

Oregon Global Warming Commission

Public Comments Through October 4, 2023

From: Lauren Anderson <la@oregonwild.org>
Sent: Friday, September 15, 2023 3:28 PM
To: Oregon GWC * ODOE
Subject: Public comment — OGWC NWL Work Plan
Attachments: OGWC NWL Work Plan Comment 9.15.23.pdf

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Hello,

We thank the Commission for issuing a draft work plan to expedite the implementation of the NCS components of HB 3409. The attached letter shares our priorities for the proposed work plan on behalf of the following organizations. Please reach out with any follow up questions.

Lauren Anderson
Climate Forests Program Manager
Oregon Wild

Megan Kemple
Executive Director
Oregon Climate and Agriculture Network

Teryn Yazdani
Staff Attorney and Climate Policy Manager
Beyond Toxics

Joe Liebezeit
Assistant Director of Statewide Conservation
Portland Audubon

Greg Holmes
Working Lands Program Director
1000 Friends of Oregon

Dani Madrone
Pacific Northwest Policy Manager
American Farmland Trust

Andrea Kreiner,
Executive Director
Oregon Association of Conservation Districts

Bob Sallinger,
Urban Conservation Director
Willamette Riverkeeper

Laura Tabor
Climate Action Director

To: Oregon Global Warming Commission, Oregon Department of Energy

Re: NWL Components of [OGWC/OCAC DRAFT Work Plan Through 2024](#)

September 15th, 2023

Dear Chair Macdonald and members of the Oregon Global Warming Commission,

We thank the Commission for recognizing the importance and urgency of this work by issuing a draft work plan to expedite the implementation of the NCS components of HB 3409. This letter shares our priorities for each component of the proposed work plan.

Priorities for NWL Fund allocation and reporting	1
Priorities for NWL Baseline, Metrics, and Sequestration Goals	3
Priorities for the NWL Advisory Committee	4
Priorities for the NWL Workforce Study	5
Priorities for a NWL Inventory	6

Priorities for NWL Fund allocation and reporting

- **Leverage federal funding resources (IIJA, IRA, Farm Bill)**
- **Maximize carbon sequestration outcomes**
- **Center environmental justice considerations**
- **Ensure accessibility of grants for landowners and land managers**
- **Utilize existing programs and leverage existing capacity wherever possible**
- **Prioritize outcomes over research**

The passage of HB 3409 added further direction and clarity to the work initiated by the Commission in the NWL Proposal, and included an initial \$10 million dollar investment to ensure this work moves forward.

Natural climate solutions are defined as activities that **enhance or protect net biological carbon sequestration on natural and working lands**, while maintaining or increasing ecosystem resilience and human well-being. Biological carbon sequestration is defined as the removal of carbon from the atmosphere by plants and microorganisms and storage of carbon dioxide in vegetation, such as grasslands, marshes or forests, or in soils and oceans.

In Section 4, the Commission is further directed to apply an environmental justice lens to Fund allocation. Priority should be given to *”technical assistance for environmental justice communities or Indian tribes; and incentives for programs or activities supported by an*

environmental justice community or supported by a resolution of an Indian tribe, with priority given to those projects or activities administered or proposed by an environmental justice community or an Indian tribe.” These criteria should be guiding principles for the Commission as it works to prioritize allocation of the Fund to state agencies, recognizing that it is important to balance the importance of progress towards carbon sequestration goals with equitable distribution of funds. These priorities may at times be in tension, for example if there is higher cost per ton of sequestration to fully engage smaller landowners, the Commission will need to consider both priorities as the work progresses. The Commission should work closely with state agencies to identify opportunities in the near term for investment, with special consideration given to deadlines for leveraging additional federal funding.¹

The recent passage of the Infrastructure Investment and Jobs Act (IIJA) in 2021 and the Inflation Reduction Act (IRA) in 2022 has significantly boosted the amount of federal funding available for natural climate solutions investments. We already know at least \$150 million will be available to Oregon through 2026 from just three Natural Resources Conservation Service (NRCS) programs. Another example is the Urban and Community Forestry Program, which is typically funded at \$32 million annually; however, the Inflation Reduction Act provided an additional \$1.5 billion for the program. These examples underscore the need to identify and access this additional funding across natural and working lands programs.

In order to ensure equitable distribution of benefits from the Fund, we encourage the Commission to invest in opportunities and projects that are not already receiving significant investments from other sources. For example, USDA has limited capacity to distribute federal funds, so the agency tends to prioritize funding fewer projects on larger farms. Therefore, it would be beneficial for the Fund to be used to invest in projects on smaller family-owned farms, who may not have access to federal funds and/or to provide the matching funds needed to help smaller scale and marginalized farmers and foresters access federal funding. In addition, forest lands in Oregon are already receiving significant wildfire mitigation funds from numerous federal and state resources. We encourage the Commission to identify new and innovative ways the state can invest in natural climate solutions.

We recognize that funding for agency capacity is limited and hope that agencies will utilize existing programs and staff capacity wherever possible. To this end, we recommend conducting a crosswalk between existing state agency program practices and the practices that the NWL Project has drafted to understand how many existing state programs already meet NCS objectives as well as whether new programs might need to be established. This exercise would also provide guidance on what kind of capacity state agencies will need to implement NCS Fund directives and to expand the use of NCS in the state. While in the long-term agencies may seek additional capacity from the legislature, we are optimistic that with thoughtful and creative approaches, agencies can effectively distribute these funds. This will require increased cross-

¹ Complete list of federal funding opportunities, including subscription announcements:

<https://www.grants.gov/web/grants/home.html>

Open IIJA funding opportunities: <https://www.whitehouse.gov/build/resources/nofos-to-know/>

Open IRA funding opportunities: <https://www.whitehouse.gov/cleanenergy/open-funding-opportunities/>

Full list of IIJA programs: <https://www.whitehouse.gov/build/guidebook/>

Full list of IRA programs: <https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/>

National Wildlife Federation Nature Based Solutions database: <https://fundingnaturebasedsolutions.nwf.org/>

agency coordination and leadership and support from the two new positions created to support this work at ODOE. The undersigned organizations would be glad to share knowledge and support the development of the crosswalk between agency programs and NCS practices, as well as relevant federal funding opportunities.

The Fund will only be effective if it is accessible to landowners and land managers. Input from landowners and land managers, and organizations supporting them, will be critical as any grant programs or other incentive programs are developed, to ensure they are structured in a way that is accessible. Landowners and land managers, and organizations supporting them, should be given the opportunity to provide input on the structure of any grant programs or other incentive programs with a process for considering and incorporating that feedback.

As the NCS Fund is developed and distributed, our hope is that Oregon will become a national leader in this work and an example other states and federal agencies look to.

Rulemaking: While HB 3409 also gives the Commission authority to determine the Fund allocation prioritization by rulemaking, we do not feel that there is any need for this additional step. The legislation clearly establishes a direction for allocating funds. Undertaking a rulemaking process before funds can be allocated would place an unnecessary administrative burden on the Commission and state agencies, and would delay implementation. Such a delay could lead to Oregon missing out on time sensitive federal funding opportunities.

Priorities for NWL Baseline, Metrics, and Sequestration Goals

- **Use the sequestration goals established in the NWL Proposal**
- **Ensure environmental justice considerations are central to community impacts metrics development (impacts to jobs, livability, access, clean water, clean air)**
- **Ensure activity-based metrics have clear measurable carbon sequestration benefits**
- **Apply consistent analytical frameworks with clear criteria across sectors**
- **Ensure communication between the technical/scientific community and the NWL Advisory Committee**
- **Ensure robust public participation**

Before finalizing the net biological carbon sequestration and storage baseline, activity-based metrics and community impact metrics, HB 3409 also requires the State Department of Energy and the commission to make **draft versions publicly available and receive comments from the public.**

We would like to note that the Commission has already issued non-binding sequestration goals (5 million metric tons of CO₂ equivalent by 2030 and up to 9.5 million metric tons by 2050), therefore we encourage you to focus on establishing a baseline and metrics moving forward, rather than spending time on a process to propose new goals. There is no need to duplicate past efforts. We would also encourage the Commission to provide a clear timeline for public comment on the goals in the work plan.

Nearly a year of work has already taken place by the Natural and Working Lands Advisory Committee formed in October 2022 to recommend activity-based and community impact

metrics. The work of this committee, along with the Institute for Natural Resource (INR) and a Technical Advisory Committee (TAC) convened to support the project, provides a good starting point for implementation of HB 3409. The OCAC should take full advantage of that work and not recreate it. Having said that, it should be noted that the work done by the Advisory Committee in different sector areas is not at the same point of development, and much work remains to reconcile input provided by the technical and stakeholder groups—a synthesis the current effort will not provide. Our understanding is that a consultant will draft baselines, activity-based metrics, and community impact metrics between March-May 2024. This large body of work will only be feasible in a three-month period if the OCAC uses the next six months to review and deliberate on INR's report in order to provide the consultant clear guidance on how to build on and move forward from the INR report findings. Public comment opportunities on the many pieces of the INR report will be an essential piece of this process.

