴ Considering the EU oil embargo, this action aims to hinder Russia’s ability to redirect oil sales away from Europe to other markets.⁵⁵

C. Russian Natural Gas

While not an issue for the United States, the EU is faced with its dependence on Russian natural gas and has taken a different approach to sanctions on Russian

49. Victor Jack & Sarah Anne Aarup, *Western sanctions sting but don’t devastate Russia’s economy*, POLITICO (July 26, 2022, 4:44 PM), <https://subscriber.politicopro.com/article/2022/07/western-sanctions-sting-but-dont-devastate-russias-economy-00048034?source=email>.

50. *Commerce Takes Further Actions to Target Russian Strategic Industries and Punish Enablers of Aggression*, U.S. DEP’T OF COM. (Mar. 4, 2022), <https://www.commerce.gov/news/press-releases/2022/03/commerce-takes-further-actions-target-russian-strategic-industries-and>.

51. *Id.*

52. *Id.*

53. *See Russia’s military aggression against Ukraine: fourth EU package of sectoral and individual measures*, COUNCIL OF THE EUROPEAN UNION (Mar. 15, 2022), <https://www.consilium.europa.eu/en/press/press-releases/2022/03/15/russia-s-military-aggression-against-ukraine-fourth-eu-package-of-sectoral-and-individual-measures/>.

54. COUNCIL OF THE EUROPEAN UNION, *supra* note 34; Jackie Northam, *The EU moves to bar insurance on ships carrying Russian oil. It’d be a big blow*, NPR (June 3, 2022, 5:11 PM), <https://www.npr.org/2022/06/03/1102990015/the-eu-will-likely-bar-insurance-on-ships-carrying-russian-oil-itd-be-a-big-blow>.

55. Cahill, *supra* note 36. *See* Northam, *supra* note 54.

natural gas and has not yet placed any embargoes on the importation of natural gas from Russia.⁵⁶ “Russia supplied Europe with [approximately] 40% of its natural gas [in 2021], with Germany as the continent’s largest importer in 2020.”⁵⁷ Compared to oil, substitutes for Russian natural gas are much harder to come by.⁵⁸ Europe has looked to liquid natural gas (LNG) imports from the United States to replace Russian natural gas.⁵⁹ However, the shift to sourcing natural gas outside of Russia has been difficult, especially in light of the June 2022 explosion at the Freeport LNG plant in Texas, which harmed the U.S.’ LNG export capacity.⁶⁰

Russia has sought to leverage its natural gas position, including threats to withhold natural gas supplies, to pressure the EU on its sanctions against Russia.⁶¹ In a move to avoid EU banking sanctions, on March 31, 2022, Russian President Putin announced a decree forcing foreign buyers to “pay for Russian natural gas in roubles . . . or else have their [natural gas] supplies cut.”⁶² European natural gas contracts primarily use euros for payment.⁶³ Pursuant to President Putin’s decree, foreign buyers would open special accounts in the Russian bank Gazprombank, and then “Gazprombank would buy rubles on behalf of the gas buyer.”⁶⁴ Since then, Russia has cut off natural gas supplies to certain European countries that refused to pay for gas in rubles, including EU member states “Poland, Bulgaria, the Netherlands, Denmark, and Finland.”⁶⁵ In addition, Russia has also been cut-

56. Ciara Nugent, *Why Sanctions on Russia Aren’t Targeting Oil and Gas*, TIME (Feb. 25, 2022, 2:55 PM), <https://time.com/6151493/russia-oil-gas-embargo-sanctions-ukraine/>.

57. Tom Espiner, *EU told to prepare for Russian gas shut-off*, BBC NEWS (July 20, 2022), <https://www.bbc.com/news/business-62230201>.

58. Clifford Krauss, *Europe’s Quest to Replace Russian Gas Faces Plenty of Hurdles*, N.Y. TIMES (May 5, 2022), <https://www.nytimes.com/2022/05/05/business/energy-environment/natural-gas-europe-russia-ukraine.html#:~:text=Climate%20concerns%2C%20investor%20reticence%20and,North%20Africa%20and%20the%20Mediterranean>.

