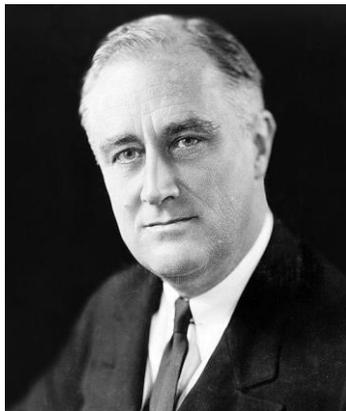


THE GREEN NEW DEAL



In the year 2019 the newly elected Alexandria Ocasio-Cortez (Ocasio-Cortez, 2019), along with colleagues in the Senate, submitted a Resolution entitled *A Green New Deal* to the United States House of Representatives. Her Resolution was modeled on President Roosevelt's New Deal, enacted in the mid-1930s which proposed 'relief, reform and recovery' from the Great Depression.



Franklin D. Roosevelt (1882-1945)

Ocasio-Cortez believes that we need a similar restructuring of our economy and social structures in response to the resource and ecological crises that we face — particularly climate change. Tinkering at the edges is not sufficient — radical actions are called for.

Although her Resolution was killed in the Senate, it did have the effect of forcing elected officials and the public at large to consider the need for far-reaching action in order to respond to the predicaments that we face.



Alexandria Ocasio-Cortez (1989-)

The Green New Deal is both aspirational and unrealistic. It is aspirational because it honestly addresses the ecological crises that we face and because it proposes radical solutions. For this reason, Christians should give their full attention and support (as appropriate) to programs such as this. It is also aspirational because it recognizes that events such as climate change or resource depletion do not take place in isolation — they interact with one another.

Unfortunately, the GND is also unrealistic for the following reasons.

1. It requires a political commitment that simply does not exist — not just in Congress, but among the public at large.
2. Roosevelt’s original New Deal focused just on the United States. For the Green New Deal to work, other nations, particularly China and India, will have to participate. Although China is developing a successful solar panel industry, there are no signs that either nation intends to cut back on its pace of development, which is what is needed. Neither country seems to be developing its own Green New Deal.
3. The GND is not practical in terms of engineering, thermodynamic, financial, or project management realities. For example, it proposes to replace fossil fuels with renewable forms of energy. In fact, fossil fuels will always be needed, even in a world of windmills and solar panels. Alternative energy sources are not going to be a full substitute for fossil fuels.
4. The proposal talks about achieving its goals in just ten years. This is so unrealistic as to distract from its seriousness. It thus loses the name of action.
5. The GND has much too broad a reach. Instead of confining itself to climate change and the need to wean ourselves off fossil fuels — extraordinarily ambitious goals in their own right — it puts forward even more largescale goals to do with social justice and income equality.
6. Perhaps the biggest drawback to the GND is that it does not call on anyone or any group to make any type of sacrifice — it assumes that we can have our cake and eat it. There is an unspoken assumption that, if we take the actions proposed, then we can continue with our present lifestyle — indeed, we may even be able to improve it. The GND fails to acknowledge that actions already taken are affecting us now, and that the consequences of climate change will continue to get worse, regardless of what we do. The best that we can do is to slow down the speed at which events are taking place and/or minimize their impact. People may have to change jobs and lifestyles, but the GND maintains that our standard of living can be maintained, or even improved. From the point of view of the politicians that wrote the Resolution this attitude makes sense. After all, any politician who says, “Elect me and I will reduce your standard of living” soon becomes an ex-politician. But the assumption that we can maintain our current standard of living, whether we adopt a GND-style program or not, is flawed. We are looking at a future of loss, hardship and anxiety.

It is easy to be cynical about politicians and their promises. We take the attitude that they will say anything to get elected, then, once in office, they will proceed to do whatever suits them. But we probably need to recognize that they themselves do not understand the nature of the dilemmas that we face. They generally state that the solution to our problems is to make sure that the economy continues to grow. Yet growth seems to have slowed down, or even stopped, so they are forced to use financial engineering to goose the growth rate, usually by creating more debt for future generations to pay. But nothing seems to working as expected — the politicians do not know what to do. Many citizens

also recognize the limitations of present-day politics, but they cannot put their finger on the problem. Hence some of them throw their support behind fringe candidates of one kind or another. What few politicians realize is that the economy is running into physical and thermodynamic limits.

So, we are presented with a dilemma. We need the aspirations of the GND, but we also need to face up to the real-world realities. It is this dilemma that presents an opportunity for the Christian church and for individual Christians to provide honest leadership.

Let us take a closer look at the details of the Green New Deal. The left column of the following Table quotes selected sections of the GND. The right column provides some discussion to do with that quotation.