We would like to emphasize three learnings from the prior NWL Advisory Committee process:

- It is essential to apply consistent analytical frameworks with clear criteria across sectors, for example when coming up with proposed NCS practices and appropriate activity-based metrics. This should be paired with dedicated capacity to convene and advance sector-specific conversations that account for the varied progress to date. For example, the agriculture subcommittee of the NWL Advisory Committee was able to achieve informed consent on a list of recommended NCS practices, whereas the forest subcommittee was not. The timeline needs to allow for everyone to weigh in and identify areas of consensus.
- Determining activity baselines and metrics should include open lines of communication between the scientific community and the NWL Advisory Committee to ensure that the metrics are both rooted in relevant science and practical to implement and track for land owners and land managers. Building on the technical work done by the Technical Advisory Committee convened to support the current INR project, the OGWC/OCAC should request a review by the scientific community of their final draft activity-based metrics before adoption to ensure the final activity-based metrics support measurable carbon sequestration benefits.
- The Institute for Natural Resources included in its recent report to the OGWC a long list of community impact metrics recommended by the Natural and Working Lands Advisory Committee. We recommend narrowing the list of community impact metrics and prioritizing environmental justice considerations (impacts to jobs, livability, access, clean water, clean air). A narrowed version of the list could be provided to agencies for the purpose of managing the fund and the full list from INR's report could be made available as a resource to agencies for use with other programs.

Priorities for the NWL Advisory Committee

- **Ensure this committee is not a substitute for public outreach and engagement**
- **Ensure tribal outreach and engagement is treated as a independent component of this work**
- **Ensure committee composition of balanced viewpoints/ experiences**
- **Establish a nomination process in addition to application process**

Section 62 of HB 3409 states: “(1) The Oregon Global Warming Commission may appoint a natural and working lands advisory committee to advise the commission in the performance of the commission’s duties under sections 53 to 63 of this 2023 Act. The commission shall seek recommendations for committee members from industry and advocacy associations where appropriate. (2) The advisory committee shall consist of at least 15 members appointed as follows:...” (listing specific areas of expertise and experience) and “(3) The commission may appoint additional members as needed to provide additional expertise or represent other interests.”

We recommend that the Commission use the process to seek recommendations for committee members required by Section 62(1) to solicit broad input on perspectives, *beyond* those required in statute, that should be represented on the NWL Advisory Committee. The NWL Advisory Committee should be composed of balanced viewpoints and experiences and be developed with an equity lens. A balanced composition would include those who are committed to strong climate mitigation and equity outcomes as well as those who are familiar with challenges and/or barriers that landowners and land managers may face as new financial incentives and programs are implemented. Recognizing that an Advisory Committee cannot represent all perspectives, and is not a substitute for public input, we appreciate that the work plan includes multiple opportunities for public comment.

If the NWL Advisory committee does not include multiple members of the scientific community, we recommend that members of the scientific community have the opportunity to review draft activity-based metrics and the draft inventory. It will be important to clarify the role of any scientific reviewers in relation to the NWL Advisory Committee and have open lines of communication between them. In general, it will be important to have open lines of communication between all of the following: technical experts, practitioners and other stakeholders.

Tribal consultation process needs to be added as a separate item under the NWL work plan

Further, we would encourage you to develop a separate work plan and timeline for this component “**Consultation with federally recognized Indian tribes in Oregon regarding NWL work**” that is independent from the work the Advisory Committee is undertaking. Section 11 of HB 3409 states “The Oregon Global Warming Commission shall establish a process for consultation with representatives of federally recognized Indian tribes in this state to advise the commission on the performance of its duties under sections 1 to 11 of this 2023 Act, including the identification of opportunities to support indigenous practices and knowledge from tribal nations to sequester and store carbon on natural and working lands.”

Tribes must be consulted as sovereign governments rather than as part of a typical stakeholder outreach process. This consultation should be a thread throughout your work on natural and working lands and natural climate solutions. Traditional ecological knowledge should be considered alongside other expert resources.

Priorities for the NWL Workforce Study

- **Center environmental justice outcomes**

Developing the workforce and training programs needed to support adoption of natural climate solutions is an important component of this work. We request that the Commission ensure this work is implemented in a manner that centers equity and prioritizes the needs of Oregon's frontline, environmental justice communities. The jobs created by this work must be able to support families and be accessible to communities across the state.

Last year at the UN's Biodiversity Conference, COP15, a new report, *Decent Work in Nature-based Solutions*, underscored the need for a "Just Transition," meaning the "creation of new jobs that support the economy in a way that is fair and inclusive, creating meaningful work opportunities and leaving no one behind." We encourage the Commission to use this lens when conducting the workforce study. Further, we request that the Commission explicitly create natural and working lands opportunities for rural Oregonians in the workforce study. While rural communities are included in Oregon's definition of "environmental justice community," the Commission should be intentional with prioritizing rural worker opportunities in this study.

Priorities for a NWL Inventory

- **Account for standing carbon stocks and annual GHG fluxes across Oregon's natural and working lands**
- **Include use of remote sensing data where feasible**

HB 3409 requires the Commission to develop a natural and working lands net biological carbon sequestration and storage inventory, allowing for a public comment process. The inventory must 1) Be based on the best available field-based and remote sensing data on biological carbon sequestration; 2) Be developed using methods consistent with methods used to assess greenhouse gas fluxes related to land use, land change and forestry for the United States Environmental Protection Agency's Inventory of U.S. Greenhouse Gas Emissions and Sinks.

Greenhouse gas (GHG) emission inventories are critical to the State's ability to measure progress toward emission reduction goals. While Oregon currently tracks GHG emissions in other sectors, to meet the greenhouse gas emissions (GHG) reduction and sequestration goals of the state, Oregon must consider GHG emissions and sinks from natural and working lands. Without establishing this inventory and baseline, we will not be able to measure meaningful progress towards meeting our sequestration and climate goals, therefore we request the commission prioritize this work moving forward.

The Commission should follow best practice guidelines² to account for carbon storage and annual GHG fluxes in natural and working lands. Following these guidelines, the inventory methods should allow for reporting within each land category (i.e., forest and woodlands, rangelands, cultivated croplands, coastal wetlands, freshwater wetlands, urban and suburban areas) as well as account for change in carbon stocks and GHG fluxes due to conversion from one land category to another. Consistent with the international guidelines, we recommend

² See the 2006 IPCC Guidelines which can be adapted to include the best available information (regional and local data where available, default values where necessary) and the World Resources Institute's updated NWL Inventory guidance. It would be good to encourage the Commission and any consultants working on the NWL GHG inventory to build from these excellent resources.

accounting across the pools defined by the 2006 International Panel on Climate Change guidelines for landscape GHG accounting. These include:

- Above-ground live and below-ground live vegetation pools;
- Dead organic matter (standing or downed dead wood, litter);
- Soil organic matter.

We recommend that the NWL Inventory make use of the best available data for each land category and direct investments to help improve the inventory over time. We encourage the Commission to include data derived from remote sensing to augment empirical field data for most land categories.

In California's Natural and Working Lands Inventory,³ the state was not able to assess some known carbon pools due to lack of data or method. It is likely the Commission will encounter similar data barriers, and we recommend leaving guidelines and criteria in place so that new data can be incorporated into the inventory as it becomes available.

It is also important to note that ideally, the NWL GHG inventory carbon stocks and GHG fluxes should be:

- Annual,
- Spatially-explicit whenever possible, and
- Should have high enough spatial resolution to allow different landowner types to be distinguished from each other.

The Commission should also be aware that landowners and organizations representing them have concerns about the public availability of data related to practices, crops and soils. INR's Jimmy Kagan issued a memo to the Natural and Working Lands Advisory Committee titled: [Oregon Carbon Stock Inventory – Assuring Data from Private Lands Is Not Shared](#), outlining sources of inventory data and the ways the privacy of these data are protected. Any additional sources of inventory data need to ensure landowner/land manager privacy is protected.

Thank you for your consideration of these recommendations, please reach out with any follow up questions.

Sincerely,

³ An Inventory of Ecosystem Carbon in California's Natural & Working Lands 2018 Edition. California Air Resources Board. https://ww3.arb.ca.gov/cc/inventory/pubs/nwl_inventory.pdf

Lauren Anderson, Climate Forests Program Manager
Oregon Wild

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Oregon Climate and Agriculture Network

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American Farmland Trust

Andrea Kreiner, Executive Director
Oregon Association of Conservation Districts

Bob Sallinger, Urban Conservation Director
Willamette Riverkeeper

Laura Tabor, Climate Action Director
The Nature Conservancy in Oregon

From: Megan Kemple <megan@oregonclimateag.org>
Sent: Tuesday, September 12, 2023 2:09 PM
To: Oregon GWC * ODOE; Cathy Macdonald
Subject: Public Comment on OGWC's draft workplan
Attachments: OrCAN's public comment on OGWC_OCAC NWL Work Plan 9-12-23.pdf

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Chair Macdonald, members of the Oregon Global Warming Commission (OGWC), and staff with Oregon Department of Energy:

Please find attached Oregon Climate and Agriculture Network's public comment on the OGWC's draft workplan through 2024.

Thank you for the opportunity to comment and for your consideration.

Megan Kemple (she/her)
Executive Director
[Oregon Climate and Agriculture Network \(OrCAN\)](#)
541-225-8807 (direct)



September 12, 2023

To: Chair Macdonald and members of the Oregon Global Warming Commission (OGWC):
Re: Public Comment on the [OGWC's Draft Work Plan through 2024](#)

NWL Advisory Committee

Public input

Because the composition of the NWL Advisory Committee was created through the legislative process and without public input, we recommend requesting public comment on any additional areas of expertise/interests to be represented on the NWL AC, prior to the call for nominations and applicants. Recognizing that an Advisory Committee can not represent all perspectives, and is not a substitute for public input, we appreciate that the work plan includes multiple opportunities for public comment.

