

Title: Facts

RESEARCH	VIDEO/IMAGERY	AUDIO/VO
1	SUPER: Top 3 facts about methane (in a faux-handwritten font with a wiggle effect applied to simulate hand-drawn animation)	Top three facts about methane:
Methane Causes An "Increased Risk Of Asthma" Because It Is "Released During The Production And Transport Of Oil, Gas And Coal," Is "Much More Potent Than Carbon Dioxide," And A "Known Driver Of Climate Change," Which Directly Causes An "Increased Risk Of Asthma." "Methane is released during the production and transport of oil, gas and coal. It is much more potent than carbon dioxide. Methane is a known driver of climate change because it traps heat in the atmosphere. Climate-related health impacts may include: reduced lung function; increased risk of asthma and COPD flare-ups; increased risk of respiratory illnesses such as bronchitis." (Allergy & Asthma Network, 12/02/23) "Methane Is The Main Precursor To Ground-Level Ozone," And "Reducing Methane Emissions By 40% By 2030 Could Prevent An Estimated [] 540,000 Emergency Room Visits From Asthma." Methane is the main precursor to ground-level ozone, a substance that has harmful health consequences that could increase as the world develops and global temperatures rise: Reducing methane emissions could avoid nearly 0.3 degrees Celsius of global warming by 2040 Reducing methane emissions by 40% by 2030 could prevent an estimated 180,000 deaths, 540,000 emergency room visits from asthma, and 11,000 hospitalizations of elderly people each year." (UNEP Climate & Clean	3D "1" rotating around in top left corner The words "Asthma", "Heart Disease", and "Cancer" show up one at a time in the same hand-drawn font as scene 1 Broken heart emojis/stickers or other symbols float around in the other corners	One: It's a toxic greenhouse gas that also raises rates of asthma, heart disease, and cancer.



Air Coalition, 03/22/21)

"Oil Producers Use Flares To Burn Methane Gas, A Process Which Also Releases Co-Pollutants Such As Nitrogen Oxides (NOx) And Fine Particle Pollution (PM2.5)" "Linked To Asthma" And "Cardiovascular Disease." "While awareness of methane's climate mitigation potential is growing, the public health benefits of cutting methane are less well understood. For example, methane is often emitted by the oil and gas industry as part of normal operations. Some oil producers use flares to burn methane das, a process which also releases co-pollutants such as Nitrogen Oxides (NOx) and fine particle pollution (PM2.5) that are linked to asthma, cardiovascular disease and premature death." (Environmental Defense Fund, 09/21/23)

NIH "Cross-Sectional" Study Of "Datasets From 73 Countries Across All Continents" Finds That "Oil And Gas Methane Emissions" "Increase" The "Burden" Of Cardiovascular Diseases. NIH Study: "The energy industry significantly contributes to anthropogenic methane emissions, which add to global warming and have been linked to an increased risk of cardiovascular diseases (CVD). This study aims to evaluate the relationship between energy-related methane emissions and the burden of CVD. measured in disability-adjusted life years (DALYs), in 2019. We conducted a cross-sectional analysis of datasets from 73 countries across all continents. The analyzed datasets included information from 2019 on environmental energy-related methane emissions, burden of DALYs due to CVD. The age-standardized prevalence of obesity in adults and life expectancy at birth were retrieved. The relationship between the variables of interest was evaluated using multiple linear regression models. In the multiple model, we observed a positive linear association between methane emissions and the log-transformed count of DALYs related to CVD. Specifically, for each unit increase in



energy-related methane emissions, the burden of CVD increased by 0.06% (95% CI 0.03–0.09%, p < 0.001). The study suggests that reducing methane emissions from the energy industry could improve public health for those at risk of CVD. Policymakers can use these findings to develop strategies to reduce methane emissions and protect public health." (National Library of Medicine, 08/19/23)

Global Climate And Health Alliance Study: "Methane-Driven" "Ozone Can Lead To [...] Cardiovascular Diseases [And] Asthma." Global Climate and Health Alliance study: "Targeted technical solutions to reduce methane emissions from fossil fuels can deliver multiple human health benefits. First. they can limit tropospheric ozone, a harmful air pollutant created by methane emitted from sources such as oil and natural das extraction, production, combustion, as well as coal mining. Methane-driven tropospheric ozone can lead to adverse health outcomes. such as cardiovascular diseases, asthma, respiratory illness, and premature death, resulting in roughly 1 million premature deaths yearly" (Global Climate and Health Alliance, <u>08/29/23</u>)

American Lung Association: "As Methane Is Leaked, So Are Other Pollutants, **Including Volatile Organic Compounds** (VOCs), Which "Can Cause Cancer, Affect The Nervous System Or Cause Birth **Defects.**" "Methane gets into the atmosphere in a number of ways, including from landfills, agricultural activities, coal mining, stationary and mobile combustion, wastewater treatment and certain industrial processes. But one of the main sources of methane gas pollution is from the production of oil and gas, according to EPA. Methane is the main component of natural gas, like the kind your home's heating or stove may use. Natural gas is also burned in many power plants to produce electricity. When natural gas or



crude oil is extracted and transported from oil and gas wells, some of the methane leaks out. In fact, one study found that about 13 million metric tons of methane leak into the atmosphere before it is even used. That is enough wasted gas to fuel 10 million homes for a year! And as methane is leaked, so are other pollutants, including volatile organic compounds (VOCs). VOCs form ozone and can cause cancer, affect the nervous system or cause birth defects." (American Lung Association, 02/24/22)

American Lung Association: "Everyone's Health Is At Risk From Breathing In VOCs - Including Healthy Adults," And Children Attending Schools And Daycares In The Area Are "Exposed To Toxic Pollution" Are Put At "Higher Risk Of Asthma Attacks, Cancer And More," And "Mothers **Exposed To This Pollution Have A Higher** Risk That Their Babies Will Be Born With **Birth Defects."** "Everyone's health is at risk from breathing in VOCs – including healthy adults. Though VOCs and other air pollutants can travel far away from their source, people who live near oil and gas wells are especially vulnerable. For example, one of many areas harmed by oil and gas pollution is Arlington, Texas. More than half of all public schools and licensed daycares in Arlington are within a half-mile of a natural gas well, eight of which are within 600 feet of a gas well. The children attending these schools and daycares are exposed to toxic pollution from these wells which puts them at a higher risk of asthma attacks, cancer and more. In addition, mothers exposed to this pollution have a higher risk that their babies will be born with birth defects." (American Lung Association, 02/24/22)



When "When Fossil Fuel Companies Burn Off Excess Methane Gas From Oil Operations," Or Venting, It "Releases Toxic Pollutants Known To Harm Human Health, Including Benzene, A Human Carcinogen That Can Cause Leukemia." "Flaring occurs when fossil fuel companies burn off excess methane gas from oil operations rather than capturing the gas in pipelines. When burned, the powerful greenhouse gas – more than 80 times more potent at global warming than carbon dioxide over a 20-year period – is released into the atmosphere. After Russia, Iraq accounts for the most flared gas in the world. Flaring also releases toxic pollutants known to harm human health, including benzene, a human carcinogen that can cause leukemia. An Irag Health Ministry report leaked to the BBC attributed pollution from the oil industry, among other sources, as the cause of a 20 percent rise in cancer in Basra between 2015 and 2018, and revealed cancer cases in the region to be three times higher than publicly disclosed figures. Iraqi government officials have acknowledged a link between the oil pollution from flaring and cancer. Irag's former environment minister, Jassem al-Falahi, told the BBC that pollution from oil production is the main reason for increases in cancer rates in Basra." (Human Rights Watch, 05/03/23)

Princeton Research: The "Increase In The Emission Of Halomethane, Which Is Made Up Of Chloromethane And Bromomethane," Leads To "Increased Rates Of Skin Cancer." "As a combination of rising sea levels, extreme weather, and groundwater overuse leads to increasing seawater encroachment in coastal areas, it's essential that we learn more about the resulting shifts in soil chemistry in these environments and the impacts they can have on a larger scale. Previous research on



coastal wetlands found that as freshwater wetlands transition into salt marshes because of increasing marine influences, there is a corresponding increase in the emission of halomethane, which is made up of chloromethane and bromomethane. Once emitted, these molecules travel to the stratosphere where they trigger ozone degradation, leading to increased rates of skin cancer and cataracts in humans."

