Narration Begins, following introductory video clips
What do climate change activists, advocates for economic justice, and peace activists have in common?

SHARED VALUES
- hopes for a healthy natural environment for future generations
- equal opportunity
- respect for all life

War and preparations for war contribute to climate change, destroy life and the environment, and drain the treasury of money for the common good
- for education,
- medical research
- housing
- health care

Efforts to address environmental issues, whether the effort is large in scope, like the reclamation of an area the size of Belgium on the Loess Plateau in China, following centuries of soil and forest degradation
Barren plateau turns into lush land: Changes in Loess Plateau, NW China, New China TV  
https://www.youtube.com/watch?v=GFXNm8omZiE

or one of the many thousand grass roots projects like Trees for the Future, a sustainable agriculture program that has planted 750,000 trees in Senegal, one of Africa's most stable democracies, can only be successful in peaceful societies.
https://trees.org/

CONFLICT RESOLUTION
Since WWII, the US has not won a major war. Negotiations, rather than military victory, have brought an end to conflict:
In Korea in 1953 with an armistice signed by North and South Korea, China and the US
Armistice Agreement for the Restoration of the South Korean State

and Vietnam in 1973 when the Paris Peace Accords were signed
https://www.mtholyoke.edu/acad/intrel/vietnam/treaty.htm

In 1978, President Jimmy Carter pressed for a peace treaty between Israel and Egypt ending a state of war that had existed for 25 years.
http://www.nytimes.com/learning/general/onthisday/big/0326.html - article

The Civil War in Bosnia ended with the peace agreement signed in Dayton, Ohio in 2008
https://www.usip.org/publications/2008/03/peace-agreements-bosnia-herzegovina

In 1998, as US Special Envoy to Northern Ireland, former senator George Mitchell was instrumental in forging the Good Friday Peace Agreements that put an end to 30 years of war in Northern Ireland.
The Editors of Encyclopaedia Britannica, "Good Friday Agreement,"
https://www.britannica.com/topic/Good-Friday-Agreement

THE US MILITARY BUDGET
Although the wars of the 21st century have led to more war rather than to peace, American tax dollars continue to support the world's most powerful and lethal military machine whose purpose is not primarily the defense of the United States but the support of global corporations, the fossil fuel industry, and the military-industrial-congressional complex.

Klare, Michael T., "Garrisoning the Global Gas Station," TomDispatch, June 13, 2008

http://priceofoil.org/fossil-fuel-industry-influence-in-the-u-s/


Because of relentless war-planning and the Pentagon's strategy of maintaining overwhelming military superiority a doctrine called "Full Spectrum Dominance" the US spends more on its military than the next 7 nations combined, including Russia and China
https://www.youtube.com/watch?v=frw87_Fbc8g
"List of countries by military expenditure," Wikipedia. Note: these figures are taken from two reliable sources: the Stockholm International Peace Research Institute and the International Institute for Strategic Studies whose databases are not easily accessed directly.

supporting: more than 800 military bases and installations, many of them secret, in over 130 countries

The number and location of US overseas military bases varies depending on the source, the "800" figure in "130" countries is conservative. See the estimates in the following sources:


Hundreds of naval vessels, including 19 functional aircraft carriers, patrolling all the world's oceans and seas. More than three times the number of aircraft than Russia has and more than 4 1/2 times those of China


Farley, Robert, "Does the US Have 10 or 19 Aircraft Carriers?" The Diplomat, April 17, 2014. https://thediplomat.com/2014/04/does-the-us-navy-have-10-or-19-aircraft-carriers/

American military power is thus projected around the world, including on the doorsteps of rival nations. From the Naval Air Station in Guam, 1800 miles from China (the distance between NY and San Antonio) and in other bases in the Pacific US ships and planes challenge the Chinese in the South China Sea