59. Liz Hampton et al., *Freeport LNG plant blast adds to strain on global supplies*, REUTERS (June 9, 2022, 4:56 AM), <https://www.reuters.com/business/energy/explosion-hits-freeport-lng-plant-us-natgas-prices-plunge-2022-06-08/>; *U.S. liquefied natural gas exports to Europe increased during the first 4 months of 2022*, U.S. ENERGY INFO. ADMIN (June 7, 2022), <https://www.eia.gov/todayinenergy/detail.php?id=52659#:~:text=During%20the%20first%20four%20months,EIA%20estimates%20for%20April%202022>.

60. Liz Hampton et al., *supra* note 59; *U.S. liquefied natural gas exports to Europe increased during the first 4 months of 2022*, *supra* note 59.

61. Sam Meredith, *Russian has cut off gas supplies to Europe indefinitely. Here’s what you need to know*, CNBC, <https://www.cnbc.com/2022/09/06/energy-crisis-why-has-russia-cut-off-gas-supplies-to-europe.html> (last updated Sept. 6, 2022, 8:30 PM).

62. Joseph Nasr & Mark Trevelyan, *Putin tells Europe: Pay in roubles or we’ll cut off your gas*, REUTERS (Mar. 31, 2022, 3:03 PM), <https://www.reuters.com/business/energy/russia-sets-deadline-rouble-gas-payments-europe-calls-it-blackmail-2022-03-31/>.

63. *Id.*

64. *Id.*

65. Espiner, *supra* note 57; Jorge Liboreiro, *Which EU countries have been totally or partially cut off from Russian gas?*, EURONEWS (July 7, 2022), <https://www.euronews.com/my-europe/2022/07/07/which-eu-countries-have-been-totally-or-partially-cut-off-from-russian-gas#:~:text=In%20late%20April%2C%20Poland%20and,pay%20their%20bills%20in%20roubles>.

ting natural gas supplies flowing to Germany through the Nord Stream 1 pipeline.⁶⁶ While Russia has cited maintenance and technical repairs for the Nord Stream 1 shut offs, German leaders have dismissed such assertions and argue instead that Russia is using economic pressure to try to weaken European support for Ukraine.⁶⁷

With all of the natural gas shut offs, the International Monetary Fund estimates that the most-affected countries in Central and Eastern Europe, such as Hungary, the Slovak Republic, and the Czech Republic, could face “shortages of as much as 40% of gas consumption,” and a “gross domestic product shrinking by up to 6%.”⁶⁸ The European Commission has also warned that a natural gas cut off during “winter could have a major impact on EU [member state] economies.”⁶⁹ Since Russia’s invasion of Ukraine, natural gas prices in Europe have already been soaring - with natural gas prices approximately six times higher than in 2021.⁷⁰ While Russian gas exports fell about in quarter in June 2022 as compared to a year ago, earnings rose from \$3.6 billion to \$11.1 billion.⁷¹

In preparation for further cuts to the natural gas supply, the EU energy ministers, except for Hungary, have agreed to cuts in natural gas consumption.⁷² While the energy plan starts as “a voluntary 15% reduction in gas consumption across the bloc” from August 2022 through March 2023, those reductions could become mandatory if faced with extreme gas storages and after the activation of Union Alert system by a “qualified majority vote.”⁷³ However, the mandatory cuts are subject to multiple exceptions, including for countries that are not interconnected with neighboring countries, and for countries that “can demonstrate they use their [LNG] infrastructure to import from non-Russian suppliers” and will export natural gas to other EU member states as possible.⁷⁴ In addition, countries can also request exemptions from the mandatory cuts based on certain enumerated reasons, including for surpassing gas storage targets.⁷⁵

66. See *Russia to cut gas through Nord Stream 1 to 20% of capacity*, ASSOCIATED PRESS (July 25, 2022) <https://apnews.com/article/russia-ukraine-germany-government-and-politics-1acacc374cd6d9bc860de00a73b8abee>.

67. *Id.*

68. Mark Flanagan et al., *How a Russian Natural Gas Cutoff Could Weigh on Europe’s Economies*, IMF (July 19, 2022) <https://blogs.imf.org/2022/07/19/how-a-russian-natural-gas-cutoff-could-weigh-on-europes-economies>.

69. Espiner, *supra* note 57.

70. Jack & Aarup, *supra* note 49.

71. *Id.*

72. Jorge Liboreiro & Alice Tidey, *Energy ministers reach deal on EU-wide 15% gas reduction plan*, EURONEWS (July 26, 2022) <https://www.euronews.com/my-europe/2022/07/26/energy-ministers-reach-deal-on-eu-wide-gas-reduction-plan>.