Balance viewpoints

The NWL Advisory Committee should be composed of balanced viewpoints and experiences and be developed with an equity lens. A balanced composition would include those who are committed to strong climate mitigation and equity outcomes as well as those who are familiar with challenges and/or barriers that landowners and land managers may face as new financial incentives and programs are implemented.

Expand to beyond land owners and land managers

The role of landowners and land managers and technical assistance providers on the NWL Advisory Committee will be critical, but we also recommend including organizations who represent them. These organizations have likely been hearing from broader groups of their constituents and can provide a perspective beyond that of individuals.

NWL Inventory

Concerns about public data

The Commission should be aware that landowners, and organizations representing them, have concerns about the public availability of data related to practices, crops and soils. INR's Jimmy Kagan issued a memo to the Natural and Working Lands Advisory Committee titled: [Oregon Carbon Stock Inventory – Assuring Data from Private Lands Is Not Shared](#), outlining sources of inventory data and the ways the privacy of these data are protected. Any additional sources of inventory data need to ensure landowner/land manager privacy is protected.

NWL Fund

Priorities

As the NCS Fund is developed and distributed, we encourage the Commission to prioritize:

- Carbon sequestration benefits;
- Outcomes, including financial incentives and technical assistance, over research;
- Black and Indigenous and People of Color (BIPOC) and small and mid-scale farm owners/managers who have been unable to access state and federal funding; and
- Utilization of existing programs and leveraging existing capacity.

Leverage federal funding

The recent passage of the Inflation Reduction Act (IRA) has significantly boosted the amount of federal funding available for natural climate solutions investments. We already know at least \$150 million will be available to Oregon through 2026 from just three Natural Resources Conservation Service (NRCS) programs. Accessing this additional funding across natural and working lands programs should be a priority moving forward.

Fill gaps in federally funded projects

Distribution of the Natural Climate Solutions Agriculture Fund should recognize that USDA has limited capacity to distribute federal funds, so the agency tends to prioritize funding fewer projects on larger farms. It will be important that the Fund is invested in projects on small and mid-scale farms, where land-owners and land managers may not have access to federal funds *and* to leverage federal funding by providing the matching funds needed to help smaller scale farms and BIPOC and other marginalized producers access federal funding.

Ensure the fund is accessible

The Fund will only be effective if it is accessible to landowners and land managers. Input from landowners and land managers, and organizations supporting them, will be critical as any grant programs or other incentive programs are developed, to ensure they are structured in a way that is accessible. Landowners and land managers, and organizations supporting them, should be given the opportunity to provide input on the structure of any grant programs or other incentive programs, with a process for considering and incorporating that feedback.

Ensure the fund is equitable

In section 4 of HB 3409 the Commission was directed to apply an environmental justice lens to Fund allocation. Priority should be given to *“technical assistance for environmental justice communities or Indian tribes; and incentives for programs or activities supported by an environmental justice community or supported by a resolution of an Indian tribe, with priority given to those projects or activities administered or proposed by an environmental justice community or an Indian tribe.”* These criteria should be guiding principles for the Commission as it works to prioritize allocation of the Fund to state agencies.

NWL Baseline, Metrics, and Sequestration Goals

Engage the public

Before finalizing the baseline, activity-based metrics and community impact metrics, HB 3409 also requires that draft versions be publicly available for comments from the public. We appreciate the opportunity for public comment on the draft metrics in the work plan.

Use existing goals

The Commission has already issued non-binding sequestration goals (5 million metric tons of CO2 equivalent by 2030 and up to 9.5 million metric tons by 2050), therefore we encourage you to focus on establishing a baseline and metrics moving forward, rather than spending time on a process to propose new goals. There is no need to duplicate past efforts. We would also like the Commission to provide a clear timeline for public comment on the goals in the work plan.

Utilize the work of the 2022-2023 NW Advisory Committee

Nearly a year of work has already taken place by the Natural and Working Lands Advisory Committee formed in October 2022 to recommend activity-based and community impact metrics. The OCAC should take full advantage of that work and not recreate it.

Get started on metrics ASAP

Our understanding is that a consultant will “Draft Baseline, Activity-Based Metrics, and Community Impact Metrics” between March-May 2024. This will only be feasible in a three month period if the OCAC has processed INR’s report and provided the consultant with guidance about how to approach this task, between now and March 2024.

Open lines of communication

Determining activity baselines and metrics should include open lines of communication between the scientific community and the NWL Advisory Committee to ensure that the metrics are both rooted in relevant science and practical to implement and track for land owners and land managers. Building on the technical work done by the Technical Advisory Committee convened to support the current INR project, the OGWC/OCAC should request a review by the scientific community of their final draft activity-based metrics before adoption to ensure the final activity-based metrics support measurable carbon sequestration benefits. And the NWL AC members should have the opportunity to engage with scientists who are providing feedback.

Thank you so much for your consideration of these comments.



Megan Kemple, Executive Director
Oregon Climate and Agriculture Network (OrCAN)

From: Bob Wright <gbobw1943@comcast.net>
Sent: Monday, September 11, 2023 8:18 PM
To: Oregon GWC * ODOE
Cc: Mike Robinson; Kevin Shanley
Subject: Comments on GWC draft work plan

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Please consider adding the following to the GWC draft work plan:

Remove legacy emissions of all greenhouse gases (CO₂, methane and other noxious gases) from the atmosphere and permanently store them. Follow guidance from the IPCC and other climate science experts. Establish a timeline consistent with keeping global warming below 1.5C as per the Paris Accords.

Consider all approaches to greenhouse gas removal (GGR) and all methods of permanent storage. By all methods I mean to include both natural and technological. And I include methods available now, those emerging near term and those that will emerge in time. All methods, whether on land or in the ocean.

Calculate Oregon's share of legacy emissions in our atmosphere. Set goals and timelines for both removal and permanent storage of greenhouse gases.

Encourage Oregon cities, counties, tribes etc. to calculate their legacy emissions and assist them in setting local goals.

Assure state support for newer land based natural carbon dioxide storage methods, such as biochar from forest and agricultural biomass, enhanced rock weathering, concrete embedded with CO₂, deep geologic burial in basalt formations and others that will emerge over time. Consider emerging methods of removing CO₂ from the atmosphere such as direct air capture, and emerging methods of offshore CO₂ storage, such as coastal methods like kelp production as well as deep ocean storage.

Expect significant job growth and economic development opportunities around GGR and permanent storage. Embrace and assist this through all available means, including research, grants, contracts, workforce training, public-private partnerships and others.

Develop plans to increase available state funding as needed for all of the above. Consider redirecting funds currently allocated as subsidies for emitters. Also consider funding mechanisms now in place or planned in other states, particularly neighboring states of California and Washington.

Thank you for considering my comments.

Bob Wright
Pacific Coast Legacy Emissions Action Network Eugene, Oregon

Sent from my iPad

From: kmshanley@comcast.net
Sent: Tuesday, September 12, 2023 7:50 PM
To: Oregon GWC * ODOE
Cc: 'Mike Robinson'; 'Bob Wright'; BAKER Zachariah * ODOE
Subject: RE: Comments on Global Warming Commission Draft Work Plan

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You don't often get email from kmshanley@comcast.net. [Learn why this is important](#)

Dear Global Warming Commission Members,

We heartily applaud the important work you are doing on behalf of Oregonians and our climate!

We would like you to consider an important addition to your Work Plan. (Sorry, we know you already have a lot on your plate!)

While reducing greenhouse gas emissions is critically important, it is equally important to remove the legacy greenhouse gases we have been dumping into our atmosphere since the beginning of the industrial revolution. This will be critical to keep our planet's climate stable and livable and the term of art is generally called "Climate Restoration".

The Global Warming Commission needs to add to its mission the development strategies to draw down at least Oregon's contributions to historic emissions. This can be facilitated through good public policies at state, county and municipal levels.

These sequestration strategies should include a broad range of solutions, with a bias towards solutions that are scalable to a very high level and that provide additional economic benefits to Oregon communities.

Solutions may include 'natural' methods, such as altered forestry or agricultural practices, but should also include 'engineered' methods, such as direct air capture or ocean alkalinity enhancement. The Commission's strategies should take advantage of Oregon's unique assets: its basalt geology, its robust forests, and its ocean continental shelf.

A sub-task would be to reasonably accurately identify Oregon's historic contribution to legacy greenhouse gas emissions in order to help identify its permanent greenhouse gas sequestration goals.

Thank you for your consideration of this addition to your Work Plan!