US soldiers train government troops in the Ukraine

See also: Hayward, John, "NATO Tank Maneuvers in Poland: 'This Is Not Just a Training Exercise.' " Breitbart, January 31, 2017

and our ships conduct aggressive military exercises in the Black Sea, on Russia's shores

while Russian ships roam the North Atlantic

The full spectrum dominance scenario has intensified the militarization of space by the US with the Russians and Chinese also developing their capacity for space warfare
Billings, Lee, "War in Space May Be Closer Than Ever: China, Russia and the U.S. are developing and testing controversial new capabilities to wage war in space despite their denial of such work." Scientific American, August 10, 2015
https://www.scientificamerican.com/article/war-in-space-may-be-closer-than-ever/


NUCLEAR WEAPONS
While arms control agreements have diminished nuclear weapons' arsenals, the arsenals of the nine nuclear-weapons states hold about 15,000 nuclear weapons The US and Russia possess 90% of those weapons with over 3000 of them deployed and aimed at each others' nations

For a good summary that touches on many issues in this section, see: Hartung, William D., "Who's Driving Nuclear Weapons Production?" The Nation, November 14, 2017.
a massive nuclear exchange is likely to result in nuclear winter, disrupting the earth's systems and ending all life as we know it.
The Editors of the Encyclopaedia Britannica, Nuclear Winter
https://www.britannica.com/topic/nuclear-winter

In exchange for Republican ratification of a new nuclear arms reduction treaty with the Russians, President Obama approved plans to "modernize" the US nuclear arsenal over the next 30 years, ostensibly to enhance safety, effective management, and reliability of nuclear weapons.

The total estimated cost for this program is 1.2 trillion dollars — over 40 billion dollars annually.
https://www.armscontrol.org/factsheets/USNuclearModernization

Forty billion is close to 8 billion more than the National Institutes of Health invest in medical research
National Institutes of Health, Budget
https://www.nih.gov/about-nih/what-we-do/budget

and nearly 3 times the Department of the Interior expenditures in the last year of the Obama administration
White House Office of Management and Budget
https://www.whitehouse.gov/omb/budget

Furthermore, the Trump administration is planning, under the modernization, to produce a new nuclear cruise missile with a variable yield, able to be launched virtually without detection to anywhere on earth, such a bomb could be used as a "limited" first strike weapon.
Rowland, Christopher, "Trump push for missile system has some on edge." Boston Sunday Globe, June 4, 2017

Rowland, Christopher, "Is President Trump setting the stage for a new nuclear arms race?" Boston Globe, June 3, 2017

"We want our adversaries to think we have the capability — and the will — to use our nuclear weapons. It's in America's interest to keep the Russians guessing if the 'crazy Americans' will pull the trigger." Adam Lowther, Director of the Air Force's
School for Advanced Nuclear Deterrence Studies, Kirtland Air Force Base, New Mexico
Quoted in: Rowland, Christopher, "Trump push for missile system has some on edge," Boston Sunday Globe, June 4, 2017

Implementation of the nuclear weapons modernization plan assures that the widespread call to eliminate nuclear weapons, including that of President Obama himself and preceding presidents, will be largely disregarded for three decades, and a new nuclear arms race with Russia and China is likely to develop.

PAYING FOR IT
More than half the discretionary budget goes to the military, National Priorities Project.  https://www.nationalpriorities.org
See especially: "Discretionary Spending" in section entitled: How the Federal Budget Affects You

much of it funding a vast weapons-manufacturing system and enormous salaries for their CEOs, like Marillyn Hewson of Lockheed Martin, who earned over 20 million dollars in total compensation in 2015.
https://www.bizjournals.com/orlando/blog/2016/03/heres-how-much-the-ceo-of-lockheed-martin-earned.html

Marczak, Tricia, Military Contractor CEOs Rank Highest Among Businesses, Mint Press News, August 24, 2012

Compare this to the average minimum wage of less than $12.00 an hour.
https://www.thebalance.com/2017-federal-state-minimum-wage-rates-2061043