73. *Id.*

74. *Id.*

75. America Hernandez, *Countries agree on mandatory gas cut regulation*, POLITICO (July 26, 2022, 2:17 PM), <https://subscriber.politicopro.com/article/2022/07/countries-agree-on-mandatory-gas-cut-regulation-document-00047964?source=email>; Liboreiro & Tidey, *supra* note 72.

D. Nord Stream 2 Pipeline

The Nord Stream 2 Gas Pipeline (“Nord Stream 2”) is an approximately \$11 billion, 1,200-kilometer offshore natural gas pipeline connecting Greifswald in northeastern Germany to Ust-Luga in northwestern Russia.⁷⁶ The pipeline crosses the Baltic Sea (bypassing Ukraine) and was intended to double the flow of natural gas between Russia and Germany.⁷⁷ Nord Stream 2 lies next to the already operational Nord Stream 1 pipeline.⁷⁸ Gazprom, the Russian state-owned energy company, is the upstream owner of Nord Stream 2.⁷⁹

Nord Stream 2 has been controversial since its inception, with the United States and numerous Eastern European countries opposing the pipeline over concerns that Nord Stream 2 would further deepen European dependence on Russian energy.⁸⁰

Although construction on Nord Stream 2 finished in September 2021 and operations were expected to start in 2022, the German energy regulator temporarily halted the certification process needed to start operating the pipeline in November 2021, and then, in response to Russia’s actions towards Ukraine, suspended the process on February 22, 2022, after German Chancellor Olaf Scholz withdrew an official opinion that the pipeline did not pose a threat to supply security.⁸¹

The following day, the Biden Administration announced increased economic sanctions on Nord Stream 2, including sanctions on its parent company Nord Stream 2 AG and its chief executive officer.⁸² Nord Stream 2 has since filed for bankruptcy in Switzerland.⁸³

III. CLIMATE CHANGE: IMPACTS AND ADAPTATION

The international agenda has recognized climate change as an urgent matter since the signing of the United Nations Framework on Climate Change (UNFCCC) in 1992.⁸⁴ The UNFCCC established an international environmental treaty where 154 state members agreed to adapt their national policies and regulations to reduce greenhouse gases and develop measures to minimize the effects of climate change.⁸⁵ Since the UNFCCC, the international climate change agenda has relied on the conclusions of the United Nations Intergovernmental Panel for Climate

76. Holly Ellyatt, *Nord Stream 2 cost \$11 billion to build. Now, the Russia-Europe gas pipeline is unused and abandoned*, CNBC, <https://www.cnbc.com/2022/03/31/the-nord-stream-2-pipeline-lies-abandoned-after-russia-invaded-ukraine.html> (last updated Mar. 31, 2022, 2:28 AM). See *Russia’s Nord Stream 2 Natural Gas Pipeline to Germany Halted*, CONG. RSCH. SERV., <https://crsreports.congress.gov/product/pdf/IF/IF11138> (last updated Mar. 10, 2022) (providing more details on Nord Stream 2).

77. CONG. RSCH. SERV., *supra* note 76.

78. *Id.*

79. *Id.*

80. *Id.*

81. CONG. RSCH. SERV., *supra* note 76.

82. *Id.*

83. *Id.*

84. U.N. Framework Convention on Climate Change, Mar. 21, 1994, 1771 U.N.T.S. 165, S. Treaty Doc. 102-38.

85. *Id.*

Change (IPCC).⁸⁶ The IPCC is the United Nations body for assessing the science related to climate change and provides scientific information that governments across the world can use to develop climate policies.⁸⁷ The IPCC has issued a series of working group reports that discuss the science behind climate change and methodology reports that address greenhouse gas emissions.⁸⁸

A. Paris Agreement Greenhouse Gas Emissions Goals

The First IPCC Report, published in 1990, stated that human activities may be changing the climate of the globe through a greenhouse effect, by past and “continuing emissions of carbon dioxide” causing the “temperature of the Earth’s surface to increase.”⁸⁹ This information formed the basis for the UNFCCC.⁹⁰ Likewise, the information released by the Fifth IPCC Report (2014) stating that “the temperature change . . . can be kept to less than 2°C relative to pre-industrial levels,”⁹¹ led state members, in the 2015 Paris Agreement⁹², to compromise to “hold[] the increase in the global average temperature to well below 2°C above pre-industrial levels and [to] pursue[] efforts to limit the temperature increase to 1.5 °C above pre-industrial levels.”⁹³ This goal remains in effect.⁹⁴

The Sixth IPCC Report (2021) stated that significant changes to reduce greenhouse emissions need to be made.⁹⁵ This information provided support for the Twenty-Sixth Conference of the Parties to the United Nations Framework Convention on Climate Change.⁹⁶ This conference is commonly referred to as COP26.⁹⁷

86. *History of the IPCC*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, <https://www.ipcc.ch/about/history/>.