Kevin Shanley
Pacific Coast Legacy Emissions Action Network, Portland, Oregon

*Kevin Shanley
305 S Montgomery Street, #509
Portland, OR 97201
541-650-2628*

From: ODOE ITService * ODOE
Sent: Monday, August 28, 2023 12:47 PM
To: Oregon GWC * ODOE
Cc: BAKER Zachariah * ODOE
Subject: New TIGHGER submission - EV4 LLC dba EV Global

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Business Contact

Toby Kinkaid

Email

toby@evglobal.net

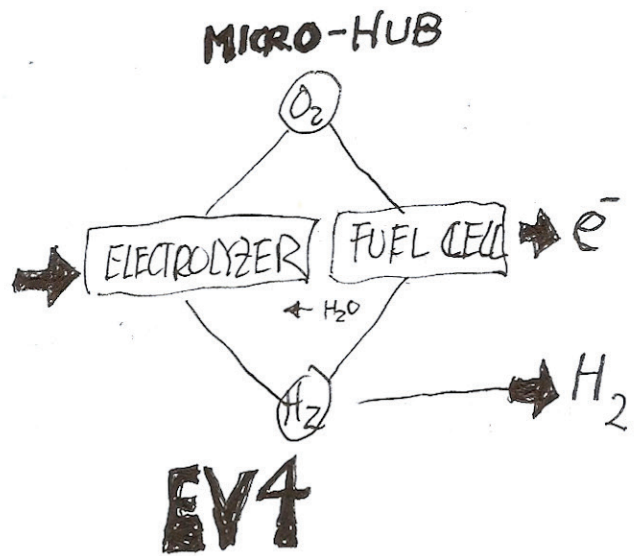
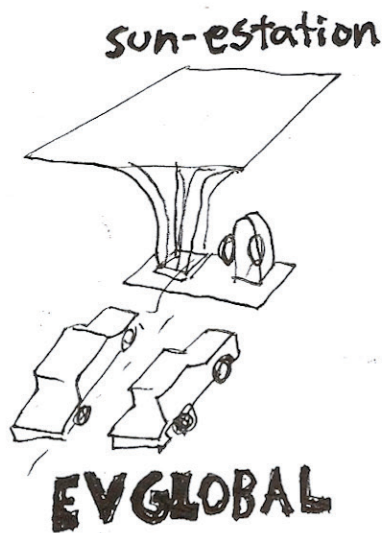
[Click here to access record](#)

Feedback on draft list of actions

General Comment on Roadmap

Dear OGWC: Thank you for your work in advancing policy. I've read with great interest your Roadmap and I have some concerns. I realize you have a complex assignment. My concerns center around stated objectives, and methodology. The roadmap (and additional documents) point out that over the last 10 years the OGWC results have been missing all milestones by double digits in actual GHG emission reduction. The policy focus seems to be more concerned with making new goals for far-off time frames, as opposed to concrete recommendations of action for the near-term. A great deal of the roadmap states, and restates different reasons the OGWC should be continued to be funded. I understand that. Since the last 10 years were ineffective, does it make sense to continue more of the same approach? Further, having missed every milestone metric, the roadmap reads as though Oregon is "on track" to meet the state's future objectives. Is this a political statement? Clearly, Oregon has missed every metric to-date. The IPCC says we have six years to half Carbon emissions. Does Oregon energy policy accept this? The methodology appears to be everyone (state agencies, stakeholders etc.) must figure it out their own plan. This requires the engineering of each situation separately, which is cumbersome, expensive, and piece-meal in approach. Also, deciding to "punt" the ball on renewable Hydrogen, clean Hydrogen, or green hydrogen altogether, which offers real solutions, sets Oregon back years - given supply chain issues. We need to look for standardized solutions to common use-cases - and install pre-engineered solutions for those fleet cases where it delivers 100% clean transportation abating toxic fossil fuels in Oregon. I don't want to offer criticism without offering my suggestions. May I offer my recommendations for Oregon's Clean Energy Plan 2023-2025? I've attached as a PDF, or below a flip book link I created which is easier to view, thank you for your attention and I wish you success. P.S. Please forgive my sketches, but a picture speaks a thousand words:
<https://www.flipsnack.com/tobykinkaid/oregon-clean-energy-plan-2023-2025-7xj4mntgvu/full-view.html> Attached is the normal PDF version galley format, thank you.

OREGON 2023 - 2025 CLEAN ENERGY PLAN

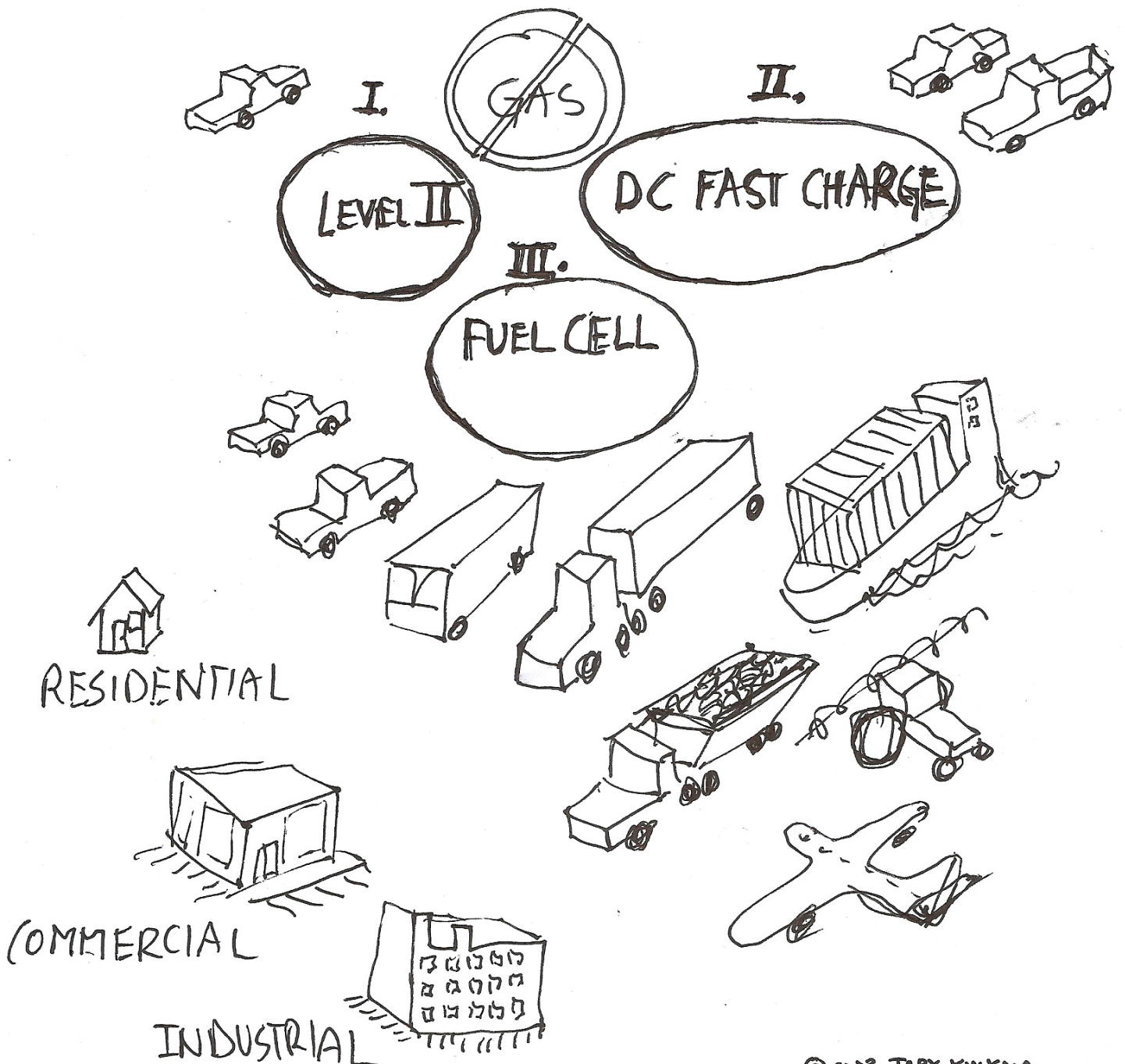


ZERO EMISSION ECONOMY

PREPARED BY
TOBY KINKAID
EVGlobal.

toby@evglobal.net

EV INFRASTRUCTURE: CLEAN CHOICES



ASPECTS

I.

- LOW PEAK DEMAND
- AC DELIVERY (240 VAC)
- NO GRID UPGRADE
- ELECTRIC BILL
- PEAK-DEMAND
- PERCENT TOXIC
- LIGHT DUTY
- GRID DEPENDENT

LEVEL
II

DC
FAST CHARGE

II.

- HIGH PEAK DEMAND
- DC FAST CHARGE (3-PHASE)
- GRID UPGRADE 3 ϕ
- LARGE ELECTRIC BILL
- HEAVY PEAK-DEMAND
- PERCENT TOXIC
- LIGHT/MEDIUM DUTY
- GRID DEPENDENT

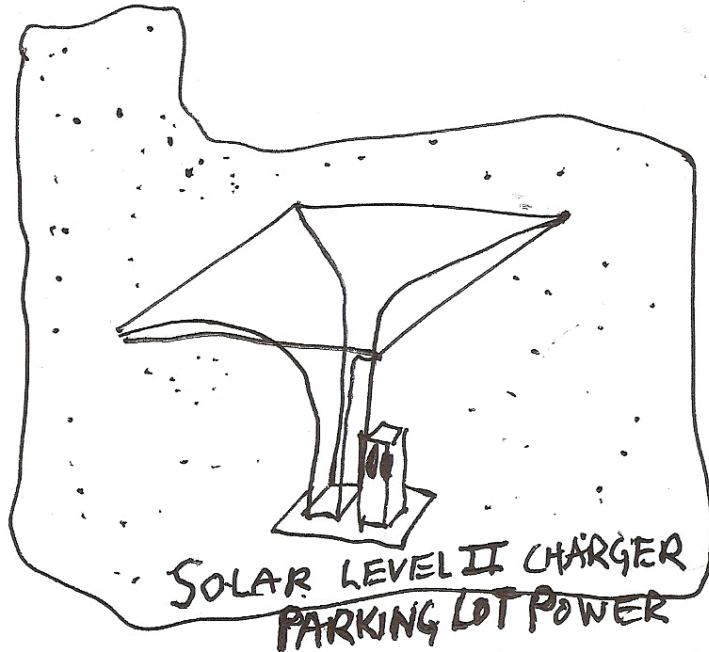
FUEL CELL

III.