During the last year of the Obama administration, the military budget of $625 billion took 54 cents out of every discretionary tax dollar.
President's Proposed 1.15 trillion dollar discretionary budget(FY 2016), National Priorities Project.
By 2017 the overall cost of wars in Afghanistan, Iraq, and Pakistan was over 4 trillion dollars

*Note: Costs of war estimates vary depending on what elements are included (for instance, homeland security, veterans' benefits, countries involved) Following are 3 estimates:

U.S, Budgetary Costs of Post-9/11 Wars through FY2018: $5.6 Trillion


Norsworthy, Cameron, "How Much Has War Cost American Taxpayers Since 9/11? Estimates Are in the Trillions," April 19, 2017. Note: The web site contains a link (every year taxpayers in United States) to a running tally of what the American taxpayer spends to fund war.
https://www.nationalpriorities.org/pressroom/articles/2017/04/19/how-much-war-has-cost-since-9-11/

*To provide some perspective, one trillion seconds equals 31,688 years.*
This figure was verified by 2 mathematicians.

Fifty-eight thousand bridges in the US, including the Brooklyn Bridge, are structurally deficient. Sixty-two billion dollars, 10% of the total military budget, would repair half of them.
https://www.infrastructurereportcard.org/cat-item/bridges/

Report: Brooklyn Bridge Among Thousands of Structurally Deficient Spans Across US, CBS New York, February 17, 2017

Halsey, Ashley, "Nearly 59,000 bridges in the US are structurally deficient," The Washington Post, February 18, 2016

Six hundred and eighty-one million, roughly the cost of 2 Navy F-35C fighter jets, would salvage and protect all superfund toxic waste sites for one year.
https://www.ciponline.org/research/entry/nuclear-weapons-who-pays-who-profits
A savings of even 1% of the Department of Defense budget, not including the cost of war could provide: over 95,000 infrastructure jobs for one year, more then 593,000 head start jobs for one year, a year's worth of solar electricity for 3.68 million households.

**National Priorities Project: Trade Offs.** (this interactive site shows what various reductions in the military budget would buy in the civilian marketplace. For different scenarios, see the drop down menu on the left "change program.")

https://www.nationalpriorities.org/interactive-data/trade-offs/?state=00&program=41

**THE HUMAN COSTS**
"You take the city down. You get rid of their power, water. In two, three, four, five days they are physically, emotionally, psychologically exhausted." Harlan Ullman, one of the architects of "Shock and Awe".  Interview on CBS, July 30, 2006

https://archive.commondreams.org/views03/0127-08.htm

US forces fired 800 Tomahawk Cruise Missiles into Baghdad during the first two days of the Iraq war.

Although "Shock and Awe" was intended to so cripple Iraq that US troops would not face serious combat, by 2016, that war took the lives of 4,512 US soldiers with almost 32,000 wounded. The Department of Veterans' Affairs estimates that 11% of Afghan war veterans and 20% of Iraq war veterans suffer from Post Traumatic Stress.
Iraq Coalition Casualty Count by Year, http://icasualties.org

https://medlineplus.gov/magazine/issues/winter09/articles/winter09pg10-14.html

https://www.huffingtonpost.com/dan-froomkin/iraq-soldiers-wounded_b_1176276.html

The US does not keep records for civilian deaths in either Afghanistan or Iraq. Estimates by independent organizations covering the first 16 years of warfare, vary from a few hundred thousand to over a million either as a result of direct hostilities
or from malnutrition, stress, and lack of access to clean water or medical care, and other privations of war

https://www.iraqbodycount.org/analysis/beyond/13-years-on/

Cost of War: poster based on the estimate of civilian deaths by *The Lancet*, British medical journal:
https://commons.wikimedia.org/w/index.php?search=lancet&title=Special:Search&profile=default&fulltext=1&searchToken=1i738o0rlupbt5tpp5s9mc7a-/media/File:Iraq_war_protest_poster.jpg