87. *Id.*

88. *See Working Groups*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, <https://www.ipcc.ch/working-groups/>.

89. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE: THE IPCC SCIENTIFIC ASSESSMENT XII (2018), https://www.ipcc.ch/site/assets/uploads/2018/03/ipcc_far_wg_I_full_report.pdf.

90. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SUMMARY FOR POLICYMAKERS 4 (2018), https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_summary-for-policymakers.pdf. *See*

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, IPCC FACTSHEET: TIMELINE – HIGHLIGHTS OF IPCC HISTORY (July 2021), https://www.ipcc.ch/site/assets/uploads/2021/07/AR6_FS_timeline.pdf.

91. SUMMARY FOR POLICYMAKERS, *supra* note 90, at 10.

92. Paris Agreement art. 2(1)(a), Apr. 22, 2016, 3156 U.N.T.S. 27.

93. *Id.*

94. *Id.*

95. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport.pdf.

96. UNITED NATIONS, REPORT OF THE CONFERENCE OF THE PARTIES SERVING ON ITS TWENTY-SIXTH SESSION, HELD IN GLASGOW FROM 31 OCTOBER TO 13 NOVEMBER 2021 PART TWO: ACTION TAKEN BY THE CONFERENCE OF THE PARTIES AT ITS TWENTY-SIXTH SESSION (Mar. 8, 2022), https://unfccc.int/sites/default/files/resource/cma2021_10_add1_adv.pdf.

97. UNITED NATIONS, COP26 THE GLASGOW CLIMATE PACT, <https://ukcop26.org/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>.

B. COP26

COP26 took place in Glasgow, United Kingdom, from October 31-November 13, 2021.⁹⁸ At COP26, state members agreed to the (non-legally binding) Glasgow Climate Pact (COP26).⁹⁹ The most significant outcomes of COP26 are detailed below.

1. Emissions Reduction

State members reaffirmed the Paris Agreement temperature goal.¹⁰⁰ They “recognize[d] that [the] impacts of climate change will be much lower at the temperature increase of 1.5 °C *compared with* 2 °C, and resolve[d] to pursue efforts to limit the increase of temperature” to such level.¹⁰¹ This results in a rapid reduction of global greenhouse gas emissions to achieve “net zero [by] mid-century.”¹⁰²

To make the transition towards a low-emissions state, members agreed to scale up the deployment of clean power generation and energy efficiency measures, making efforts to “phase-down” coal power and “phase-out” inefficient fossil fuel subsidies.¹⁰³ Thus far, the U.S., Japan and Canada have submitted climate targets before COP26, and India is preparing to submit new climate goals in September 2022.¹⁰⁴

2. China and the United States Substantive Cooperation

The U.S. and China engaged in “*The U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s*” to avoid catastrophic impacts of climate change and strengthen implementation of the Paris Agreement goals.¹⁰⁵ The two countries agreed to cooperate on regulatory frameworks that reduce emissions and develop decarbonization and electrification policies.¹⁰⁶ The declaration also addresses key areas for circular economies, green designs, direct air capture and Carbon Capture, Utilization, and Storage technologies.¹⁰⁷ More broadly, the U.S. and China agreed to reduce methane emissions as well as carbon dioxide.¹⁰⁸ For

98. UNITED NATIONS, REPORT OF THE CONFERENCE OF THE PARTIES SERVING AS THE MEETING OF THE PARTIES TO THE PARIS AGREEMENT ON ITS THIRD SESSION, HELD IN GLASGOW FROM 31 OCTOBER TO 13 NOVEMBER 2022 PART ONE: PROCEEDINGS (Mar. 8, 2022), <https://unfccc.int/documents/460942>.

99. *Id.* at 14.

