The Orthodox Christian Fellowship and Orthodox young people from across America

Sanctity of Life Sunday January 22, 2015

Your Eminences and Graces,

Glory to Jesus Christ,

As Orthodox young adults, please know we are worried about the future. We are especially concerned about global climate change and what it is already bringing to our world.

We are also concerned about the lack of public discussion on this major issue on the part of our Orthodox bishops and hierarchs. The words of our Church are helpful, but we are concerned at the lack of effort to moderate and stop this issue which challenges the future of stable civilization.

This coming Sunday we pray for the souls of the millions of unborn children who have been aborted. This is right, but people are already dying because of climate change across the Third World, and the numbers who will die are projected to soar far above and beyond the number of aborted babies.

If it is right to address the moral issue of abortion, it must also be right to address the far larger and more serious issue of global climate change. Please teach the moral implications of this issue as climate change will impact our future more than any other issue. Yet there is almost no discussion of how this is a moral issue.

As background, please read the statement below that many of us have developed in concert with those young adults who understand the urgency of the world's climate challenge.

Signed,

Rachel Dovey [Sebastopol, California] and Orthodox students and members of the next generation

Orthodoxy and Climate Change

A response and plea from the next generation

Introduction

Though droughts, hurricanes and heat waves have begun to function as a wake up call, global warming too often sounds like a gentle, distant problem. Full of scientific language about the future, it seems far less urgent than the wars, genocides and inequities that fracture geopolitics and shape the nightly news.

But climate change is not just another headline. Without a quick, drastic, even life changing response, the implications of global temperature rise will be devastating. From rising oceans that displace entire nations\1 to food loss, water scarcity and super-storms like the one that killed 10,000 Filipinos in 2013\2, it threatens all of us. However, in a pattern that should be particularly troubling to Christians, its impacts are being felt first and most intensely by the global poor — subsistence nations that don't have the adaption technologies available to the first world. And because wealthy nations like the U.S. emit the most pollutants\3, we are creating a pattern that exacerbates and continues the darkest chapters of our human history.

Our brothers and sisters in Christ, both Orthodox and non-Orthodox, have begun to understand how deeply fossil fuel consumption conflicts with the Gospel, and are starting to act. The Catholic Church has assembled a covenant to help laity "explore how climate change affects the world's poor."\4 The Southern Baptist Environment and Climate Initiative declares: "We must care about environmental and climate issues because we are called to love our neighbors, to do unto others as we would have them do unto us and to protect and care for the "least of these."\5 And in 2007, a unanimously approved SCOBA message from our own Orthodox bishops\6 took a harsher tone.

"To persist in a path of excess and waste, at the expense of our neighbors and beyond the capability

of the planet to support the lifestyle directly responsible for these changes, is not only folly; it jeopardizes

the survival of God's creation, the planet that we all share," it reads. "In the end, not only is it sinful; it is

no less than suicidal."

Sadly, more than seven years after that statement we are still speeding down a superhighway to global disaster. Leaders in the U.S. and China have finally set some long-term caps\7, but nationally, our emissions are rising\8 and with developing nations' increasing dependence on coal\9, scientists warn that unless our habits change drastically — and soon — we chart a deadly path.

This is an exhortation to Orthodox leaders, parishes and laity to take our bishops' message seriously however we can. It is not a blueprint outlining one kind of political activism or "green"

consumption; instead, it combines scripture and sacramental tradition with facts about climate change, urging deep and swift transformation in our relationship with the created world. It is written by the Orthodox 29-year-old mother of a toddler (who also happens to be an environmental journalist) and signed by Orthodox young adults across the country. Our age group, nicknamed "Generation Hot," has the most to lose as temperatures rise.

The science of climate disruption

Though politicians and the media still present climate change as controversial, scientists studying it offer overwhelming consensus. According to NASA, 97 percent believe that human activity is warming our atmosphere.10

~The Greenhouse Effect

As the old analogy goes, Earth is like a greenhouse. Sunlight penetrates the atmosphere, plants and soil absorb it, and infrared radiation leaves. 11 But our atmosphere acts as a barrier made of particles — the glass in the analogy. Some, like CO2 and methane, trap heat. As more of these gasses pour out of tailpipes and power plants, the atmosphere traps more heat, warming like a greenhouse in the middle of the day. 12

This is already happening. Ice caps are melting\13 and sea levels are rising so drastically that island nations are going under.\14 In 2014, we saw chart-topping temperatures,\15 unprecedented droughts\16 and deadly wildfires.\17 Meanwhile, temperature rise is contributing to what scientists call the sixth mass extinction. Nearly half the world's species could be either extinct or teetering on the edge by 2050.\18