- NO PEAK DEMAND
- BALANCES GRID OFF-PEAK 3 ϕ LOAD
- NO GRID UPGRADE
- OFF-PEAK ELECTRIC BILL, or NO BILL
- OFF-PEAK DEMAND
- NON-TOXIC USING GREEN HYDROGEN
- LIGHT/MEDIUM/HEAVY DUTY VEHICLES
RESIDENTIAL/COMMERCIAL/INDUSTRY/
FEEDSTOCKS/FERTILIZER/
CEMENT/STEEL/MARITIME/
AVIATION
- GRID INDEPENDENT

Oregon's Goal: 250,000 EVs
-by 2025

1.



SUN-e
STATION™

2,400 MILES
MONTH

100% CLEAN
MOBILITY

ADDITIONAL CHARGING
STALLS REQUIRED

9,260

4,629

SUNNY STATIONS
INSTALLED ACROSS
ALL 36 COUNTIES

128

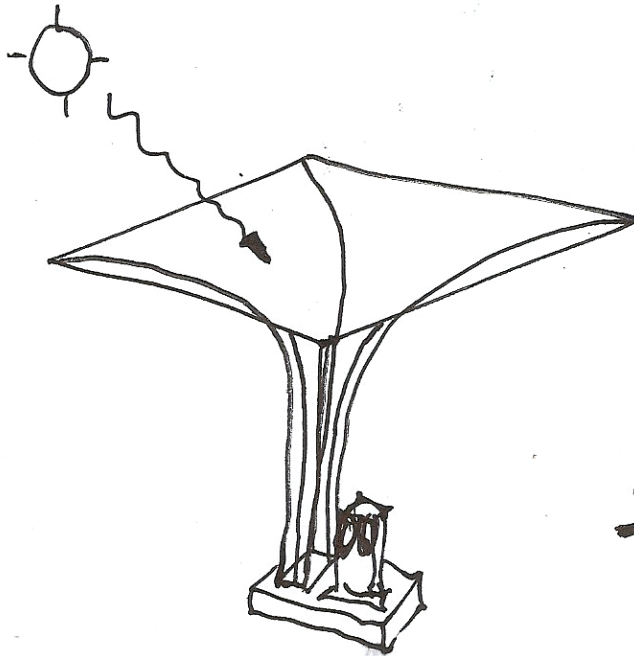
SUNNY STATIONS
PER COUNTY

11

MILLION MILES
CLEAN TRANSPORTATION

PER MONTH

ECONOMICS



Sun-ESTATION™

PRODUCTION

100% CLEAN MOBILITY

80 MILES / DAY

2,400 MILES / MONTH

28,800 MILES / YEAR

144,000 MILES / 5-YEAR

288,000 MILES / 10-YEAR

AVOIDED COSTS

- NO GRID CONNECTION
- NO GRID IMPACTS
- NO GRID COSTS
- NO GRID SURVEYS
- NO ELECTRIC BILLS
- NO DEMAND CHARGES
- NO UNKNOWN COSTS
- NO TRENCHING
- NO FUEL COSTS
- NO SOIL, WATER, AIR OR BIOLOGICAL IMPACTS
- NO WATER REQUIRED
- NO NEW LAND REQUIRED (DEPLOYED IN PARKING LOTS)
- NO FUTURE IMPACTS FROM CHANGING ELECTRICITY PRICES
- NO TOXICITY
- NO MOVING PARTS
- SILENT RUNNING

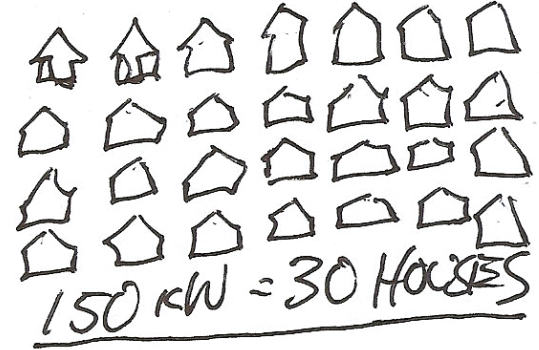
1.

LACK OF MATERIALS



2.

HUGE POWER DEMAND PER VEHICLE



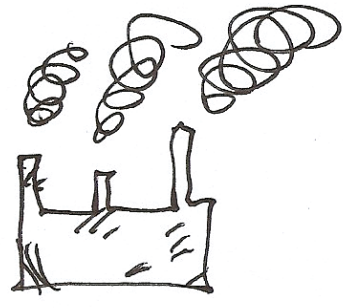
3.

UNSCHEDULED LOADS



4.

TOXIC SOURCES OF ELECTRICITY

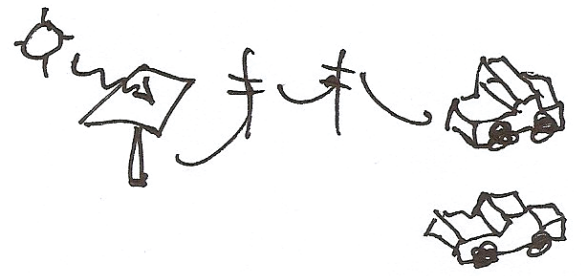


5.

GRID OVERLOAD AT SCALE

6.

CAPACITY FACTOR MISMATCH

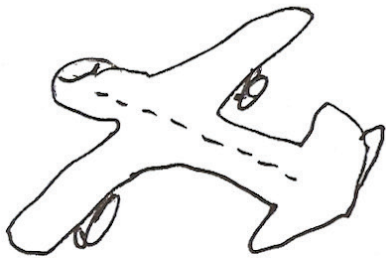


7.

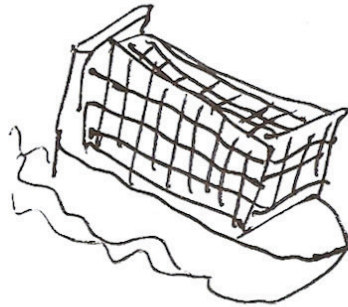
LONG FUELING TIME



BEV CHALLENGES

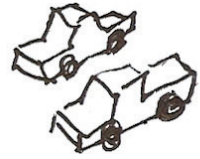


AVIATION

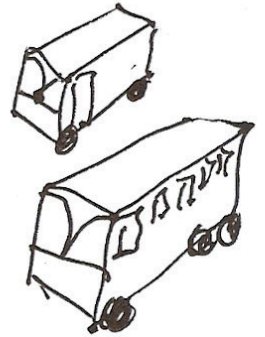


SHIPPING

LIGHT



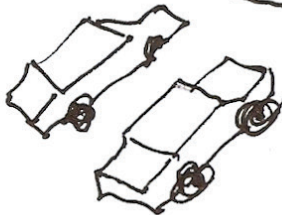
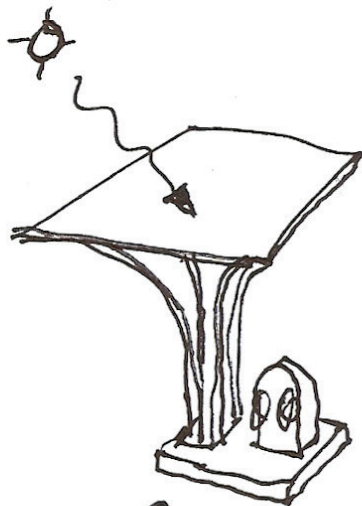
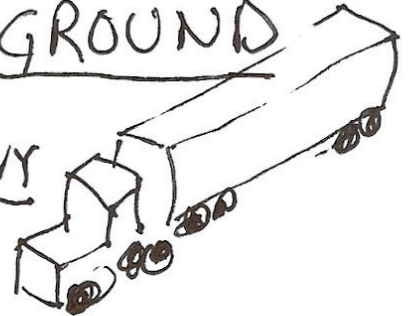
MEDIUM