Future generations, too, have been imperiled by the heavy use of nuclear waste in the form of depleted uranium in bombs, missiles and bullets. Within a year of the invasion of Iraq, a UN environmental report estimated that at least 4 million pounds of radioactive dust covered the country. Depleted uranium has a half-life of 4.5 billion years, meaning that the people of Iraq and Afghanistan face increased rates of cancer, birth defects, and miscarriages until the end of time.

http://www.americanfreepress.net/seven-years-later-depleted-uranium-plagues-fallujah/

"Here Are the Radioactive Byproducts of Depleted Uranium (Uranium 238)" Canadian Council for Nuclear Responsibility (CCNR)
http://www.ccnr.org/decay_U238.html

By inhaling the radioactive dust released when a weapon containing depleted uranium ignites, thousands of US veterans are also suffering radiation-induced cancers and other illnesses
Gulf War Syndrome, Depleted Uranium http://gulfwarvets.com/du.htm

Tucker, James P., Jr., "DU Death Toll Tops 11,000," American Free Press.net

For a comprehensive account of the effect of depleted uranium on US troops and on civilians see: Bertell, Dr. Rosalie, "Gulf War Syndrome, Depleted Uranium and the Dangers of Low-Level Radiation (no date) http://www.ccnr.org/bertell_book.html
Dr. Bertell was a distinguished environmental epidemiologist who collaborated in analyses undertaken in the US, Canada, Japan, the Marshall Islands, Malaysia, India, Germany, Ukraine and other countries.
WAR ON THE EARTH
"Of course it's about oil, it's very much about oil, and we can't really deny that. We're treating the Arab world as one big gas station." General John Abizaid. US Central Command, with responsibility for Iraq.
"Abizaid: Of Course It's About Oil, We can't really deny that." Huffington Post, POLITICS 03/28/2008 02:45 am ET Updated May 25, 2011 https://www.huffingtonpost.com/2007/10/15/abizaid-of-course-its-abo_n_68568.html

Ironically, to secure access to cheap oil, the US military has become the largest single consumer of oil in the world. In 2008, Forbes Magazine reported that fuel costs for the wars in Afghanistan and Iraq came to $3 million a day

The F-15 consumes 1600 gallons per hour, and the B-52 Stratocruiser, 3,334 gallons per hour, nearly 7 times the 500 gallons consumed by the average US driver in a year.

In just 2 months, emissions related to military fuel consumption in Iraq alone cancelled out four years' worth of emissions reduction achieved through San Francisco's emissions reduction plan.

While the use of fuel can be at least roughly calculated, and the destructive aftermath of bombardments are obvious, the effect of wartime explosions on the atmosphere, and therefore, on climate change cannot be precisely determined. However, it can be reliably assumed that fires started by bomb explosions release massive amounts of carbon dioxide as well as ash and soot into the atmosphere as does the bombing of fuel depots and petrochemical plants.
Goldstein, Gary, Department of Physics and Astronomy, Tufts University, e-mail to Ghanda Di Figlia on question of how wartime explosions affect climate change, Wednesday, January 18, 2017

"The fate of the climate movement and the fate of the peace movement are intimately bound together. " Paul Shannon, American Friends Service Committee

In urban warfare chemicals from destroyed building materials, plastics, cell phones, computers, and other elements of modern life also release large quantities of greenhouse gasses. On September 11, 2001, New Yorkers experienced the effects of urban warfare. The enormous toxic dust cloud that rolled through the streets and buildings of Lower Manhattan contained glass fibers, PCBs and many other toxic materials Columnist Joseph Kahn of the Boston Globe visited the site three weeks later: "Debris from the Twin Towers lay everywhere. Computer parts, melted
telephones. The sights, sounds, and smells I encountered that day will stay with me forever." Joseph Kahn, Boston Globe


WHAT OUR MONEY BUYS
Producing and testing the weapons and machinery of war has serious consequences for human life and the environment. Nearly 900 out of the approximately 1,300 Superfund sites in the United States — those considered the most hazardous to human health and to the environment — are military-related.