~Two Degrees

The Copenhagen Accord, an agreement signed by world leaders in 2009, set a cap of two degrees Celsius average global temperature rise.\19 Then, scientists estimated that industrialization had already caused an average bump of .8 degrees, which had already melted one-third of the Arctic's summer ice and made oceans 30 percent more acidic. Two degrees was a scarily high target according to two leading climatologists, James Hansen of NASA and Kerry Emanuel of MIT, who predicted that it could churn up wetter, stronger, deadlier hurricanes and obliterate low-lying island nations and most of Africa.\20

Now, however, two degrees is looking more and more unattainable. If nothing changes, we are on a path to warm the earth's average temperature by about 5 degrees Celsius by the century's end.\21 Again, all of the changes that scientists have so far linked to warming — the drought that depleted Syrian crops 75 percent between 2006 and 2011;\22 Hurricane Haiyan in the Philippines\23 — came from less than one degree.

One of the scariest things climate models show are feedback loops that accelerate warming. As the arctic disappears, less white landmass will reflect light and heat back into space, less

vegetation will soak up CO2 and arctic permafrost will melt, pooling in wetlands that burp large bubbles of methane. Scientists worry that we could reach a tipping point from all these chains upon chains of reactions, when our atmosphere's accelerated warming could become irreversible.\24

~ Carbon Budget

In 2009, the UN set a "carbon budget" — the amount of CO2 that can still enter the atmosphere before we reach two degrees — at 565 gigatons, which the global economy will hit in about 14 years.\25 According to a project called the Carbon Tracker Initiative, the amount of oil and gas that fossil fuel companies have already written into their budgets is 2,795 gigatons: five times our carbon budget.\26

In other words, our job right now is to keep most of the reserves we already have in the ground. Those reserves could grow our economy and make powerful corporations even wealthier than they already are. Leaving them untouched will involve both innovation and deep personal sacrifice.

What does our theology say?

Because climate disruption is a uniquely modern problem, we don't have any Biblical passages or saints' words that directly apply. However, several theological lenses can help us view it in the context of Orthodox tradition.

~ Love of Neighbor

From the Old Testament commandment\27 to Jesus' unprecedented teaching that "the last shall be first,"\28 our life-long vocation as Christians is very clear. In the words of St. Basil the Great (quoted in an essay on Orthodox ecology): "the coat that hangs in your closet belongs on the shoulders of your brother who is naked, the extra shoes belong on the feet of the one who has none…"\29

Right now, our country's consumption habits look more like the Gospel of Luke's unnamed Rich Man.\30 Together with China, we produce almost half the world's emissions, and China's devastating pollution comes largely from manufacturing our goods.\31

Inside U.S. borders, this energy-use looks like car trips, cheap food, affordable clothing and heated homes — it doesn't resemble the "purple and fine linen" of luxurious living juxtaposed to Lazarus' sores. But if we begin to pay attention, we'll see how our daily actions, however innocently intended, impact our global neighbors.

View satellite images of the Earth at night and you'll see the U.S. glowing while Africa is dark.\32 But Africa will feel the effects of climate change — to which it has barely contributed — much sooner and more intensely than the U.S. Several countries could run out of water by

2025, while crop yields could be cut in half sooner than that according to the IPCC.\33

Meanwhile, island nations like Kiribati are disappearing as the ocean rises. When the first village went under, The New Yorker reported, former residents built a sea wall around their church so that its submerged structure could "bear testimony" to the world.\34 Every year, about 75 people relocate to New Zealand, and they won't be the only ones displaced.\35 Researchers predict that 150 million people worldwide — 10 percent of the global population — could become climate refugees by 2050.\36

Syria — a country with deep Orthodox roots — provides a tragic preview of how this displacement can destabilize a nation. Following a drought so severe the country lost 75 percent of it crops between 2006 and 2011, more than a million farmers migrated to the nation's cities.\37 By 2011, when 15 children were arrested and tortured in Daraa, the parched nation was already full of internal refugees. Infrastructure, food and water had stretched dangerously thin, and the country snapped.\38

If we are serious about our Orthodox teaching, we must act on climate change. As Ecumenical Patriarch Bartholomew has said "There is a close link between the economy of the poor and the warming of our planet. Conservation and compassion are intimately connected."\39

~ Sacramental Creation Care

In Prosperity Gospel-shaped America, we see widespread misunderstanding of Genesis 1:28 "And God blessed them, and God said unto them, be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth." 40

But what should this "dominion" actually look like? Genesis' next chapter reveals it as an act wholly different from the mechanized exploitation on which our global economy relies.\41 It is, instead, a practice of intimate specificity: naming. Commenting on this in *For the Life of the World*, Fr. Alexander Schmemann wrote "[I]n the Bible to name is infinitely more than a means to distinguish one thing from another. It reveals the very essence of a thing, or rather a thing as God's gift.... To name a thing, in other words, is to bless God for it and in it."\42

Western Christians often use the word "stewardship" to express our ideal relationship with the natural world. But as Schmemann's book explores, the Orthodox East has an even deeper and more profound vision.