SUN-E STATION™

GROUND

HEAVY



**400 = 1 MILLION
MILES
Per MONTH**

**ABATES 28,500 GAL. GAS
Per MONTH**

ADVANTAGES

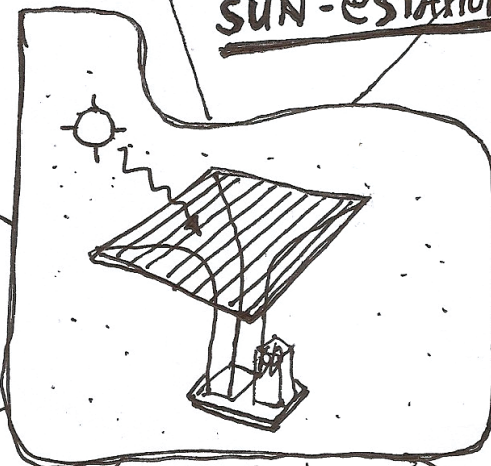
100% CLEAN TRANSPORTATION

NO FUEL COSTS

EMPOWERS
DISADVANTAGED
COMMUNITIES

SUN-ESTATION™

ZERO EMISSIONS



NO GRID COSTS

NO MOVING
PARTS

NO GRID IMPACTS

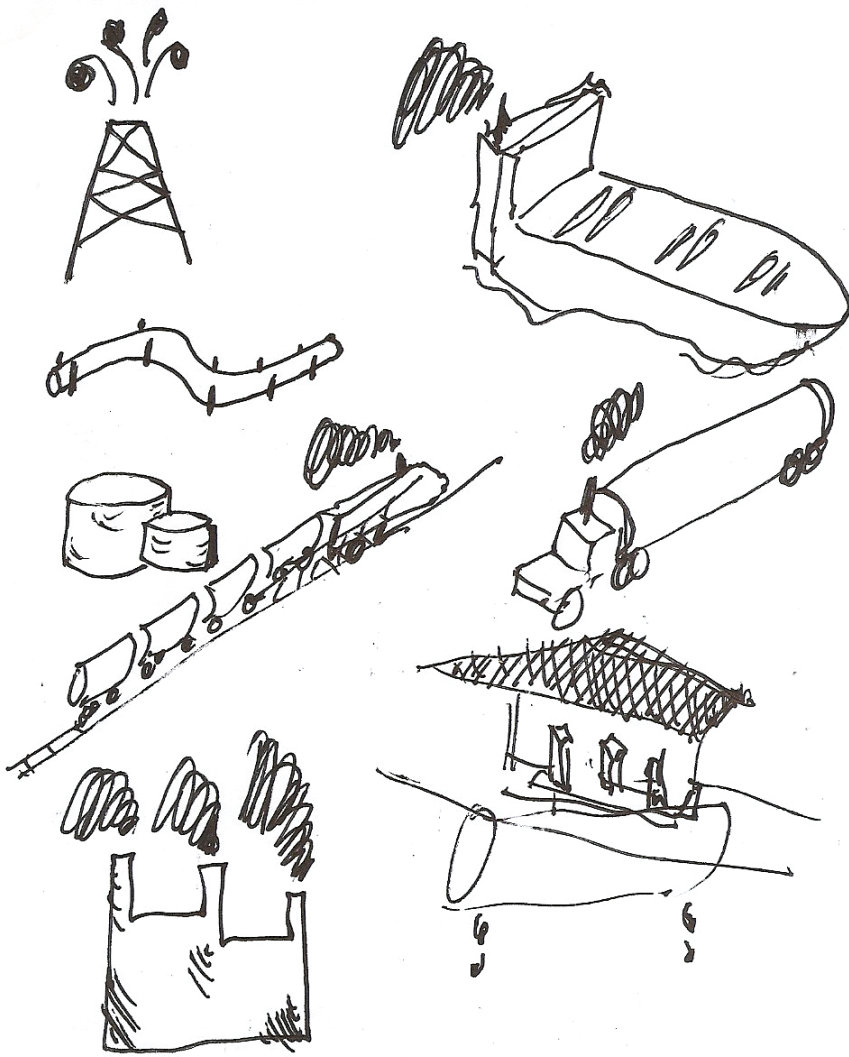
PRE-ENGINEERED

EASY TO USE

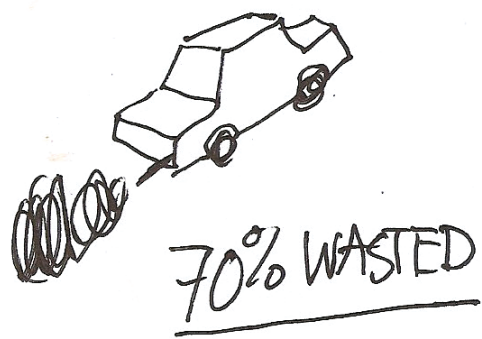
NO NEW LAND
REQUIRED

FAST INSTALL

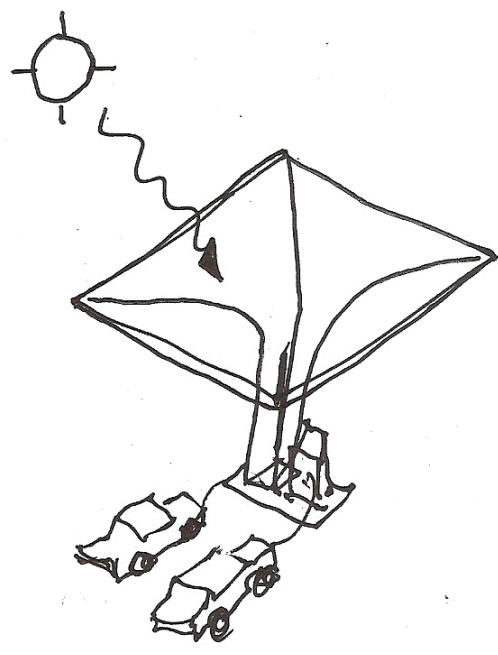
**AVAILABLE TO ALL
OREGONIANS**



OLD



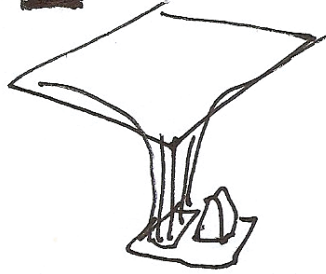
NEW



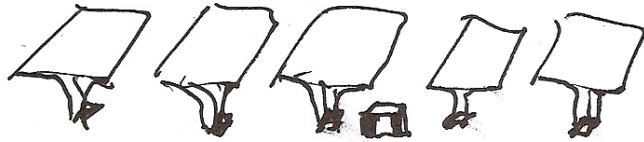
400 SUN-e STATIONS
=
28,500 GAL. GAS
Per **MONTH**