(Princeton Media, 04/27/22)

A "Chemical Called Mercaptan Is Added"
To Methane "To Help You Smell A Gas
Leak" That "Smells Like Rotten Eggs."
"Although methane has no smell, a stinky
chemical called mercaptan is added to
natural gas to help you smell a gas leak. It
smells like rotten eggs." (Ohio Department of
Health, 12/07/17)

Calcasieu Pass 2 Is "An Enormous Liquefied-Natural-Gas Export Terminal [...] **Proposed For The Louisiana Coast" That** Would "Help Lock In The Planet's Reliance On Fossil Fuels Long Past What Scientists Have Identified As The **Breaking Point For The Climate System.**" "But the Willow field is not the only major fossil-fuel project in the works. Soon, you may also be hearing a good deal about C.P.2, or Calcasieu Pass 2, an enormous liquefied-natural-gas export terminal that's been proposed for the Louisiana coast, and which the Biden Administration is likely to approve or reject this fall. The project, the largest of at least twenty L.N.G. terminals proposed by a handful of companies to take gas mostly from the Southwest's Permian Basin to overseas customers, is a poster child for late-stage petrocapitalism: it would help lock in the planet's reliance on fossil fuels long past what scientists have identified as the breaking point for the climate system.

And it will bring to the fore one of the most

Stylized "2" in top left corner

Stylized SUPER: Massive New Methane Plant using this text effect:



Sticker pops on: simple-looking building with black smoke spewing from a chimney Two: Big Oil has plans to build a massive new methane plant in Louisiana, and lots more after that.



crucial—and least-discussed—parts of the climate fight: America's rapidly increasing exports of oil and gas to the rest of the world. To give an idea of how big the battle at C.P.2 could turn out to be: according to the veteran energy analyst Jeremy Symons, the greenhouse-gas emissions associated with it would be twenty times larger than those from the oil drilling at Willow [...] Venture Global also says that it will help in the climate fight by deploying 'carbon capture' technology at the C.P.2 site, 'compressing CO2 at its sites and then transporting the CO2 and injecting it deep into subsurface saline aguifers where it will be permanently stored.' But that would only capture the carbon produced in the process of liquefying the gas and loading it on ships; it wouldn't capture any of the far greater amounts of carbon produced when that gas is later burned overseas, or the heat-trapping methane released by the fracking process in the first place." (New Yorker, 09/22/23)

Liquefied Natural Gas "Is A Major Driver Of The Climate Crisis" As It "Involves The Leaking Of Large Quantities Of Methane, A Potent Greenhouse Gas." "Joe Biden's administration is under mounting pressure to block construction of what would be one of the world's largest gas export hubs, and which would be perched near the rapidly eroding Louisiana shoreline, due to concerns over its impact on the climate and communities living amid an unprecedented expansion of new gas infrastructure along the Gulf of Mexico [...] Environmental groups have warned that Biden risks blowing apart his own efforts to combat the climate crisis in the US and endanger international climate goals by allowing terminals such as CP2, which is likely to be decided upon by federal regulators within the next month [...] Critics point out that the production



of LNG, when drilling, production and burning are considered, is a major driver of the climate crisis. Studies have shown that while gas emits less carbon dioxide than coal, it often also involves the leaking of large quantities of methane, a potent greenhouse gas." (*Guardian*, 10/23/23)

U.S. Energy Information Administration: LNG Export Capacity From North America Is Likely To More Than Double Through 2027," As "Five LNG Export Projects Are **Currently Under Construction With A** Combined 9.7 Bcf/d Of LNG Export Capacity," And "Developers Expect LNG **Exports From Golden Pass LNG And** Plaguemines LNG To Start In 2024." "LNG export capacity from North America is likely to more than double through 2027 [...] Five LNG export projects are currently under construction with a combined 9.7 Bcf/d of LNG export capacity—Golden Pass, Plaquemines, Corpus Christi Stage III, Rio Grande, and Port Arthur. Developers expect LNG exports from Golden Pass LNG and Plaguemines LNG to start in 2024." (U.S. Energy Information Administration, 11/13/23)

2023: "U.S. Liquefied Natural Gas (LNG)" Were Projected To "Approve Three Export **Projects Capable Of Processing 5.1 Billion** Cubic Feet Per Day (Bcfd) Of Gas In The First Half Of The Year, A Record Volume For New LNG Projects In Any Year." "U.S. liquefied natural gas (LNG) developers are on track to approve three export projects capable of processing 5.1 billion cubic feet per day (bcfd) of gas in the first half of the year, a record volume for new LNG projects in any year. The U.S. became the world's largest LNG producer by installed capacity in 2022 driven by the boom in LNG plant construction and a decade of surging shale gas discoveries. U.S. LNG exports are poised to reach 12.1 bcfd this year and 12.7 bcfd next year. The latest approvals are chipping away at a backlog of projects pursuing financial support and customers willing to sign long-term contracts. Analysts say



demand for the fuel will keep the flow of approvals coming this year." (*Reuters*, 06/23/23)

2022: "The U.S. Became The World's Largest LNG Producer By **Installed Capacity [...] Driven By** The Boom In LNG Plant **Construction And A Decade Of** Surging Shale Gas Discoveries." "U.S. liquefied natural gas (LNG) developers are on track to approve three export projects capable of processing 5.1 billion cubic feet per day (bcfd) of gas in the first half of the year, a record volume for new LNG projects in any year. The U.S. became the world's largest LNG producer by installed capacity in 2022 driven by the boom in LNG plant construction and a decade of surging shale gas discoveries. U.S. LNG exports are poised to reach 12.1 bcfd this year and 12.7 bcfd next year. The latest approvals are chipping away at a backlog of projects pursuing financial support and customers willing to sign long-term contracts. Analysts say demand for the fuel will keep the flow of approvals coming this year." (Reuters, 06/23/23)

Study: "Extensive Methane Leaks At Just About Every Stage" Of LNG/'Natural' Methane Production, "From Drilling To Transportation," Show Best Case, It Could Be "24 Percent Worse For The Climate Than Coal," Or In "The Worst-Case Scenario—When LNG Makes Long Journeys On Old, Polluting Tankards—The Fuel Is 274 Percent Worse For The Environment Than Coal Is." "Natural gas may be worse for the world than coal, but it's got two important things on its side: the word natural and the seemingly



unconditional support of the United States government. Preliminary research by Cornell University's Robert Howarth, reported in The New Yorker by Bill McKibben this week, finds that 'natural' (methane) gas may be 24 percent worse for the climate than coal in the best-case scenario. That's thanks to extensive methane leaks at just about every stage of its production, from drilling to transportation. In the worst-case scenario—when LNG makes long journeys on old, polluting tankards—the fuel is 274 percent worse for the environment than coal is." (New Republic, 11/02/23) • LNG Exports Were Banned Until 2016. "The findings have major implications for global climate goals and for the United States, which became the world's largest exporter of liquefied natural gas earlier this year. LNG exports were banned until 2016, and now, more than 60 members of Congress are urging the Department of		
Energy to reconsider shipping the fossil fuel abroad." (NBC Bay Area, 11/30/23)	Stylized "3 (Favorite!)" in top left corner	And this last fact is my favorite:
Headline: "Biden Stalls Natural Gas Exports That Activists Call 'Climate Bombs'" "Biden stalls natural gas exports that activists call 'climate bombs'" (Washington Post, 01/26/24 and Google search for Washington Post, 01/26/24)	Cutout of Biden's head smiling SUPER: Biden Put The Brakes On Pollution	President Biden put the brakes on those plans that would pump toxic pollution in the air!
President Biden Announced A Review Of "Pending And Future Applications To Export Liquefied Natural Gas" Which "Will Take Months And Then Will Be Open To Public Comment." "U.S. President Joe Biden on Friday paused approvals for pending and future applications to export liquefied natural		



gas (LNG)from new projects, a move cheered by climate activists that could delay decisions on new plants until after the Nov. 5 election. The Department of Energy (DOE) will conduct a review during the pause that will look at the economic and environmental impacts of projects seeking approval to export LNG to Europe and Asia where the fuel is in hot demand. The review will take months and then will be open to public comment which will take more time, Energy Secretary Jennifer Granholm told reporters in a teleconference. Biden said in a statement: 'During this period, we will take a hard look at the impacts of LNG exports on energy costs, America's energy security, and our environment.' The pause 'sees the climate crisis for what it is: the existential threat of our time,' said Biden, a Democrat." (*Reuters*, <u>01/26/24</u>)

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Stickers of lungs and hearts 💝 💝 💝





Biden slamming the brakes on methane is a win for our health—and that's a fact.