Hanford, Washington, where the bomb that destroyed Nagasaki was built, is the biggest Superfund site in the United States. Because of Hanford's proximity to the Columbia River, threats to the delicate surrounding ecosystem continue.


In 2009, the President's Cancer Panel determined that for over 25 years, as many as 500,000 people at Camp Lejuene in South Carolina were using drinking water containing toxic chemicals related to military activity


In historic Concord, Massachusetts, a company called Nuclear Metals made depleted uranium rounds for the United States Army. The company admitted to dumping 400,000 pounds of uranium waste in an outdoor pit. Although production ended in 1999, cleanup did not begin until 2016.


In Europe, the Department of Defense has admitted that serious environmental damage exists at 70 bases on that continent.

For 60 years, the US Navy used the Puerto Rican island of Vieques as a bombing and gunnery practice range. The cancer rate on Vieques, attributed to contamination of land and water, is 27% higher than in the rest of Puerto Rico.


In South Korea, the US military dumped toxic formaldehyde into the Han River that runs through Seoul.


A DIFFERENT VISION
This ideas in this section are based on the following book:

See also: Stephan, Maria J. "What Happens When You Replace a Just War with a Just Peace," Foreign Policy, May 18, 2016 http://foreignpolicy.com/2016/05/18/pope-francis-just-peace-catholic-vatican-africa-isis/

Ever since the Just War doctrine was first formulated by St. Augustine in the 5th century of the Common Era the just war theory has been used by tyrants, despots, and democratic political leaders to justify military action.

In the last decade of the 20th century, many people have challenged the idea that modern warfare especially nuclear warfare, with its inevitably high civilian casualties, can meet the Just War criteria
In 2010, representatives of the Christian, Muslim, and Jewish faiths formulated 10 principles of Just Peacemaking based on their sacred texts and religious traditions.

Among those principles:

**NON-VIOLENT DIRECT ACTION**
as in Liberia in 2003 when peace negotiations to end 15 years of war came to a standstill, Christian and Muslim women held a sit-in outside the presidential palace, refusing to let anyone leave until they signed a peace treaty. Under democratically-elected president, Ellen Johnson Sirleaf, a Nobel Prize winner, Liberia has advanced both economically and in terms of human rights.


https://www.nytimes.com/2017/10/09/world/africa/liberia-women-election.html?_r=0

**INDEPENDENT INITIATIVES TO REDUCE THREAT**
In 1958, Nikita Khrushchev, leader of the Soviet Union initiated a unilateral halting of nuclear testing in the atmosphere. President Dwight Eisenhower announced a ban on US testing later that year. In 1963, after years of complicated negotiations, both superpowers signed a treaty banning the testing of nuclear weapons in the atmosphere, underwater, and in space.

Note: Thistlethwaite, (*Interfaith :Jewish, Christian, and Muslim Perspectives on the New Paradigm of Peace and War*) names President Eisenhower as the initiator of the testing ban (p. 34). However, the statement is not annotated and the Polsby book, on the subject of official policy initiatives, seems more authoritative.

https://www.state.gov/t/isn/4797.htm

**COOPERATIVE CONFLICT RESOLUTION**
With the help of Cuba, Norway, and Venezuela President Manuel Santos of Columbia negotiated with the Revolutionary Armed Forces of Columbia (the FARC) to end 52 years of conflict in which more than 200,000 people were killed and 5 million displaced.

JUST AND SUSTAINABLE ECONOMIC DEVELOPMENT
In addition to direct negotiations with the FARC, president Santos has fostered policies like recovery of abandoned farms, development of small-scale businesses, and the health, housing, and education needs of the poor.