ACTION PLAN

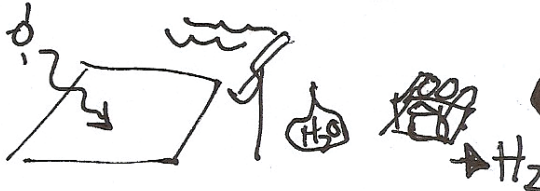
1. LEVEL II



2. DC FAST CHARGE



3. CLEAN FUELING

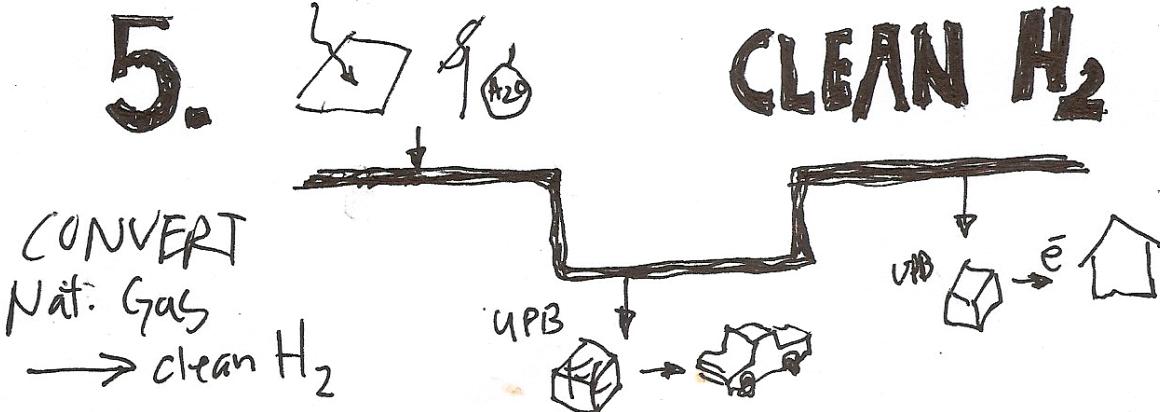


4. ALL VEHICLE TYPES



- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL

5. CLEAN H₂



ROADMAP

2025

1. SOLAR LEVEL II
PARKING LOT DEPLOYMENT

4630 Sun-stations
128 Stations / COUNTY

2. CLEAN H₂ FUELING
w/ DC FASTCHARGE

83 H₂/DFEC STATIONS
TRUCK STOPS

3. MICRO HUBS

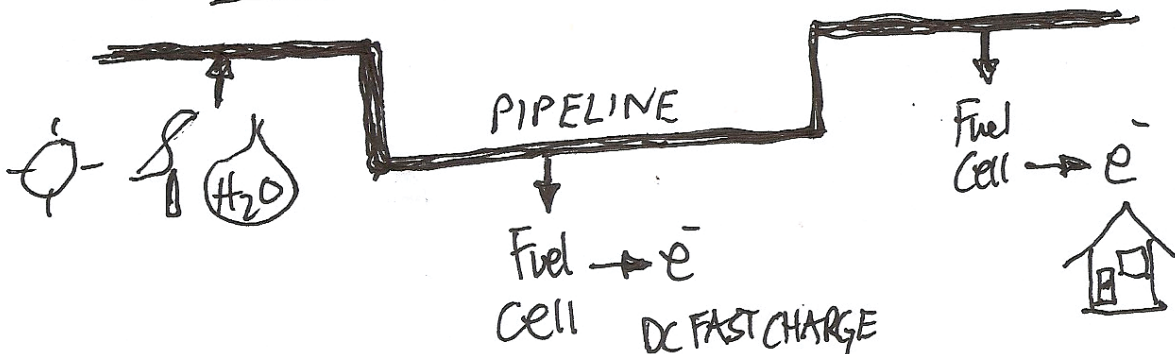
36 LARGE CLEAN H₂
PUBLIC TRANSIT FUEL

4. PORTS

3 LARGE CLEAN H₂
PORT OF PORTLAND
AND POX

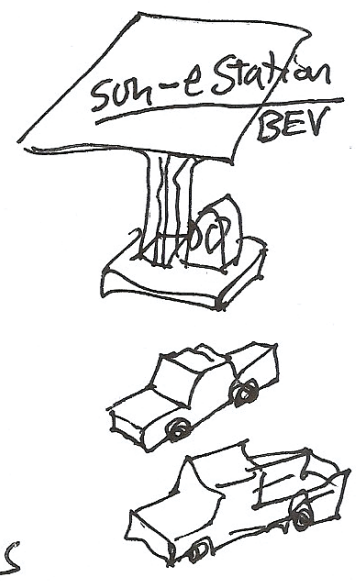
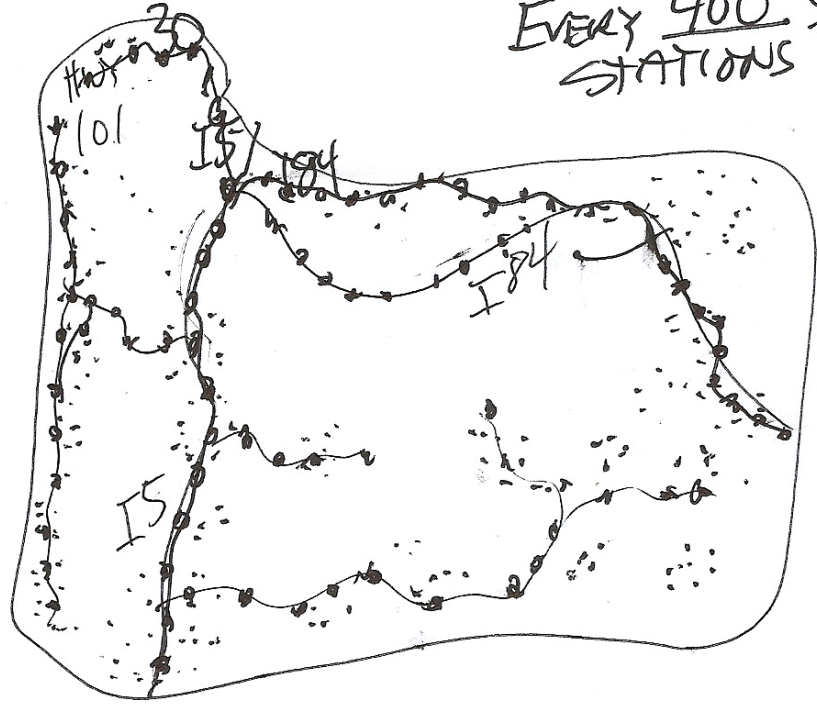
5. Nat^a Gas
to CLEAN H₂

1,000 MILES
of
DISTRIBUTION

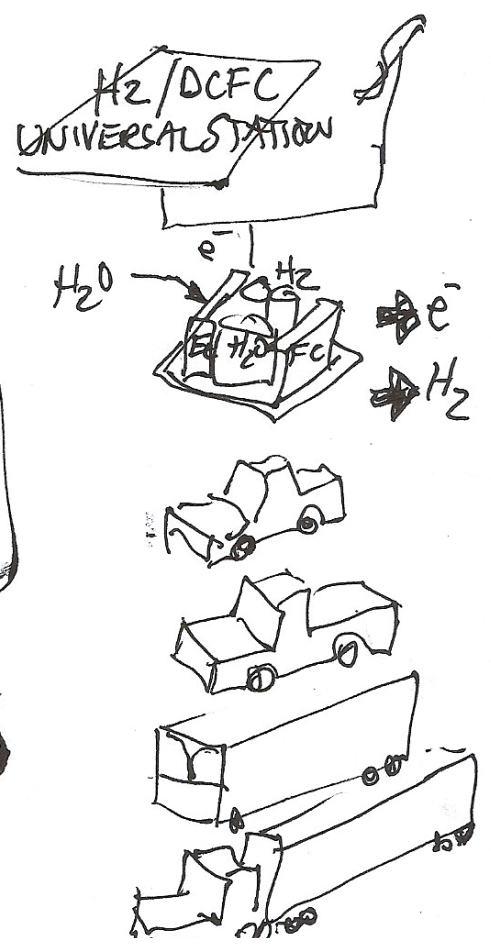
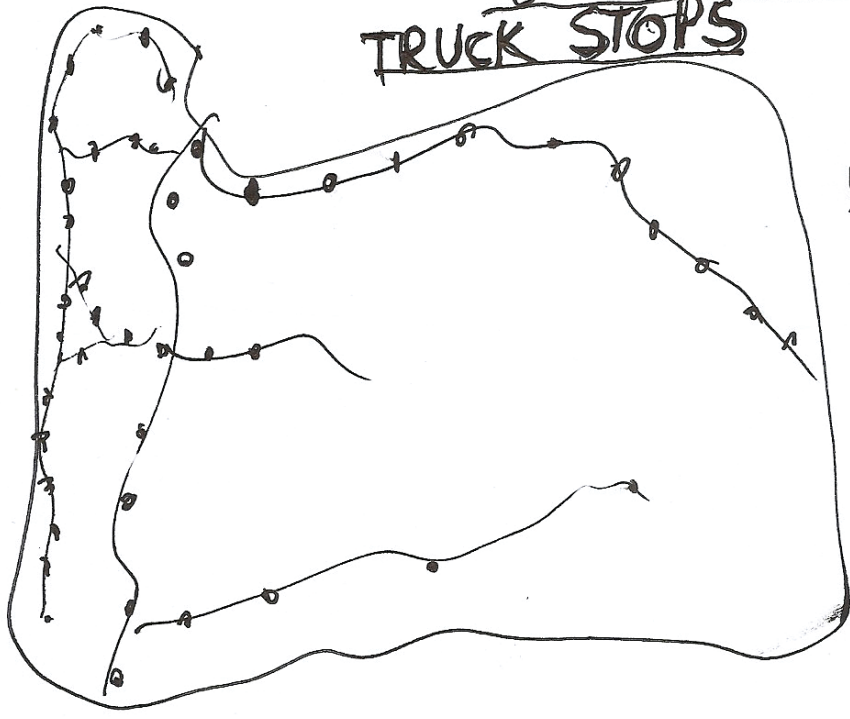


4,629 Sun-stations
PARKING LOTS

OREGON'S "DRIVING ON SUNSHINE"
State-wide 100% CLEAN MOBILITY
Every 400 Solar Charging
STATIONS = 1 Million Miles
MONTH

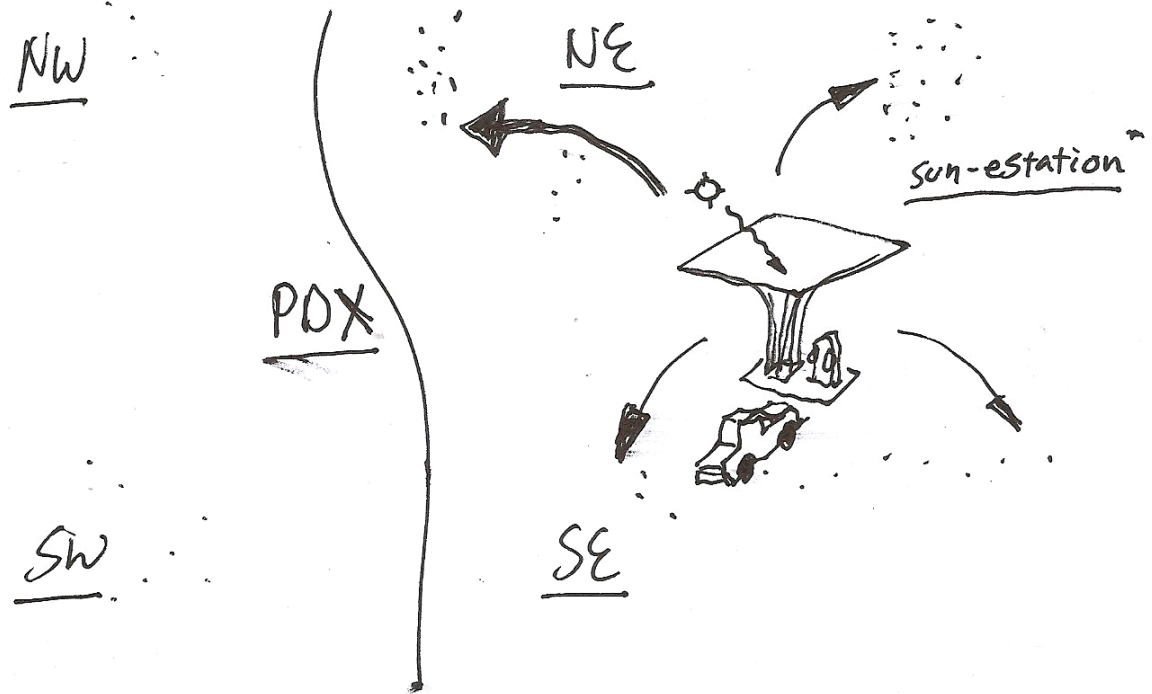


83 H2/DCFC STATIONS
TRUCK STOPS



INSTALL by 2025

DISADVANTAGED NEIGHBORHOOD
FOCUS



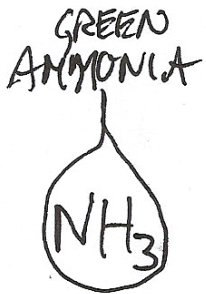
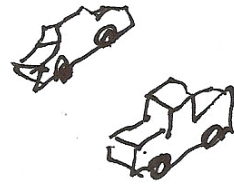
DISTRIBUTED SOLAR LEVEL II PARKING LOT