100. Conference of the Parties serving as the meeting of the Parties to the Paris Agreement Decision 1/CMA.3 (March 8, 2022).

101. *Id.* at ¶ 21.

102. *Id.* at ¶ 22.

103. *Id.* at ¶ 36.

104. *India preparing to submit new climate targets to UN in September*, STRAITS TIMES (July 13, 2022), <https://www.straitstimes.com/asia/south-asia/india-preparing-to-submit-new-climate-targets-to-un-in-september>.

105. *U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s*, U.S. DEP’T OF STATE (Nov. 10, 2021), <https://www.state.gov/u-s-china-joint-glasgow-declaration-on-enhancing-climate-action-in-the-2020s/>.

106. *Id.*

107. *Id.*

108. *Id.*

such purposes, the United States announced the “U.S. Methane Emissions Reduction Action Plan” as well as its goal to reach 100% carbon pollution-free electricity by 2035, and China stated its intention to develop a “National Action Plan on methane”¹⁰⁹ and a “phase down coal consumption during the 15th Five Year Plan.”¹¹⁰

3. Developing Country Assistance

In continuation of existing compromises under the Paris Agreement, state members pledged to significantly support developing countries, among others, through financial resources to implement mitigation and adaptation measures.¹¹¹ Moreover, they recognized that the previous goal to mobilize \$100 billion per year by 2020 has not been met and agreed upon to increase economic support beyond \$100 billion per year through 2025.¹¹²

4. Countries Pledge to Stop Deforestation by 2030

Previous efforts to end deforestation have resulted in the “Glasgow Leaders’ Declaration on Forests and Land Use,” where 141 countries agreed on the “sustainable management of forests.”¹¹³ These countries committed to work to reverse forest loss and land degradation by 2030, while making efforts to conserve and restore forest; facilitate policies that promote sustainable development, reduce vulnerability in rural livelihoods, “redesign agricultural policies,” and “reaffirm international financial commitments.”¹¹⁴

Twelve governments committed \$12 billion to fight deforestation and private companies pledged \$7.2 billion which included \$1.7 billion for Indigenous peoples.¹¹⁵ Likewise, more than “30 financial institutions . . . vowed to stop investing in companies responsible for deforestation.”¹¹⁶

5. Financial Organizations Backing Clean Technology

The Glasgow Financial Alliance for Net Zero (The Alliance) was launched in April 2021 to provide a forum for leading financial institutions to accelerate the

109. U.S. DEP’T OF STATE, *supra* note 105.

110. *Id.*

111. *The Glasgow climate pact, annotated*, WASH. POST (Nov. 13, 2021), <https://www.washingtonpost.com/climate-environment/interactive/2021/glasgow-climate-pact-full-text-cop26/>.

112. *Id.*

113. Dr. Adriana Erthal Abdenur, *The Glasgow Leaders’ Declaration on Forests: Déjà Vu or Solid Restart?*, UNITED NATIONS UNIV., CTR. FOR POL’Y RSCH. 1 (2022), <https://collections.unu.edu/eserv/UNU:8669/COP26ForestGovernance.pdf>.

114. *Glasgow Leaders’ Declaration on Forests and Land Use*, UN CLIMATE CHANGE CONFERENCE UK 2021 (Feb. 11, 2021), <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>.

115. Chloé Farand, *Donor nations commit \$1.7bn to help indigenous people protect forests*, CLIMATE HOME NEWS (Feb. 11, 2021, 4:54 PM), <https://www.climatechangenews.com/2021/11/02/donor-nations-commit-1-7bn-help-indigenous-people-protect-forests/>.

116. *Global Leaders Pledge to End Deforestation by 2030*, N.Y. TIMES, <https://www.nytimes.com/2021/11/02/climate/cop26-deforestation.html> (last updated Nov. 10, 2021).

transition to a net-zero global economy in the Paris Agreement context.¹¹⁷ Accordingly, 450 financial organizations agreed to support clean technology development and “finance away from fossil fuel-burning.”¹¹⁸ It is estimated that the Alliance could “deliver as much as \$100 trillion of financing to help” a cleaner transition by 2050.¹¹⁹

Finally, the COP26 stated as *urgent* that “operating entities of the Financial Mechanism, multilateral development banks and other financial institutions . . . *scale up* investments in climate action”¹²⁰ and “accelerate the alignment of their financing activities with the goals of the Paris Agreement.”¹²¹

