

## NORTHWEST GEOLOGICAL SOCIETY

A regional association of professionals, students & others interested in geology  
Please browse [www.nwgs.org](http://www.nwgs.org) for more about us

### April, 2022 Newsletter

Volume 36, Number 4

#### April 12 Program Speaker

The [Zoom meeting link](#) will be in the meeting reminder email from [NWGS Secretary](#) to all registered members prior to the meeting.

If you are not a member, please email [NWGS Secretary](#) for the link.

Reservations are not needed.

6:30pm: No-host social hour small group break-out sessions; 7:30pm: Speaker program

**Speaker:** Jory A. Pacht, President, Altair Resources

**Title:** Energy 101: A Rational Approach Towards Our Energy Future

**Abstract:** Anthropogenic global warming is an inconvenient truth. But so are the huge benefits that every country in the world has enjoyed because of cheap fossil fuel energy. Perhaps the most important thing to understand about energy is just how much of it we use. Every man, woman and child in the world uses 20 million watt-hours of energy per year. In developed countries, the number is far higher. The reason energy use is so high is that energy is in everything we do. For example, food for a U.S. family of four takes the energy equivalent of 22 gallons of gas per week to grow, ship, process and sell. If energy is in everything we do, then the cost of energy is in everything we do and worldwide, most decisions on energy sources are made based on cost. This is particularly true for undeveloped and developing countries. However, it is also true for industrial powerhouses like China, that have prioritized economic growth. As we hear the call for a carbonfree world in 30, 20 and now 15 years, we have to ask if this is realistic? Can we accomplish this without devastating economies? Currently about 89% of all energy in the world is produced using fossil fuels. Solar and wind comprise only 4%. Are there other alternatives? Are the world's citizens ready to accept the increased economic, land use, and other impacts that come with a switch to renewable sources of energy? In countries that are desperately poor, is it moral to insist that they forgo the benefits of cheap energy that we enjoy. Acquaintance with some of the facts of energy production and use may help in making the difficult decisions that will be required in the future. Managing global CO2 will require rational market-based solutions that may be different for different countries. Political invective on both sides is counter-productive and only creates division.

**[JOIN THE PROGRAM VIA ZOOM!](#)** Join the program by clicking the link in the separate meeting email announcement. Until we start meeting in person again, there is no cost and a reservation is not needed. You may join for both the social hour (6:30 pm) and the speaker program (7:30 pm), or just the speaker program. During the speaker presentation, the host will mute your microphone, and we ask that you please also mute your camera so as to allow sufficient band width for the speaker program. A Q&A session will follow the presentation. If you have a question or comment during the presentation, click **Chat** at the bottom of your screen to type your question or comment to the general audience. You may also click the **Raise my hand** link to ask the speaker a question and the host will call on you. Click on the Zoom link above to join the meeting at the appropriate time as listed above on the day of the meeting. See the [NWGS](#)

#### Upcoming Speakers and Field Trips

May **17** (note: **3rd Tuesday** due to WAHGS conference conflict): Lee Florea (Wa DNR), topic TBA.  
Spring Field Trip: Tom Doe, Deception Pass/Anacortes area, dates TBA (June, July, or September).

Fall Field Trip: TBA (although the spring field trip may end up in September as stated above).

If you would like to volunteer to give a talk or lead a field trip for NWGS, please contact President [Matthew Porter](#).

Please see the [NWGS website](#) for detailed announcements.  
Contact webmaster [Matthew Porter](#) if you have any announcements to post on the website.

## Announcements

- [NWGS](#) has a new, modern [website](#)! You can now update your membership, check out upcoming meeting speakers, access field trip publications, and more! Check it out!
- Carla Whittington has been approved by the Board to fill the recently vacated At-large Board Position. Thanks, Carla, and congratulations!
- NWGS is still seeking a talented volunteer to fill the **President Elect** position. The time commitment is not enormous, and this is a rewarding opportunity to contribute to and help shape the direction of our fine organization. Please contact President [Matthew Porter](#) for more information.
- Tom Doe and colleagues have volunteered to lead a two-day field trip to the Deception Pass/Anacortes area. Dates TBD (June, July, or Sept.). Cost TBD (~\$250 because one day will involve a boat).
- Next **Board of Directors** meeting: April 12, 2022, 5:30 P.M. via Zoom.