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0.03–0.09%, p < 0.001). The study suggests that reducing methane emissions from the energy industry could improve public health for those at risk of CVD. Policymakers can use these findings to develop strategies to reduce methane emissions and protect public health." (National Library of Medicine, 08/19/23)

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President Biden Announced A Review Of "Pending And Future Applications To Export Liquefied Natural Gas" Which "Will Take Months And Then Will Be Open To Public Comment." "U.S. President Joe Biden on Friday paused approvals for pending and future applications to export liquefied natural gas (LNG)from new projects, a move cheered by climate activists that could delay decisions on new plants until after the Nov. 5 election. The Department of Energy (DOE) will conduct a review during the pause that will look at the economic and environmental impacts of projects seeking approval to export LNG to Europe and Asia where the fuel is in hot demand. The review will take months and then will be open to public comment which will take more time, Energy Secretary Jennifer Granholm told reporters in a teleconference. Biden said in a statement: 'During this period, we will take a hard look at the impacts of LNG exports on energy costs, America's energy security, and our environment.' The pause 'sees the climate crisis for what it is: the existential threat of our time,' said Biden, a Democrat." (Reuters, 01/26/24)		
Headline: "Big Oil's Evil, Stupid Plan To Drown The World In Plastic" Headline: "Big Oil's Evil,	Shitty stick figure animation of Big Oil	First Big Oil was like, "Rahhh I'm



Stupid Plan to Drown the World in Plastic" (New Republic, 09/04/20)

Headline: "Big Oil Vs The World Review — Drilling Into The 'Ethical Evil' That Drives The Industry" Headline: "Big Oil vs the World review — drilling into the 'ethical evil' that drives the industry" (*Irish Times*, 07/21/22)

"Big Oil" Is "The Evil Mastermind Behind Climate Change Denial." "Big oil the evil mastermind behind climate change denial [...] It is like the well-worn action or thriller movie plot where the seeming good guy turns on his friend halfway through, revealing he was the evil mastermind all along — only this environmental disaster show is no movie, but 50 years in the making. Quelle surprise, oil industry figures, specifically those in ExxonMobil, knew exactly of the implications of fossil fuel dependence on the future state of the environment in the 1970s, with their own scientists warning of the consequences, but instead of taking evasive action, they decided to hide the truth in the pursuit of money. They not only knew global warming was happening at an alarming rate, but were able to map out accurately the picture we are seeing today." (Irish Examiner, 01/18/23)

Big Oil Is "Often Called 'Wicked' And 'Evil."
"There is much anger at the 'obscene' profits recorded by Shell – nearly \$40bn worldwide in the last year. Big, even by Big Oil standards. Only a few billion of that is generated in the UK, but it's still large enough to be annoyed about. Oil companies are often called 'wicked' and 'evil' because they dig fossil fuels out of the ground, which is bad; and they make lots of money without trying very hard, which is equally unpalatable."
(Independent, 02/02/23)

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Shitty drawing of toxic methane facility

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Study: "Extensive Methane Leaks At Just About Every Stage" Of LNG/'Natural' Methane **Production, "From Drilling To Transportation,"** Show Best Case, It Could Be "24 Percent Worse For The Climate Than Coal." Or In "The Worst-Case Scenario—When LNG Makes Long Journeys On Old, Polluting Tankards—The **Fuel Is 274 Percent Worse For The** Environment Than Coal Is." "Natural gas may be worse for the world than coal, but it's got two important things on its side: the word natural and the seemingly unconditional support of the United States government. Preliminary research by Cornell University's Robert Howarth, reported in The New Yorker by Bill McKibben this week, finds that 'natural' (methane) gas may be 24 percent worse for the climate than coal in the best-case scenario. That's thanks to extensive methane leaks at just about every stage of its production, from drilling to transportation. In the worst-case scenario—when LNG makes long journeys on old, polluting tankards—the fuel is 274 percent worse for the environment than coal is." (New Republic, 11/02/23)

• LNG Exports Were Banned Until 2016. "The findings have major implications for global



climate goals and for the United States, which became the world's largest exporter of liquefied natural gas earlier this year. LNG exports were banned until 2016, and now, more than 60 members of Congress are urging the Department of Energy to reconsider shipping the fossil fuel abroad." (NBC Bay Area, 11/30/23)

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• Methane Storage Facilities Can Leak Up To Half A Ton Of Methane Into The Air Every Hour. "The Petal Gas Storage Station lies halfway between the winding banks of the Leaf River and the International Checker Hall of Fame. It's a warren of pipes, wellheads and metal buildings where noisy compressors



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Methane Causes An "Increased Risk Of Asthma" Because It Is "Released During The **Production And Transport Of Oil, Gas And** Coal." Is "Much More Potent Than Carbon Dioxide," And A "Known Driver Of Climate Change," Which Directly Causes An "Increased Risk Of Asthma." "Methane is released during the production and transport of oil, gas and coal. It is much more potent than carbon dioxide. Methane is a known driver of climate change because it traps heat in the atmosphere. Climate-related health impacts may include: reduced lung function; increased risk of asthma and COPD flare-ups; increased risk of respiratory illnesses such as bronchitis." (Allergy & Asthma Network, 12/02/23)

"Methane Is The Main Precursor To Ground-Level Ozone." And "Reducing Methane Emissions By 40% By 2030 Could Prevent An Estimated [...] 540,000 Emergency Room Visits From Asthma." Methane is the main precursor to ground-level ozone, a substance that has harmful health consequences that could increase as the world develops and global temperatures rise: Reducing methane emissions could avoid nearly 0.3 degrees Celsius of global warming by 2040 Reducing methane emissions by 40% by 2030 could prevent an estimated 180,000 deaths, 540,000 emergency room visits from asthma, and 11,000 hospitalizations of elderly people each year." (UNEP Climate & Clean Air Coalition, 03/22/21)

"Oil Producers Use Flares To Burn Methane



Gas, A Process Which Also Releases
Co-Pollutants Such As Nitrogen Oxides (NOx)
And Fine Particle Pollution (PM2.5)" "Linked
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"While awareness of methane's climate mitigation
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Nitrogen Oxides (NOx) and fine particle pollution
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Defense Fund, 09/21/23)

NIH "Cross-Sectional" Study Of "Datasets From 73 Countries Across All Continents" Finds That "Oil And Gas Methane Emissions" "Increase" The "Burden" Of Cardiovascular Diseases. NIH Study: "The energy industry significantly contributes to anthropogenic methane emissions, which add to global warming and have been linked to an increased risk of cardiovascular diseases (CVD). This study aims to evaluate the relationship between energy-related methane emissions and the burden of CVD, measured in disability-adjusted life years (DALYs), in 2019. We conducted a cross-sectional analysis of datasets from 73 countries across all continents. The analyzed datasets included information from 2019 on environmental energy-related methane emissions, burden of DALYs due to CVD. The age-standardized prevalence of obesity in adults and life expectancy at birth were retrieved. The relationship between the variables of interest was evaluated using multiple linear regression models. In the multiple model, we observed a positive linear association between methane emissions and the log-transformed count of DALYs related to CVD. Specifically, for each unit increase in energy-related methane emissions, the burden of CVD increased by 0.06% (95% CI 0.03-0.09%, p < 0.001). The study suggests that reducing methane emissions from the energy industry could improve public health for those at risk of CVD. Policymakers can use these findings to develop strategies to reduce methane emissions and protect public health." (National Library of Medicine, 08/19/23)