C. Further Meetings on Climate Change

The Egyptian government will host the next Conference of the Parties (COP27) in November 2022 and “has promised to make climate finance a central theme of the gathering.”¹²² State members met in Bonn, Germany on December 6, 2021, and June 6, 2022 to address “technical issues and to prepare decisions for adoption” at COP27.¹²³

On June 2, 2022, the United Nations “Stockholm+50” Conference took place.¹²⁴ The four plenary sessions featured calls for bold actions to accelerate the implementation of the United Nations 2030 Agenda for Sustainable Development.¹²⁵

D. Renewable Energy Developments in Africa and Latin America.

1. Africa

In 2022, several solar developments had been proposed in South Africa.¹²⁶ Among them: (a) a request of the Renewable Energy Independent Power Producer Procurement Program to develop 1,000 MW on solar capacity; (b) an approved proposal by the National Energy Regulator to develop 200 MW of solar energy by

117. *About Us*, GLASGOW FIN. ALL. FOR NET ZERO, <https://www.gfanzero.com/about/>.

118. Angus King-Davies et al., *Summary of COP26 Deal: The Glasgow Climate Pact*, TENO (Nov. 15, 2021), <https://www.teneo.com/summary-of-cop26-deal-the-glasgow-climate-pact/>.

119. *Id.*

120. PART TWO: ACTION TAKEN BY THE CONFERENCE OF THE PARTIES AT ITS TWENTY-SIXTH SESSION, *supra* note 96, at Art. V, ¶ 47.

121. *Id.* at Art. V, ¶ 55.

122. Zack Colman & Karl Mathiesen, *Hype or hope? The rich country strategy to pay nations to ditch coal*, POLITICOPRO (Jun. 15, 2022), <https://subscriber.politicopro.com/article/2022/06/hype-or-hope-the-rich-country-strategy-to-pay-nations-to-ditch-coal-00039418>.

123. *Bonn Climate Change Conference Makes Progress in Several Technical Areas, But Much Work Remains*, UNITED NATIONS CLIMATE CHANGE (Jun. 16, 2022), <https://unfccc.int/news/bonn-climate-change-conference-makes-progress-in-several-technical-areas-but-much-work-remains>.

124. *Summary of Stockholm+50, 2-3 June 2022*, INT’L INST. FOR SUSTAINABLE DEV. (June 6, 2022), <https://enb.iisd.org/stockholm50-summary>.

125. *Id.*

126. *Top 5 Solar Developments in South Africa*, ENERGY CAP. & POWER, <https://energycapitalpower.com/south-africa-solar-energy-2022-projects/>.

Cape Town-based energy firm, SOLA Group; (c) a three-project plan to deploy up to 175 MW of solar capacity across the Mining firm, Sibanye-Stillwater sites; and, (d) a commitment of R2.3 billion by African Development Bank to help fund towards Redstone concentrated solar power project in the Northern Cape province.¹²⁷

2. Latin America

A quarter of Latin America's primary energy comes from renewable energy, mostly hydropower.¹²⁸ In 2021, Latin America installed more than "16.5 GW of . . . renewable capacity" and it is estimated that 13 GW of solar will be produced in 2022.¹²⁹

Among some of the solar projects to be implemented are (a) "the supply and installation of photovoltaic equipment and internal installations in public buildings of 19 provinces of Argentina;" (b) A-4 2022 new energy auction [in Brazil], with 1894 registered projects approved to participate . . . (around 75,250 MW) including wind, photovoltaic, hydroelectric and biomass thermoelectric plants;" (c) 24 MW through "Solar Project Helios" and Grenergy Renovables in Colombia.¹³⁰

127. *Id.*

128. *Latin America and the Caribbean*, INT'L RENEWABLE ENERGY AGENCY, <https://www.irena.org/lac>.

129. Leila Garcia de Fonseca, *Why 2022 will be a record year for Latin American power and renewables*, WOOD MACKENZIE (Jan. 21, 2021), <https://www.woodmac.com/news/opinion/why-2022-will-be-a-record-year-for-latin-american-power-and-renewables-2022-outlook/>.

130. Erick Hernández Gallego, *Renewable Energy in Latin America Updates May 2022*, NAT'L LAW REV. (May 11, 2022), <https://www.natlawreview.com/article/renewable-energy-latin-america-updates-may-2022>.