Quotation	Discussion
<p><i>The Special Report on Global Warming of 1.5°</i> (Intergovernmental Panel on Climate Change (IPCC), 2018) found that human activity is the dominant cause of observed climate change over the past century;</p>	<p>This section shows that the Resolution is based on authoritative science. It unequivocally challenges the “denialists” positions that the atmosphere is not heating up, or that it is caused by natural phenomena.</p> <p>This section fails to point out that the IPCC report is probably understated. For example, no consideration is given to feedback loops such as the potential for the “clathrate gun” (page Error! Bookmark not defined.) releasing large quantities of methane — a greenhouse gas that is some 50 times more potent than CO₂.</p> <p>This section does not mention the fact that much of the increase in CO₂ concentrations has occurred in recent years, in fact, since the publication of Al Gore’s <i>An Inconvenient Truth</i> (Gore, 2006). The term “the past century” is somewhat misleading — most of the increase in greenhouse gas concentrations have occurred within the lifetime of most people reading the report.</p>
<p>global warming at or above 2 degrees Celsius beyond preindustrialized levels will cause (here follows a list of social, economic and ecological calamities).</p>	<p>The Resolution cites 1.5°C as the confirmed target for temperature increase, but then uses a value of 2°C. The differences seems minor. But an increase of 2°C would lead to consequences, as listed by the GND, that are catastrophic. It talks about mass migrations, massive economic losses, large numbers of people exposed to heat stress (see page and the discussion on page Error! Bookmark not defined. to do with Black Flag Weather), and rising sea levels.</p> <p>It is likely that the 2°C level will be exceeded by the end of the century. Even if drastic action is taken right now it is too late to stay within that boundary. Hence the programs provided in the GND are very unlikely to achieve their goals. It is more probable that we will 3°C reach by the year 2050.</p>

<p>global reductions in greenhouse gas emissions from human sources of 40 to 60 percent from 2010 levels by 2030.</p>	<p>This is a staggering goal, one that would require a massive commitment from everyone on the planet, not just the United States (note the use of the word “global”). It would utterly transform the way we work and the nature of our society. Not only is there no indication that the United States is willing to make such a change, there are even fewer indicators that other large countries would sign on to such a challenge.</p>
<p>net-zero emissions by 2050.</p>	<p>Use of the word “net” presumably means that credit is taken for carbon capture, either through environmental means (such as increased forest cover) or new types of industrial technology.</p>
<p>Whereas the United States is currently experiencing several related crises.</p>	<p>Much of the GND covers an extraordinarily wide range of topics that are related only peripherally to climate change. These topics include “clean air, clean water, healthy food, and adequate health care, housing, transportation, and education”. Later sections of the GND discuss income disparity, socioeconomic mobility, the racial wealth divide, the gender earnings gap, and repairing and upgrading the infrastructure.</p> <p>While all these goals are worthy, they distract from the more immediate goal of cutting greenhouse gas emissions and reducing the use of fossil fuels. This paragraph indicates that the ultimate motive of the GND is not just to control fossil fuel emissions, but to engineer profound social change.</p>

<p>Whereas the Federal Government-led mobilizations during World War II and the New Deal created the greatest middle class . . .</p>	<p>There is much to unpack here. Some historians would argue that the New Deal — which came before World War II — was not all that effective at helping the economy recover. Others would argue that such recovery as there was resulted from financial decisions, such as allowing debt levels to increase.</p> <p>World War II provided people with an immediate, short-term goal — climate change is not like that. There is no clearly identified enemy (“the enemy is us”). Nor is there a clearly defined means of defining victory.</p> <p>The rise of the middle class that followed World War II was based in large part on the availability of low cost oil from fields in the United States. Those oil fields are largely depleted; their replacements (tight and shale oil) have a much lower Energy Returned on Energy Invested (Attachment G). We cannot simply duplicate the New Deal — the economic, energy and ecological environment is totally different now from what it was then.</p>
<p>. . . the goals described in the “Green New Deal” goals should be accomplished through a 10-year national mobilization . . . meeting 100 percent of the power demand through clean, renewable, and zero-emission energy sources . . .</p>	<p>Once more, we run into engineering, financial and project management realities.</p>
<p>. . . overhauling transportation systems . . . zero-emission vehicle infrastructure and manufacturing;</p>	<p>Proponents of electric vehicles (EVs) note that there are no direct emissions — these vehicles do not have a tail pipe. But EVs are not zero-emissions — they use electricity which is generated at a power plant that most certainly does have a tail pipe: its exhaust stack.</p> <p>But this paragraph talks about zero-emissions infrastructure and manufacturing. Such a goal defies the Second Law of Thermodynamics.</p>

<p>high-speed rail</p>	<p>I have been involved in high-speed rail projects, and with the development of a new technology known as hyperloop. The goals of these projects can only be achieved if we commit enormous resources to the effort and if we are willing to override land use principles.</p>
<p>guaranteeing a job with family-sustaining wage, adequate family and medical leave, paid vacations and retirement security to all the people of the United States.</p>	<p>This is simply a wish list that has little to do with climate change and resource depletion.</p>