Global Climate And Health Alliance Study: "Methane-Driven" "Ozone Can Lead To [...] Cardiovascular Diseases [And] Asthma." Global Climate and Health Alliance study: "Targeted technical solutions to reduce methane emissions from fossil fuels can deliver multiple human health benefits. First, they can limit tropospheric ozone, a harmful air pollutant created by methane emitted from sources such as oil and natural gas extraction, production, combustion, as well as coal mining. Methane-driven tropospheric ozone can lead to adverse health outcomes, such as cardiovascular diseases, asthma, respiratory illness, and premature death, resulting in roughly 1 million premature deaths yearly" (Global Climate and Health Alliance, 08/29/23)

American Lung Association: "As Methane Is Leaked, So Are Other Pollutants, Including Volatile Organic Compounds (VOCs), Which "Can Cause Cancer, Affect The Nervous System Or Cause Birth Defects." "Methane gets into the atmosphere in a number of ways, including from landfills, agricultural activities, coal mining, stationary and mobile combustion, wastewater treatment and certain industrial processes. But one of the main sources of methane gas pollution is from the production of oil and gas, according to EPA. Methane is the main component of natural gas, like the kind your home's heating or stove may use. Natural gas is also burned in many power plants to produce electricity. When natural gas or crude oil is extracted and transported from oil and gas wells, some of the methane leaks out. In fact, one study found that about 13 million metric tons of methane leak into the atmosphere before it is even used. That is enough wasted gas to fuel 10 million homes for a year! And as methane is leaked, so are other pollutants, including volatile organic compounds (VOCs). VOCs form ozone and can cause cancer, affect the nervous system or cause birth defects." (American Lung Association, 02/24/22)



American Lung Association: "Everyone's Health Is At Risk From Breathing In VOCs – Including Healthy Adults," And Children Attending Schools And Daycares In The Area Are "Exposed To Toxic Pollution" Are Put At "Higher Risk Of Asthma Attacks, Cancer And More," And "Mothers Exposed To This Pollution Have A Higher Risk That Their Babies Will Be Born With Birth Defects."

"Everyone's health is at risk from breathing in VOCs – including healthy adults. Though VOCs and other air pollutants can travel far away from their source, people who live near oil and gas wells are especially vulnerable. For example, one of many areas harmed by oil and gas pollution is Arlington, Texas. More than half of all public schools and licensed daycares in Arlington are within a half-mile of a natural gas well, eight of which are within 600 feet of a gas well. The children attending these schools and daycares are exposed to toxic pollution from these wells which puts them at a higher risk of asthma attacks, cancer and more. In addition, mothers exposed to this pollution have a higher risk that their babies will be born with birth defects." (American Lung Association, 02/24/22)

When "When Fossil Fuel Companies Burn Off Excess Methane Gas From Oil Operations," Or Venting, It "Releases Toxic Pollutants Known To Harm Human Health, Including Benzene, A **Human Carcinogen That Can Cause** Leukemia." "Flaring occurs when fossil fuel companies burn off excess methane gas from oil operations rather than capturing the gas in pipelines. When burned, the powerful greenhouse gas – more than 80 times more potent at global warming than carbon dioxide over a 20-year period – is released into the atmosphere. After Russia, Iraq accounts for the most flared gas in the world. Flaring also releases toxic pollutants known to harm human health, including benzene, a human carcinogen that can cause leukemia. An



Iraq Health Ministry report leaked to the BBC attributed pollution from the oil industry, among other sources, as the cause of a 20 percent rise in cancer in Basra between 2015 and 2018, and revealed cancer cases in the region to be three times higher than publicly disclosed figures. Iraqi government officials have acknowledged a link between the oil pollution from flaring and cancer. Iraq's former environment minister, Jassem al-Falahi, told the BBC that pollution from oil production is the main reason for increases in cancer rates in Basra." (Human Rights Watch, 05/03/23)		
Princeton Research: The "Increase In The Emission Of Halomethane, Which Is Made Up Of Chloromethane And Bromomethane," Leads To "Increased Rates Of Skin Cancer." "As a combination of rising sea levels, extreme weather, and groundwater overuse leads to increasing seawater encroachment in coastal areas, it's essential that we learn more about the resulting shifts in soil chemistry in these environments and the impacts they can have on a larger scale. Previous research on coastal wetlands found that as freshwater wetlands transition into salt marshes because of increasing marine influences, there is a corresponding increase in the emission of halomethane, which is made up of chloromethane and bromomethane. Once emitted, these molecules travel to the stratosphere where they trigger ozone degradation, leading to increased rates of skin cancer and cataracts in humans." (Princeton Media, 04/27/22)		
"Big Oil" Is "The Evil Mastermind Behind Climate Change Denial." "Big oil the evil mastermind behind climate change denial [] It is like the well-worn action or thriller movie plot where the seeming good guy turns on his friend halfway through, revealing he was the evil mastermind all along — only this environmental disaster show is no movie, but 50 years in the making. Quelle surprise, oil industry figures, specifically those in ExxonMobil, knew exactly of the implications of fossil fuel dependence on the	Shitty stick figure animation of Big Oil execs with speech bubbles saying the VO	And Big Oil was like, "We don't care Imao!"

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future state of the environment in the 1970s, with their own scientists warning of the consequences, but instead of taking evasive action, they decided to hide the truth in the pursuit of money. They not only knew global warming was happening at an alarming rate, but were able to map out accurately the picture we are seeing today." (*Irish Examiner*, 01/18/23)

"Oil Industry Figures, Specifically Those In ExxonMobil, Knew Exactly Of The Implications Of Fossil Fuel Dependence On The Future State Of The Environment In The 1970s," And "Predicted Global Warming Correctly And Skillfully." But Instead Of Working To Take "Evasive Action, They Decided To Hide The Truth In The Pursuit Of Money." "Quelle surprise, oil industry figures, specifically those in ExxonMobil, knew exactly of the implications of fossil fuel dependence on the future state of the environment in the 1970s, with their own scientists warning of the consequences, but instead of taking evasive action, they decided to hide the truth in the pursuit of money. They not only knew global warming was happening at an alarming rate, but were able to map out accurately the picture we are seeing today. A study in the peer-reviewed journal Science this month revealed that Texas-based oil and gas behemoth Exxon 'in private and academic circles since the late 1970s and early 1980s, predicted global warming correctly and skillfully'. Researchers from Harvard and Potsdam University said: 'Our findings demonstrate that ExxonMobil didn't just know something about global warming decades ago — they knew as much as academic and government scientists knew.' 'But whereas those scientists worked to communicate what they knew, ExxonMobil worked to deny it — including overemphasising uncertainties, denigrating climate models, mythologising global cooling, feigning ignorance about the discernibility of human-caused warming, and staying silent about the possibility of stranded fossil fuel assets in a carbon-constrained world." (Irish Examiner. 01/18/23)

U.S. Energy Information Administration: LNG Export Capacity From North America Is Likely To More Than Double Through 2027," As "Five



LNG Export Projects Are Currently Under Construction With A Combined 9.7 Bcf/d Of LNG Export Capacity," And "Developers Expect LNG Exports From Golden Pass LNG And Plaquemines LNG To Start In 2024." "LNG export capacity from North America is likely to more than double through 2027 [...] Five LNG export projects are currently under construction with a combined 9.7 Bcf/d of LNG export capacity—Golden Pass, Plaquemines, Corpus Christi Stage III, Rio Grande, and Port Arthur. Developers expect LNG exports from Golden Pass LNG and Plaquemines LNG to start in 2024." (U.S. Energy Information Administration, 11/13/23)

2023: "U.S. Liquefied Natural Gas (LNG)" Were **Projected To "Approve Three Export Projects** Capable Of Processing 5.1 Billion Cubic Feet Per Day (Bcfd) Of Gas In The First Half Of The Year. A Record Volume For New LNG Projects **In Any Year.**" "U.S. liquefied natural gas (LNG) developers are on track to approve three export projects capable of processing 5.1 billion cubic feet per day (bcfd) of gas in the first half of the year, a record volume for new LNG projects in any year. The U.S. became the world's largest LNG producer by installed capacity in 2022 driven by the boom in LNG plant construction and a decade of surging shale gas discoveries. U.S. LNG exports are poised to reach 12.1 bcfd this year and 12.7 bcfd next year. The latest approvals are chipping away at a backlog of projects pursuing financial support and customers willing to sign long-term contracts. Analysts say demand for the fuel will keep the flow of approvals coming this year." (Reuters, 06/23/23)