*YOU would like to be involved!*

## About NWGS

The [Northwest Geological Society](#) is a non-profit educational organization which provides a forum for information and discussion on Northwest geology and related topics. The Society sponsors talks by leading academic and professional geologists at its monthly meetings, conducts field trips to locales of regional geologic interest, and publishes meeting summaries and field guides based on those activities. Membership is open to anyone interested in regional geoscience issues.

**Program meetings** are the 2<sup>nd</sup> Tuesdays, October through May. **Until we are able to meet in person again, meetings are held via Zoom (link is included in the email announcement to all members; nonmembers contact the [NWGS Secretary](#)). Anyone may attend the speaker program at no cost, and a reservation is not needed.**

**Field trips (members only):** The Society sponsors two overnight field trips each year, one in the fall and one the spring, to locales of regional geologic interest.

**Membership** is open to anybody with an interest in geology. **Annual dues:** Professional: \$55; Student: \$10. **To join or pay annual dues:** go to the [NWGS website](#), or visit our website for more details. We look forward to seeing you soon!

## Recommended Readings

The movie Switch: produced by The Switch Energy Alliance -Scott Tinker. <https://switchon.org/films/switch/>

[A Question of Power: Electricity and the Wealth of Nations](#) by Robert Bryce

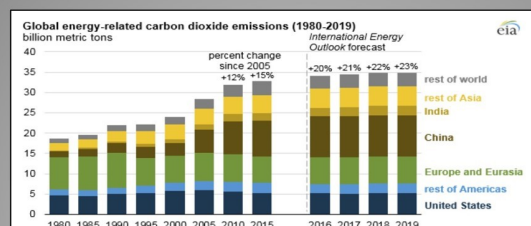
The "New Energy Economy": An Exercise in Magical Thinking by Mark Mills [Green Energy Revolution Can't Meet America's Energy Demands | Manhattan Institute \(manhattan-institute.org\)](#) For the PDF version [The "New Energy Economy": An Exercise in Magical Thinking | Manhattan Institute \(manhattan-institute.org\)](#)

Please send your reading recommendations to Newsletter Editor [Tom Bush](#).

To update your account information,, go to [NWGS.org/membership](#).  
Questions or comments? Contact President [Matthew Porter](#).

## Photo Spotlight

### Should We Subsidize China?



- U.S. produces ~13% of global CO<sub>2</sub> emissions. They have decreased by 14% since 2005.
- Overall CO<sub>2</sub> emissions have increased by 23% since 2005. Most of that increase is from China, which produces 29% of world emissions, and India.
- In addition to upfront switching costs, industrial companies would face costs per unit of energy that are 3x-6x higher for electricity from renewables than for direct natural gas (JP Morgan, 2021).
- 51.7% of the energy produced from coal is produced in China. That will continue to increase.

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### NWGS Board

**President** [Matthew Porter](#)  
AESI

**President** Open  
**Elect**

**Past President** [Chris Kimmel](#)  
Landau Assoc.

**Secretary** [Amy Knudson](#)

**Treasurer** [Pam Osterhout](#)  
Floyd I Snider

**At-Large Board** [Maura OBrien](#)  
Retired

**Members** [Carla Whittington](#)  
Highline College

### Other Personnel

**Membership Chair** [George Bennett](#)  
Bennett Consulting

**Field Trip Coordinator** [Kathleen Goodman](#), Wood PLC

**Newsletter Editor & Publications** [Tom Bush](#)  
Pierce College  
Puyallup

**Poster Chair** [Maura OBrien](#)  
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**Webmaster** [Matthew Porter](#)  
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**Facebook Page** [Eric Baer](#)  
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