REDUCE OFFENSIVE WEAPONS AND THE WEAPONS TRADE
Reductions in the stockpiling and deployment of nuclear weapons, have only been achieved through negotiations between US Presidents and leaders of the Soviet Union
https://www.armscontrol.org/factsheets/USRussiaNuclearAgreementsMarch2010

Pope Francis, in an address to the US Congress, has called for an end to the arms trade.
For the entire speech, see:
https://www.youtube.com/watch?v=oBM7DIeMsP0

STRENGTHEN THE UNITED NATIONS AND INTERNATIONAL EFFORTS FOR COOPERATION AND HUMAN RIGHTS
The United Nations has negotiated peaceful settlements in 172 regional conflicts including the civil war in El Salvador in 1992 and the Iran-Iraq war.
See also: United Nations Peacemaker, Peace Agreements Database Search
https://peacemaker.un.org/elsalvador-chapultepec92
https://peacemaker.un.org/iraqiran-resolution598

UNICEF has addressed the health and education needs of children in 138 countries
Update: According to the UNICEF website, https://www.unicef.org/ the organization operates in 190 countries, territories, and areas.
and the World Health Organization has eradicated smallpox and made headway in eliminating polio worldwide.
Greenspan, Jesse, "The Rise and Fall of Smallpox," History.com, May 7, 2015

Norway has given 1 billion dollars to Brazil to diminish the rate of deforestation in the Amazon Rain Forest.
Butler, Rhett A. "Norway Pays Brazil $1B to fulfill pledge for curbing deforestation," Mongabay Series: Global Forests
WORK WITH EMERGING COOPERATIVE FORCES IN THE INTERNATIONAL SYSTEM AND ENCOURAGE GRASSROOTS PEACEMAKING AND VOLUNTARY ASSOCIATIONS.

As environmentalist and author Paul Hawken has documented, there are over a million organizations worldwide working for peace, justice—including economic justice—human rights, and the environment.


In fact, to scroll through a list of all those organizations would take a month of viewing, 24 hours a day.

Speech by Paul Hawken to the Dominican University of California's Institute for Leadership Studies, June 7, 2007. A 43-minute video; statistic quoted above can be found at minute 19:50 to 22:00. https://www.youtube.com/watch?v=NsHTZDTTpBQ

The grassroots action they represent has been responsible for:

Desegregation and the extension of voting rights in the south during the 1950s and 1960s.


Major environmental legislation like the Clean Air and Clean Water Acts in the early 1970s

For an overview of the citizen action that led to the adoption of the Clean Air and Clean Water acts see "The History of Earth Day," https://www.earthday.org/about/the-history-of-earth-day/

The suspension of military aid by the House of Representatives to the repressive government of El Salvador.


And most recently, in 2017, grass roots protests have led to cancellation of the original attempt by the House of Representatives to repeal the Affordable Care Act.


Sustained grassroots action offers the best hope for addressing the major issues that affect life on the planet: the nuclear menace, climate change, environmental destruction, economic and social injustice.

Nations have mobilized to wage war or to prepare for war.

They have also come together to address major issues, as the Paris Climate Agreement. In celebration, the U.S. Chief of Missions' Residence in Paris was illuminated in green.

Note: In 2016 and 2017, 195 nations signed the Paris Climate Accord. As of mid-November 2017, 170 nations ratified the treaty. This number includes two countries that did not actually sign it: Nicaragua and the Syrian Arab Republic.

https://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0

In July of 2017, 122 countries, excluding the 9 nuclear weapons states and the members of NATO adopted the treaty on the prohibition of nuclear weapons to encourage steps toward their total elimination.

https://www.nytimes.com/2017/05/22/world/americas/united-nations-nuclear-weapons.html?_r=0

Cronberg, Tarja, "The Challenges to the Ban Treaty," European Leadership Network, January 10, 2017
https://www.europeanleadershipnetwork.org/commentary/the-challenges-to-the-ban-treaty/

In the same spirit, can millions of people come together to pursue peace, a sustainable planet, and economic justice?

**Video Clip: Mary Hanson, Ground Zero Center, Seattle Washington**

The Earth was small, light blue, and so touchingly alone. Our home that must be defended like a holy relic." Aleksie Leonov, Soviet Cosmonaut

New Mexico Museum of Space History, International Space Hall of Fame, Alexei A. Leonov
http://www.nmspacemuseum.org/halloffame/detail.php?id=17