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If Opened, The Plant Would Be The Cause Of Nearly 200 Million Tons Of "Planet-Heating Gases Each Year," "20 Times Greater Than The Controversial Willow Oil Project In Alaska, Which Was Approved By The Biden Administration" Earlier In 2023. "According to calculations by Symons, who runs his own consultancy, the CP2 project would cause 197m tons of planet-heating gases each year once fully operational, including emissions from the production of the gas and its eventual burning



overseas, which isn't counted in the US's own emissions tally. This scale of emissions is 20 times greater than the controversial Willow oil project in Alaska, which was approved by the Biden administration despite a huge outcry from Democrats, tribes and climate campaigners earlier this year." (New Yorker, 09/22/23)

"Fossil Fuel Operations Cause 40%" Of Methane Emissions, Which Is Causing "A Third Of The Global Heating Driving The Climate Crisis Today," And "Is The Biggest Threat To Keeping Below 1.5C Of Global **Heating" That "Could Trigger Catastrophic** Climate Tipping Points." "Methane emissions have accelerated since 2007 and cause a third of the global heating driving the climate crisis today. The acceleration has alarmed scientists, who fear it is the biggest threat to keeping below 1.5C of global heating and could trigger catastrophic climate tipping points. The rapid rise appears to be due to global heating driving more methane production in wetlands – a potential vicious circle that makes cuts of human-caused methane emissions even more urgent. Decomposing waste is responsible for about 20% of human-caused methane emissions. Fossil fuel operations cause 40% of emissions, and the Guardian revealed there were more than 1,000 super-emitter events from oil, gas and coal sites in 2022 alone, many of which could be easily fixed." (Guardian, 02/12/24)

"Stopping Methane Emissions Is Key To Slowing The Planet From Reaching 1.5 Degrees" Above Pre-Industrial Levels, And The "Planet Is Already Seeing The Impact In The Form Of Extreme Fire Behavior, Severe Flooding, Relentless Drought And Deadly Heat Waves." "Global temperatures are now at 1.1 degrees Celsius above pre-industrial levels, according to the report, and the planet is already seeing the impact in the form of extreme fire behavior, severe flooding, relentless drought and deadly heat waves. The IPCC report makes clear that stopping methane emissions is key to slowing the planet from reaching 1.5 degrees. Scientists say world leaders need to act immediately in tackling all greenhouse gas emissions, and not iust carbon dioxide." (CNN, 08/12/21)



Burning Fossil Fuels "With Large Leaks Of Methane" Or Fossil Fuels "That Are More Efficiently Extracted [] At The Rate We Are Doing Will Kill The Planet." "Yes, fossil fuels that are more efficiently extracted are better for the planet than those carelessly extracted with large leaks of methane, a greenhouse gas more potent than carbon dioxide. But that ignores the fact that they're still fossil fuels, and burning them at the rate we are doing will kill the planet." (Guardian, 10/07/23)		
Latest Oil Profit Reports: Exxon Made A Company Record \$55.7 Billion, Chevron \$36.5 Billion, Marathon \$14.5 Billion, Valero \$11.6 Billion, And Phillips 66 \$11 Billion. "Oil company profit reports for 2022 are rolling in and the numbers tell the story we've suspected all along: Big Oil reaped record amounts as California families were fleeced at the pump. Five major oil companies have reported their 2022 profits, smashing last year's highs: Exxon: \$55.7 billion — setting a company record and bringing in \$6.3 million an hour Chevron: \$36.5 billion — doubling their 2021 profits, with executives flaunting their 'outstanding results' in an earnings call Marathon: \$14.5 billion — Q4 profit of \$3.32 billion surged 331% from previous year Valero: \$11.6 billion — 866% higher than the previous year Phillips 66: \$11 billion — Q4 profit of \$1.9 billion up 46% over Q4 2021" (California Office of the Governor, 01/31/23) • "Oil And Gas Giant Shell" Reported The Highest Profit "In Its 115-Year History." "Oil and gas giant Shell has reported record annual profits after energy prices surged last year following Russia's invasion of Ukraine. Profits hit \$39.9bn (£32.2bn) in 2022, double the previous year's total and the highest in its 115-year history. Energy firms have seen record earnings since oil and gas prices jumped	Shitty stick figure animation of Big Oil execs with speech bubbles saying the VO	And Big Oil was like, "but think about how rich we'll be!!!!"



following the invasion of Ukraine." (*BBC*, 02/02/23)

The Price Of Retail Gasoline Has Increased Nearly Three-Fold Since 1991. According to the U.S. Energy Information Administration, the cost of "U.S. Regular All Formulations Retail Gasoline Prices (Dollars per Gallon)" has increased from \$1.094 in February 1991 to \$3.134 in December 2023, the last month of data available. (U.S. Energy Information Administration, accessed 01/22/24)

Venture Global CEO Has Admitted Previous LNG Projects Help Them "Bring US LNG To The Market To Support Global Energy Security." "Today Venture Global LNG is announcing a final investment decision (FID) and successful closing of the \$13.2 billion project financing for the initial phase (an upsized 13.33 MTPA) of the Plaguemines LNG facility and the associated Gator Express pipeline. This transaction represents the largest project financing in the world closed to date in 2022. The proceeds of the debt and equity financing fully fund the balance of construction and commissioning of the initial phase. This is the first LNG project located in the United States to reach financial close since Venture Global's Calcasieu Pass facility in August 2019. 'The Venture Global team is proud to announce FID on our second project, Plaguemines LNG, just months after exports began at Calcasieu Pass. I want to thank our team for their tireless efforts to support this remarkable achievement,' said Mike Sabel, CEO of Venture Global LNG. 'Plaquemines will build on the success of Calcasieu Pass, which broke global records for speed and execution. The project has attracted robust financial and commercial support which has enabled us to formally sanction this project at a critical moment for energy markets. Speed matters more than ever and Venture Global is uniquely positioned to quickly bring US LNG to the market to support



global energy security and environmental progress. I would like to thank our customers, lenders, advisors, construction partners and local partners in Louisiana for their trust and support." (Venture Global, 05/25/22)

Despite CP2 Not Being Permitted By The Federal Government, Venture Global, Which Is Attempting to Build CP2, Has Already Agreed To Global Agreements With A German State-Owned Energy Company And Two Japanese Oil And Gas Companies. "The German state-owned Securing Energy for Europe GmbH (SEFE) has become the third company to seek approval from the U.S. energy regulator for liquefied natural gas (LNG) developer Venture Global to begin construction on its CP2 LNG project in Louisiana. SEFE's letter to the U.S. Federal Energy Regulatory Commission (FERC), dated Monday, highlighted the role of the CP2 LNG project in securing Europe's energy supply. In June, SEFE, via its unit Wingas, signed a 20-year deal to buy 2.25 million tons per annum (MTPA) of LNG from Venture Global's proposed 20 MTPA CP2 project in Louisiana. The appeal to FERC follows a similar request from two Japanese energy companies, Inpex Corp 1605.T and JERA, seeking approval for construction by Venture Global for the project." (Reuters, 12/14/23)

2022: The Following International Oil And Gas Companies Were The First Announced LNG Customers For Venture Global: Polish State-Controlled Oil And Gas Company PGNiG, French State-Owned Energy Company EDF, Global Malaysian Oil Corporation PETRONAS, Chinese Oil And Gas Giants Sinopec And CNOOC, And Multinational Oil And Gas Conglomerates Shell And ExxonMobil.