"In the Bible the food that man eats, the world of which he must partake in order to live, is given to him by God, and it is given as communion with God," he writes.43

The physical world — the "breeze[s] full of scents; mountains reaching to the skies; waters like boundless mirrors, reflecting the sun's golden rays" so beautifully described in our thanksgiving Akathist\44 — is not just a temporary rental that we should care for like stewards; it is the matter through which we interact with God. Our worship is not theoretical, full of sermons, readings and hymns about another reality; it is sacramental and actual, offering bread, wine, water and oil

to commune with Christ. In his essay Through Creation to the Creator, Bishop Kallistos Ware writes:\45

"After perceiving each kingfisher, each frog, each human face, each blade of grass in its uniqueness,

in its full reality and immediacy, we are then to treat each as a means of communion with God, and

so to ascend through the creation to the Creator."

We can agree with our Western sisters and brothers that the human suffering caused by climate change should be our first motivator, but creation care should be our second. If we listen to our own tradition, ecological destruction is a grave sin. To co-opt and exploit Earth's resources for profit and convenience goes against the very work for which we were created: to name, use wisely and give thanks — and so grow in the image and likeness of God.

What must we do?

This paper urges action on climate change — but what should it look like? The deepest answer comes from within our own tradition.

"The real crisis lies not in the environment but in the human heart," Ecumenical Patriarch Bartholomew said during an address in 2012. "The fundamental problem is to be found not outside, but inside ourselves, not in the ecosystem but in the way we think. Without a revolutionary change within ourselves, all our conservation projects will ultimately remain insufficient and ineffective."\46

As a means of repentance, the Patriarch suggested *ascesis*, which he translated as "abstinence and moderation, or — better still — simplicity and frugality."

In a lovely piece of symmetry, many of the self-denying acts integral to our tradition actually do help the environment. We fast from meat and dairy for nearly half the year; and eating lower on the food chain slows deforestation and spares an overwhelming amount of water, methane and transportation fuels.\47 Our monasteries model simple living, often with practices that go way beyond "reduce, reuse, recycle." And even for laity, taking up our Orthodox cross presents many opportunities to opt out of the consumption that drives so much global pollution. We can buy less; use less; drive less; eat less.

But while we can certainly start by eliminating the energy-intensive luxuries we don't need, the hour is very late. Our country needs an energy policy overhaul that can't be accomplished with shorter showers, cloth diapering and less meat (though those acts can certainly help). Many of the emissions we generate come from basic necessities — commuting to work, school and daycare; heating our homes in winter so our children don't get sick; buying factory farmed food because it's government subsidized and, thus, the only kind we can afford.\48

Changing the system of fossil fuel dependence in which we are trapped, then, becomes our

primary task. Our cities are dominated by infrastructure built only for cars.\49 Our energy grids are owned by monopolies for whom solar and wind are bottom line threats.\50 Our past consumption habits have driven subsidies toward monoculture, ensuring that the cheapest food is neither healthy nor green.\51

This paper does not advocate one kind of action or consumption. Instead, it asks that Orthodox clergy and laity in the U.S. to consider the global impact of our daily acts, remember our own teachings, and then turn in repentance however we feel called. We have as a model one of our own patriarchs — a tireless advocate for energy policy overhaul — as well as a growing faith-based movement of fossil fuel divestment, non-violence assembly and prayer for change. As Patriarch Bartholomew has said, at this particular moment in history, acting on climate disruption is a natural extension of our own Orthodox faith.