"Plaquemines LNG has received all necessary permits, including FERC authorization and



non-FTA export authorization from the U.S. Department of Energy. In addition, the company has executed 20-year Sales and Purchase Agreements (SPAs) for 80% of the full 20.0 MTPA project. Plaquemines LNG phase one customers include PGNiG, Sinopec, CNOOC, Shell and EDF; phase two customers announced to date include ExxonMobil, PETRONAS and New Fortress Energy. Marketing is actively underway for the company's third facility, CP2, and two SPAs with ExxonMobil and New Fortress Energy have already been executed for this project." (Venture Global, 05/25/22)

In 2021, Venture Global Signed A \$30 Billion, "20-Year Supply Agreement With China's Sinopec, The Largest Long-Term Liquefied Natural Gas Supply Deal Ever Signed By An American Company." "U.S.-based Venture Global LNG announced on Thursday a 20-year supply agreement with China's Sinopec, the largest long-term liquefied natural gas supply deal ever signed by an American company. 'Over the term of the contract, it is going to aggregate more than 80 million tons,' Venture Global CEO Mike Sabel told CNBC's 'Worldwide Exchange.' 'On a dollar basis, that will eventually end up being over \$30 billion for the life of the contract.' The deal also makes Venture Global the top American LNG exporter to China. The company will deliver the product from its plant in Plaquemines, Louisiana." (CNBC, 11/04/21)

 Venture Global Is "The Top American LNG Exporter To China."
 "U.S.-Based Venture Global LNG Announced On Thursday A 20-Year Supply Agreement With China's Sinopec, The Largest Long-Term Liquefied Natural Gas Supply Deal Ever Signed By An American Company. 'Over The Term Of The Contract, It Is Going To Aggregate More Than 80 Million Tons,' Venture



Global CEO Mike Sabel Told CNBC's 'Worldwide Exchange.' 'On A Dollar Basis, That Will Eventually End Up Being Over \$30 Billion For The Life Of The Contract.' The Deal Also Makes Venture Global The Top American LNG Exporter To China. The Company Will Deliver The Product From Its Plant In Plaquemines, Louisiana." (CNBC, 11/04/21)		
6	Shitty stick figure animation of crowd of people with speech bubble saying the VO	And then everyone was like, "What are we gonna do???"
7	Shitty stick figure animation of Joe Biden with speech bubble saying the VO	And then Joe Biden was like, "Watch this!!!"
Headline: "Biden Stalls Natural Gas Exports That Activists Call 'Climate Bombs'" "Biden stalls natural gas exports that activists call 'climate bombs'" (Washington Post, 01/26/24 and Google search for Washington Post, 01/26/24)	Shitty stick figure animation of Joe Biden stomping on the methane facility	and put the brakes on Big Oil's plans for all new methane facilities!
President Biden Announced A Review Of "Pending And Future Applications To Export Liquefied Natural Gas" Which "Will Take Months And Then Will Be Open To Public Comment." "U.S. President Joe Biden on Friday paused approvals for pending and future applications to export liquefied natural gas (LNG)from new projects, a move cheered by climate activists that could delay decisions on new plants until after the Nov. 5 election. The Department of Energy (DOE) will conduct a review during the pause that will look at the economic and environmental impacts of projects seeking approval to export LNG to Europe and Asia where the fuel is in hot demand. The review will take months and then will be open to public comment		



which will take more time, Energy Secretary Jennifer Granholm told reporters in a teleconference. Biden said in a statement: 'During this period, we will take a hard look at the impacts of LNG exports on energy costs, America's energy security, and our environment.' The pause 'sees the climate crisis for what it is: the existential threat of our time,' said Biden, a Democrat." (<i>Reuters</i> , 01/26/24)		
	[Insert disclaimer here]	

Title: A Breath of Fresh Air



RESEARCH	VIDEO/IMAGERY	AUDIO/VO
1		ANNCR VO: No one wants dirty air



Friends hiking with energetically animated light blue wavy lines representing fresh air moving around and behind them to represent fresh air



Runners in Detroit with same wavy lines moving around them

Calcasieu Pass 2 Is "An Enormous Liquefied-Natural-Gas Export Terminal [...] **Proposed For The Louisiana Coast" That** Would "Help Lock In The Planet's Reliance On Fossil Fuels Long Past What Scientists Have Identified As The Breaking Point For The Climate System." "But the Willow field is not the only major fossil-fuel project in the works. Soon, you may also be hearing a good deal about C.P.2, or Calcasieu Pass 2, an enormous liquefied-natural-gas export terminal that's been proposed for the Louisiana coast, and which the Biden Administration is likely to approve or reject this fall. The project, the largest of at least twenty L.N.G. terminals proposed by a handful of companies to take gas mostly from the Southwest's Permian Basin to overseas customers, is a poster child for late-stage petrocapitalism: it would help lock in the planet's reliance on fossil fuels long past what scientists have identified as the breaking point for the climate system. And it will bring to

Image of methane facility with animated *nasty* smoggy lines moving around and behind them to represent dirty air

Big Oil was going to build methane facilities that would pump toxic pollution into the air.



the fore one of the most crucial—and least-discussed—parts of the climate fight: America's rapidly increasing exports of oil and gas to the rest of the world. To give an idea of how big the battle at C.P.2 could turn out to be: according to the veteran energy analyst Jeremy Symons, the greenhouse-gas emissions associated with it would be twenty times larger than those from the oil drilling at Willow [...] Venture Global also says that it will help in the climate fight by deploying 'carbon capture' technology at the C.P.2 site, 'compressing CO2 at its sites and then transporting the CO2 and injecting it deep into subsurface saline aquifers where it will be permanently stored.' But that would only capture the carbon produced in the process of liquefying the gas and loading it on ships; it wouldn't capture any of the far greater amounts of carbon produced when that gas is later burned overseas, or the heat-trapping methane released by the fracking process in the first place." (New Yorker, 09/22/23)

Liquefied Natural Gas "Is A Major Driver Of The Climate Crisis" As It "Involves The Leaking Of Large Quantities Of Methane, A Potent Greenhouse Gas." "Joe Biden's administration is under mounting pressure to block construction of what would be one of the world's largest gas export hubs, and which would be perched near the rapidly eroding Louisiana shoreline, due to concerns over its impact on the climate and communities living amid an unprecedented expansion of new gas infrastructure along the Gulf of Mexico [...] Environmental groups have warned that Biden risks blowing apart his own efforts to combat the climate crisis in the US and endanger international climate goals by allowing terminals such as CP2, which is likely to be decided upon by federal regulators within the next month [...] Critics point out that the production of LNG, when drilling, production and burning are considered, is a



major driver of the climate crisis. Studies have shown that while gas emits less carbon dioxide than coal, it often also involves the leaking of large quantities of methane, a potent greenhouse gas." (*Guardian*, 10/23/23)

If Opened, The Plant Would Be The Cause Of Nearly 200 Million Tons Of "Planet-Heating Gases Each Year," "20 **Times Greater Than The Controversial** Willow Oil Project In Alaska, Which Was Approved By The Biden Administration" Earlier In 2023. "According to calculations by Symons, who runs his own consultancy, the CP2 project would cause 197m tons of planet-heating gases each year once fully operational, including emissions from the production of the gas and its eventual burning overseas, which isn't counted in the US's own emissions tally. This scale of emissions is 20 times greater than the controversial Willow oil project in Alaska, which was approved by the Biden administration despite a huge outcry from Democrats, tribes and climate campaigners earlier this year." (New Yorker, 09/22/23)

American Lung Association: "Everyone's Health Is At Risk From Breathing In VOCs -Including Healthy Adults," And Children Attending Schools And Daycares In The Area Are "Exposed To Toxic Pollution" Are Put At "Higher Risk Of Asthma Attacks, Cancer And More," And "Mothers Exposed To This Pollution Have A Higher Risk That Their Babies Will Be Born With Birth **Defects."** "Everyone's health is at risk from breathing in VOCs – including healthy adults. Though VOCs and other air pollutants can travel far away from their source, people who live near oil and gas wells are especially vulnerable. For example, one of many areas harmed by oil and gas pollution is Arlington,



Texas. More than half of all public schools and licensed daycares in Arlington are within a half-mile of a natural gas well, eight of which are within 600 feet of a gas well. The children attending these schools and daycares are exposed to toxic pollution from these wells which puts them at a higher risk of asthma attacks, cancer and more. In addition, mothers exposed to this pollution have a higher risk that their babies will be born with birth defects." (American Lung Association, 02/24/22)

When "When Fossil Fuel Companies Burn Off Excess Methane Gas From Oil Operations," Or Venting, It "Releases Toxic Pollutants Known To Harm Human Health, Including Benzene, A Human Carcinogen That Can Cause Leukemia." "Flaring occurs when fossil fuel companies burn off excess methane gas from oil operations rather than capturing the gas in pipelines. When burned, the powerful greenhouse gas - more than 80 times more potent at global warming than carbon dioxide over a 20-year period - is released into the atmosphere. After Russia, Iraq accounts for the most flared gas in the world. Flaring also releases toxic pollutants known to harm human health, including benzene, a human carcinogen that can cause leukemia. An Iraq Health Ministry report leaked to the BBC attributed pollution from the oil industry, among other sources, as the cause of a 20 percent rise in cancer in Basra between 2015 and 2018, and revealed cancer cases in the region to be three times higher than publicly disclosed figures. Iraqi government officials have acknowledged a link between the oil pollution from flaring and cancer. Iraq's former environment minister, Jassem al-Falahi, told the BBC that pollution from oil production is the main reason for increases in cancer rates in Basra." (Human Rights Watch, <u>05/03/23</u>)



Methane Causes An "Increased Risk Of Asthma" Because It Is "Released During The Production And Transport Of Oil, Gas And Coal," Is "Much More Potent Than Carbon Dioxide." And A "Known Driver Of Climate Change," Which Directly Causes An "Increased Risk Of Asthma." "Methane is released during the production and transport of oil, gas and coal. It is much more potent than carbon dioxide. Methane is a known driver of climate change because it traps heat in the atmosphere. Climate-related health impacts may include: reduced lung function; increased risk of asthma and COPD flare-ups: increased risk of respiratory illnesses such as bronchitis." (Allergy & Asthma Network, 12/02/23)

"Methane Is The Main Precursor To Ground-Level Ozone," And "Reducing Methane Emissions By 40% By 2030 Could Prevent An Estimated [...] 540,000 **Emergency Room Visits From Asthma.**" Methane is the main precursor to ground-level ozone, a substance that has harmful health consequences that could increase as the world develops and global temperatures rise: Reducing methane emissions could avoid nearly 0.3 degrees Celsius of global warming by 2040 Reducing methane emissions by 40% by 2030 could prevent an estimated 180,000 deaths, 540,000 emergency room visits from asthma, and 11,000 hospitalizations of elderly people each year." (UNEP Climate & Clean Air Coalition, 03/22/21)

"Oil Producers Use Flares To Burn Methane Gas, A Process Which Also Releases Co-Pollutants Such As Nitrogen Oxides (NOx) And Fine Particle Pollution (PM2.5)" "Linked To Asthma" And "Cardiovascular Disease." "While awareness of methane's climate mitigation potential is growing, the public health benefits of cutting methane are less well understood. For example, methane is often emitted by the oil and gas industry as part of normal operations. Some oil producers use flares to burn methane gas, a process which also releases co-pollutants such as Nitrogen Oxides (NOx) and fine particle pollution

Sequence of 2-3 photos of empty lots with methane gas facilities drawn over them with *clouds of pollution drawn in the air.*

Fresh air comes in and sweeps them away one by one, representing Biden blocking them from being built.

That pollution would have put us at higher risk of asthma, heart disease, and cancer.



(PM2.5) that are linked to asthma, cardiovascular disease and premature death." (Environmental Defense Fund, 09/21/23)

NIH "Cross-Sectional" Study Of "Datasets From 73 Countries Across All Continents" Finds That "Oil And Gas Methane Emissions" "Increase" The "Burden" Of Cardiovascular Diseases. NIH Study: "The energy industry significantly contributes to anthropogenic methane emissions, which add to global warming and have been linked to an increased risk of cardiovascular diseases (CVD). This study aims to evaluate the relationship between energy-related methane emissions and the burden of CVD, measured in disability-adjusted life years (DALYs), in 2019. We conducted a cross-sectional analysis of datasets from 73 countries across all continents. The analyzed datasets included information from 2019 on environmental energy-related methane emissions, burden of DALYs due to CVD. The age-standardized prevalence of obesity in adults and life expectancy at birth were retrieved. The relationship between the variables of interest was evaluated using multiple linear regression models. In the multiple model, we observed a positive linear association between methane emissions and the log-transformed count of DALYs related to CVD. Specifically, for each unit increase in energy-related methane emissions, the burden of CVD increased by 0.06% (95% CI 0.03-0.09%, p < 0.001). The study suggests that reducing methane emissions from the energy industry could improve public health for those at risk of CVD. Policymakers can use these findings to develop strategies to reduce methane emissions and protect public health." (National Library of Medicine, 08/19/23)

Global Climate And Health Alliance Study: "Methane-Driven" "Ozone Can Lead To [...] Cardiovascular Diseases [And] Asthma." Global Climate and Health Alliance study: "Targeted technical solutions to reduce methane emissions from fossil fuels can deliver multiple human health benefits. First, they can limit tropospheric ozone, a harmful air pollutant



created by methane emitted from sources such as oil and natural gas extraction, production, combustion, as well as coal mining.

Methane-driven tropospheric ozone can lead to adverse health outcomes, such as cardiovascular diseases, asthma, respiratory illness, and premature death, resulting in roughly 1 million premature deaths yearly" (Global Climate and Health Alliance, 08/29/23)

American Lung Association: "As Methane Is Leaked, So Are Other Pollutants, Including Volatile Organic Compounds (VOCs), Which "Can Cause Cancer, Affect The Nervous System Or Cause Birth Defects." "Methane gets into the atmosphere in a number of ways, including from landfills, agricultural activities. coal mining, stationary and mobile combustion, wastewater treatment and certain industrial processes. But one of the main sources of methane gas pollution is from the production of oil and gas, according to EPA. Methane is the main component of natural gas, like the kind your home's heating or stove may use. Natural gas is also burned in many power plants to produce electricity. When natural gas or crude oil is extracted and transported from oil and gas wells, some of the methane leaks out. In fact, one study found that about 13 million metric tons of methane leak into the atmosphere before it is even used. That is enough wasted gas to fuel 10 million homes for a year! And as methane is leaked, so are other pollutants, including volatile organic compounds (VOCs). VOCs form ozone and can cause cancer, affect the nervous system or cause birth defects." (American Lung Association, 02/24/22)

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Biden signs an order while wavy blue air lines flow from his pen

But President Biden put the brakes on their plans.



President Biden Has The "Goal Of A 100 Percent Clean Electricity Grid By 2035," And By January 2024, Had "Approved 47 Clean Energy Projects And Permitted 11,236 Megawatts Of Wind, Solar And Geothermal **Energy On Public Lands – Enough To** Power More Than 3.5 Million Homes." "The Department of the Interior today announced an updated roadmap for solar energy development across the West, designed to expand solar energy production in more Western states and make renewable energy siting and permitting on America's public lands more efficient. The Bureau of Land Management also announced the next steps on several renewable projects in Arizona, California and Nevada, representing more than 1,700 megawatts of potential solar generation and 1,300 megawatts of potential battery storage capacity. Together, these milestones represent continued momentum from President Biden's Investing in America agenda – a key pillar of Bidenomics – which is working to accelerate the clean energy and transmission buildout to lower consumers' energy costs, prevent power outages in the face of extreme weather, create good-paying union jobs, tackle the climate crisis, advance the priorities of clean air and environmental justice for all, and achieve the President's goal of a 100 percent clean electricity grid by 2035. During the Biden-Harris administration, the BLM has approved 47 clean energy projects and permitted 11,236 megawatts of wind, solar and geothermal energy on public lands enough to power more than 3.5 million homes." (Department of the Interior, 01/17/24)

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And is keeping our air clean.