"There is no distinction between concern for human welfare and concern for ecological preservation," he said at a Convention in Warsaw. "The way we relate to nature as creation directly reflects the way we believe in God as Creator of all things."\52

Citations

1. http://www.cnn.com/2012/12/04/world/asia/nauru-ocean-danger/

2. http://www.theguardian.com/world/2013/nov/10/typhoon-haiyan-thousands-dead-philippines

3. <u>http://www.theguardian.com/news/datablog/2011/jan/31/world-carbon-dioxide-emissions-country-data-co2</u>

4. http://catholicclimatecovenant.org/resources/feast-of-st-francis-2014/

5. <u>http://www.baptistcreationcare.org/node/1</u>

6. http://www.goarch.org/news/2007-05-25-scobaonclimatechange

7. <u>http://www.whitehouse.gov/the-press-office/2014/11/11/us-china-joint-announcement-climate-change</u>

8. <u>http://www.usatoday.com/story/money/business/2014/09/26/us-carbon-emissions-rise-despite-obama-climate-plan/16276811/</u>

9. <u>http://www.nytimes.com/2014/11/18/world/coal-rush-in-india-could-tip-balance-on-climate-change.html?_r=0</u>

10. http://climate.nasa.gov/scientific-consensus/

11. http://www.epa.gov/climatestudents/basics/today/greenhouse-effect.html

12. http://www.epa.gov/climatestudents/basics/today/greenhouse-gases.html

13. http://www.nrdc.org/globalwarming/qthinice.asp

14. http://america.aljazeera.com/articles/2014/7/1/kiribati-climatechange.html

15. http://www.bbc.com/news/science-environment-30852588

16. http://droughtmonitor.unl.edu

 $17. \ \underline{http://www.ucsusa.org/global_warming/science_and_impacts/impacts/climate-change-development-patterns-wildfire-costs.html \#.VLrEx94qZRE$

18.

http://www.biologicaldiversity.org/programs/biodiversity/elements_of_biodiversity/extinction_cr isis/

19. http://unfccc.int/meetings/copenhagen_dec_2009/items/5262.php

20. http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719

21. http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5_wgII_spm_en.pdf

22.

http://www.slate.com/articles/technology/future_tense/2014/06/isis_water_scarcity_is_climate_c hange_destabilizing_iraq.html

23. http://www.scientificamerican.com/article/did-climate-change-cause-typhoon-haiyan/

24. http://www.ipcc.ch/news_and_events/docs/ar5/ar5_syr_headlines_en.pdf

25. http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719

26. http://www.carbontracker.org

27. Exodus 20

28. Matthew 20:16

29. <u>http://oca.org/the-hub/the-church-on-current-issues/an-orthodox-christian-perspective-on-ecological-justice-and-change</u>

30. Luke 16:19-31

31. <u>http://www.washingtonpost.com/business/economy/china-us-agree-to-limit-greenhouse-gases/2014/11/11/9c768504-69e6-11e4-9fb4-a622dae742a2_story.html</u>

32. http://www.nasa.gov/mission_pages/NPP/news/earth-at-night.html#.VLrTHt4qZRE

33. http://www.ipcc.ch/pdf/technical-papers/ccw/chapter5.pdf

34. http://www.newyorker.com/tech/elements/president-tong-and-his-disappearing-islands

35. http://www.pbs.org/newshour/updates/planning-sink-happens-kiribati-drowns/

36. http://www.theguardian.com/environment/2009/nov/03/global-warming-climate-refugees

37. <u>http://www.washingtonpost.com/blogs/wonkblog/wp/2013/09/10/drought-helped-caused-syrias-war-will-climate-change-bring-more-like-it/</u>

38. http://www.cnn.com/2012/03/01/world/meast/syria-crisis-beginnings/

39. <u>http://www.oikoumene.org/en/resources/documents/wcc-programmes/justice-diakonia-and-responsibility-for-creation/climate-change-water/on-climate-change</u>

40. Genesis 1:28

41. Genesis 2

42. For the Life of the World, Fr. Alexander Schmemann

43. For the Life of the World, Fr. Alexander Schmemann

44. Akathist Hymn: Glory to God for All Things

45. http://www.incommunion.org/2004/12/11/through-creation-to-the-creator/

46. http://www.catholicculture.org/news/headlines/index.cfm?storyid=14682

47. <u>http://science.time.com/2013/12/16/the-triple-whopper-environmental-impact-of-global-meat-production/</u>

48. <u>http://www.epa.gov/climatechange/ghgemissions/sources.html</u>

49. <u>http://www.citylab.com/commute/2014/02/9-reasons-us-ended-so-much-more-car-dependent-europe/8226/</u>

50. http://www.eei.org/ourissues/finance/documents/disruptivechallenges.pdf

51. <u>http://opinionator.blogs.nytimes.com/2011/03/01/dont-end-agricultural-subsidies-fix-them/?_r=0</u>

52. <u>http://www.huffingtonpost.com/ecumenical-patriarch-bartholomew/spirituality-environment-b_4275769.html</u>