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President Biden's LNG Pause Will Include CP2 If It's Approved By FERC, As Early As February 2024. "Upset with Biden's approvals last year of oil and gas projects in Alaska, climate activists have focused on stopping Venture Global's Calcasieu Pass 2 (CP2) pending LNG project in Louisiana, which would



be the nation's largest. CP2 first needs approval by the Federal Energy Regulatory Commission (FERC), which could consider it as soon as February, before its exports are considered by the DOE. The DOE said the pause applies to all current and future pending applications until the review is complete. That means the pause could include projects like CP2 if approved by FERC, which only voted down an LNG project once, a move it later reversed." (*Reuters*, 01/26/24)

Liquefied Natural Gas "Is A Major Driver Of The Climate Crisis" As It "Involves The Leaking Of Large **Quantities Of Methane, A Potent** Greenhouse Gas." "Joe Biden's administration is under mounting pressure to block construction of what would be one of the world's largest gas export hubs, and which would be perched near the rapidly eroding Louisiana shoreline, due to concerns over its impact on the climate and communities living amid an unprecedented expansion of new gas infrastructure along the Gulf of Mexico [...] Environmental groups have warned that Biden risks blowing apart his own efforts to combat the climate crisis in the US and endanger international climate goals by allowing terminals such as CP2, which is likely to be decided upon by federal regulators within the next month [...] Critics point out that the production of LNG, when drilling, production and burning are considered, is a major driver of the climate crisis. Studies have shown that while gas emits less carbon dioxide than coal, it often also involves the leaking of large quantities of methane, a potent greenhouse gas." (Guardian, 10/23/23)



CP2 Is Just "The Latest In The Oil And Gas Industry's Mad Dash To Build Gas Export Facilities That Will Make Countries Around The World Dependent On Fossil Fuels For Decades To Come." "That kind of gaslighting is the current reality for communities in Southern Louisiana, as President Biden's Department of Energy considers granting a license to build a new 'liquified natural gas' export terminal called Calcasieu Pass 2 (CP2). This is the latest in the oil and gas industry's mad dash to build gas export facilities that will make countries around the world dependent on fossil fuels for decades to come." (Salon, 11/24/23)

The Infrastructure Of CP2, If Approved, "Will Linger For Decades," As "More Than A Third Of Increases In Oil And Gas **Production Between Now And 2035 Is** Slated To Come From The U.S. Alone." "The first large-scale L.N.G. exports began in 2016; Vladimir Putin provided a rationale for backing increased exports when he launched his attack on Ukraine in 2022 and turned down the gas tap for Europe. The U.S. and others met the challenge, exporting fifty-six billion cubic metres to the European Union last year; the Biden Administration has promised another fifty billion this winter. Projects like C.P.2, though, won't be done for at least three years, by which time the geopolitical reasoning will presumably have faded, but the infrastructure will linger for decades. The U.S. has now surpassed Russia and Qatar to become the single largest exporter of L.N.G. in the world. And that's just the beginning. A new report published last week (I helped present the data at a press conference) showed that more than a third of increases in oil and gas production between now and 2035 is slated to come from the U.S. alone." (New Yorker, 09/22/23)



Liquefied Natural Gas "Is A Major Driver Of The Climate Crisis" As It "Involves The Leaking Of Large Quantities Of Methane, A Potent Greenhouse Gas." "Joe Biden's administration is under mounting pressure to block construction of what would be one of the world's largest gas export hubs, and which would be perched near the rapidly eroding Louisiana shoreline, due to concerns over its impact on the climate and communities living amid an unprecedented expansion of new gas infrastructure along the Gulf of Mexico [...] Environmental groups have warned that Biden risks blowing apart his own efforts to combat the climate crisis in the US and endanger international climate goals by allowing terminals such as CP2, which is likely to be decided upon by federal regulators within the next month [...] Critics point out that the production of LNG, when drilling, production and burning are considered, is a major driver of the climate crisis. Studies have shown that while gas emits less carbon dioxide than coal, it often also involves the leaking of large quantities of methane, a potent greenhouse gas." (Guardian, 10/23/23)

The Emissions From All Existing And Planned LNG Export Terminals "In The U.S. 'Would Be Equivalent To 681 Coal Plants.'"

"The methane rule: The EU rule introduces new methane limitations for oil and gas, including on LNG imports—requiring importers to monitor, report, and verify emissions of the potent greenhouse gas. Suppliers who are found to be in violation of the methane limit will face massive fines, and eventually contract cancellations [...] The lawmakers, including Sen. Jeff Merkley of Oregon and Rep. Jared Huffman, cited a new analysis from the Sierra Club that found lifecycle emissions of planned and existing LNG export terminals in the U.S.



'would be equivalent to 681 coal plants or 548 million gasoline-powered cars annually, putting domestic and global climate targets out of reach.'" (*Washington Examiner*, 10/17/23)

New Research Shows LNG "Has An Even **Bigger Impact On Climate Change Than** Burning Coal" And "Over A 20-Year Span, **Methane Is 80 Times More Potent Than** Carbon Dioxide — Heating The Atmosphere Much More Quickly." "One of the world's biggest sources of energy, thought to be a replacement for coal, might be even worse for the environment than the energy sources it wants to replace and could be responsible for heating the planet faster than other known polluters. New research from Cornell University shows liquefied natural gas, known as LNG. has an even bigger impact on climate change than burning coal. 'A broader conclusion is the need to move away from any use of LNG as a fuel as quickly as possible, and to immediately stop construction of any new LNG infrastructure,' wrote Robert Howarth, the author of the analysis. The findings have major implications for global climate goals and for the United States, which became the world's largest exporter of liquefied natural gas earlier this year. LNG exports were banned until 2016, and now, more than 60 members of Congress are urging the Department of Energy to reconsider shipping the fossil fuel abroad [...] Nevertheless, Howarth claims short-term energy needs are better met by reopening closed coal facilities temporarily, instead of expanding LNG use. Howarth's assertion is based on the repeated methane emissions throughout the lifecycle of natural gas — from drilling and fracking, to liquefying, shipping, and eventually burning the gas. According to Howarth, even in the most sophisticated systems, methane is leaked or directly emitted at virtually every step, and over a 20-year span,



methane is 80 times more potent than carbon dioxide — heating the atmosphere much more quickly." (NBC Bay Area, 11/30/23)

Study: "Extensive Methane Leaks At Just About Every Stage" Of LNG/'Natural' Methane Production, "From Drilling To Transportation," Show Best Case, It Could **Be "24 Percent Worse For The Climate Than** Coal," Or In "The Worst-Case Scenario—When LNG Makes Long Journeys On Old, Polluting Tankards—The **Fuel Is 274 Percent Worse For The Environment Than Coal Is."** "Natural gas may be worse for the world than coal, but it's got two important things on its side: the word natural and the seemingly unconditional support of the United States government. Preliminary research by Cornell University's Robert Howarth, reported in The New Yorker by Bill McKibben this week, finds that 'natural' (methane) gas may be 24 percent worse for the climate than coal in the best-case scenario. That's thanks to extensive methane leaks at just about every stage of its production, from drilling to transportation. In the worst-case scenario—when LNG makes long journeys on old, polluting tankards—the fuel is 274 percent worse for the environment than coal is." (New Republic, 11/02/23)

• LNG Exports Were Banned Until 2016. "The findings have major implications for global climate goals and for the United States, which became the world's largest exporter of liquefied natural gas earlier this year. LNG exports were banned until 2016, and now, more than 60 members of Congress are urging the Department of Energy to reconsider shipping the fossil fuel abroad." (NBC Bay Area, 11/30/23)



Methane, Due To Its Structure, Is "80 Times More Harmful Than CO2 For 20 Years After It Is Released," As It "Traps More Heat In The Atmosphere." "Colourless, odourless and invisible to the naked eye, methane is a potent greenhouse gas. It is responsible for more than 25 per cent of the global warming we are experiencing today. Due to its structure, methane traps more heat in the atmosphere per molecule than carbon dioxide (CO2), making it 80 times more harmful than CO2 for 20 years after it is released." (United Nations Environment Programme, 10/18/22)

"Methane Is Responsible For Around 30% Of The Rise In Global Temperatures Since The Industrial Revolution, And Rapid And **Sustained Reductions In Methane Emissions Are Key To Limit Near-Term** Warming." "Methane is responsible for around 30% of the rise in global temperatures since the industrial revolution, and rapid and sustained reductions in methane emissions are key to limit near-term warming and improve air quality [...] The concentration of methane in the atmosphere is currently around two-and-a-half times greater than its pre-industrial levels. The increase has accelerated in recent years, and preliminary analysis indicates 2021's rise is likely to be amongst the largest ever recorded." (International Energy Agency, 2022)

4



We can all breathe easier.

	Wavy blue air lines move across more clips of	
	people being active outside	
5	Happy selfie-style vid of someone saying "Thanks!"	That's something to celebrate
	[Insert disclaimer here]	