NETWORK OF
100% CLEAN MOBILITY
EV CHARGERS

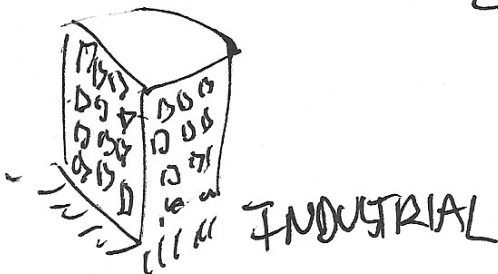
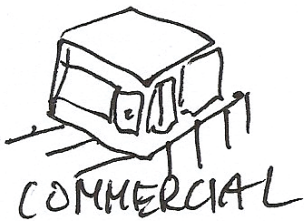
UNIVERSAL FAST CHARGE



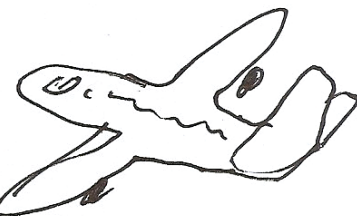
CLEAN FUELING



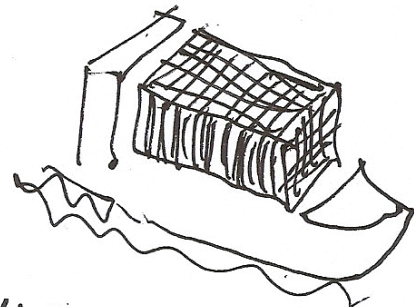
RESIDENTIAL



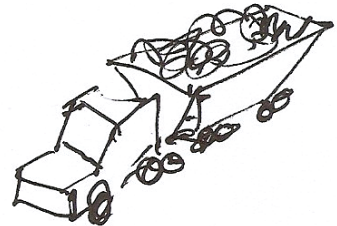
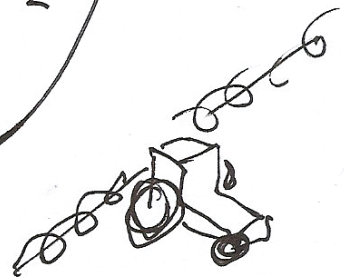
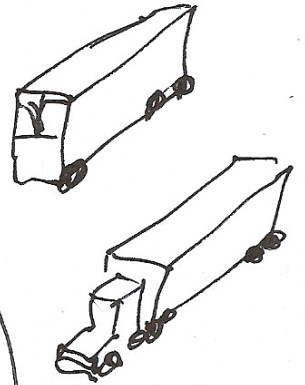
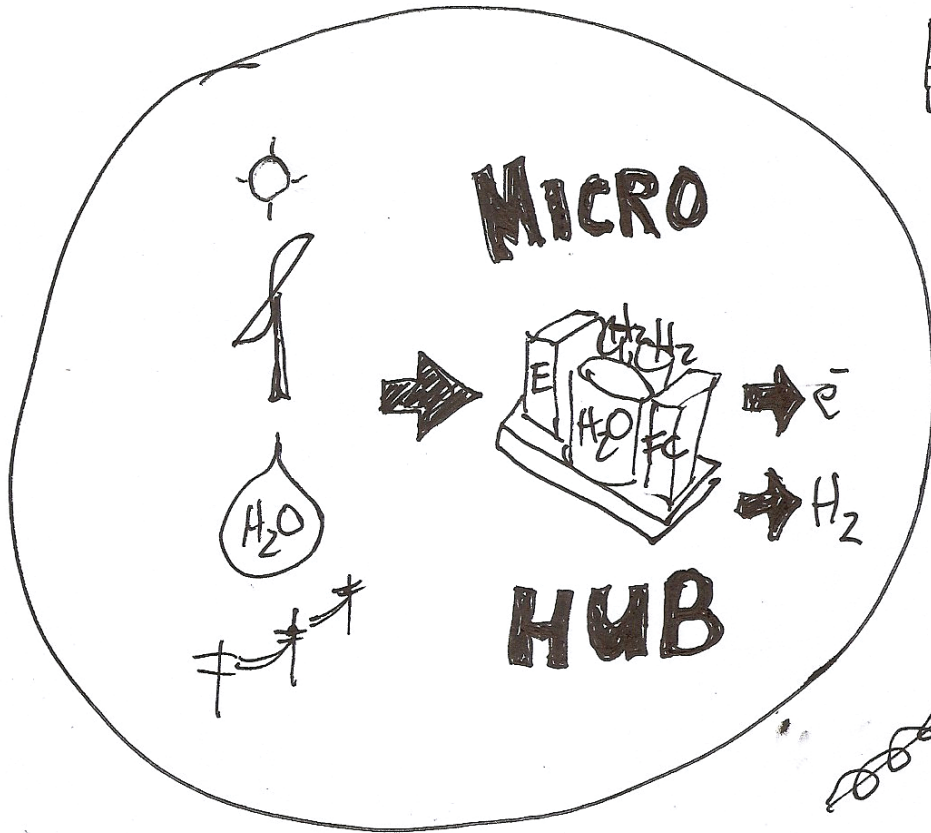
INDUSTRIAL



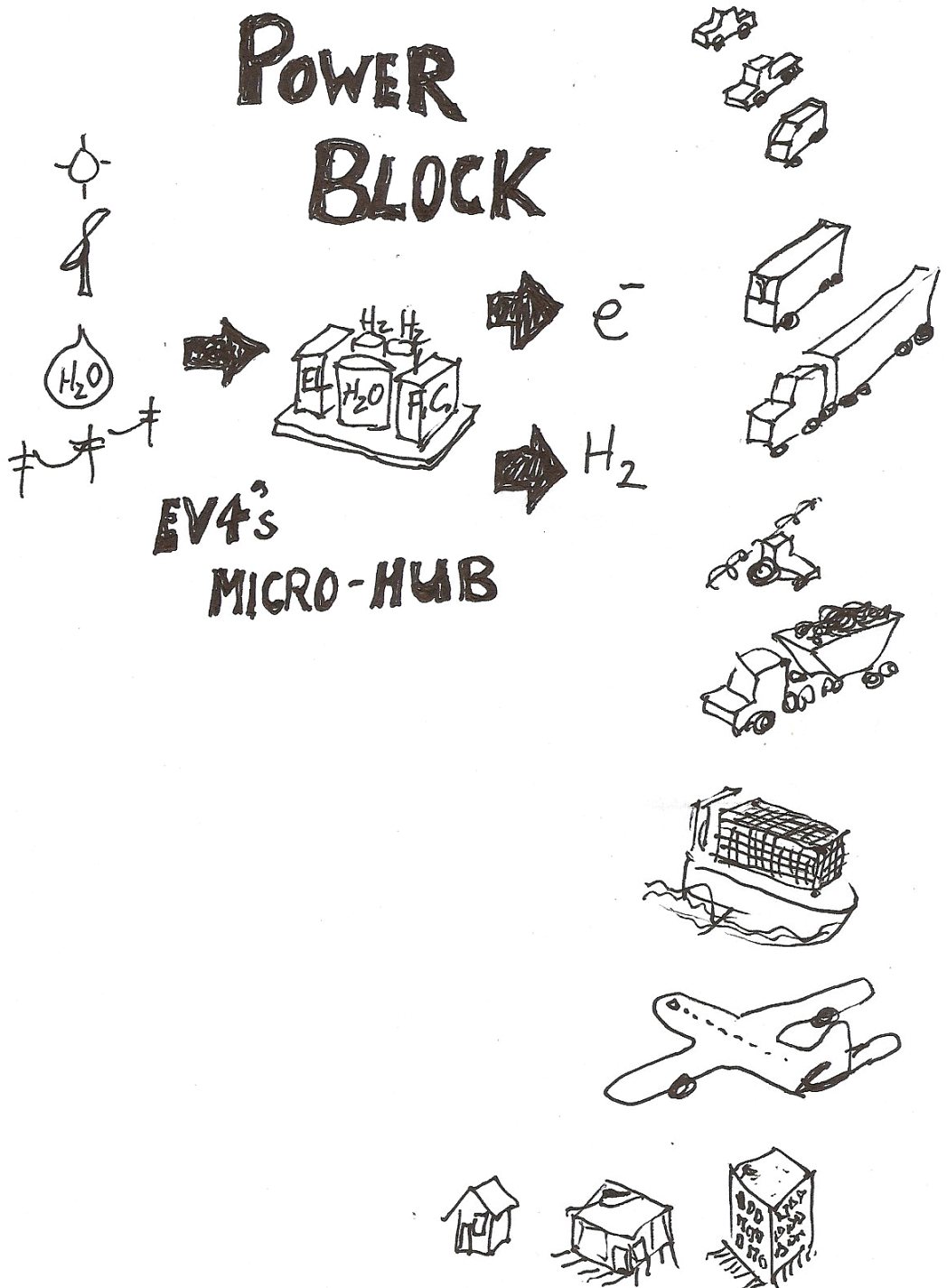
AVIATION



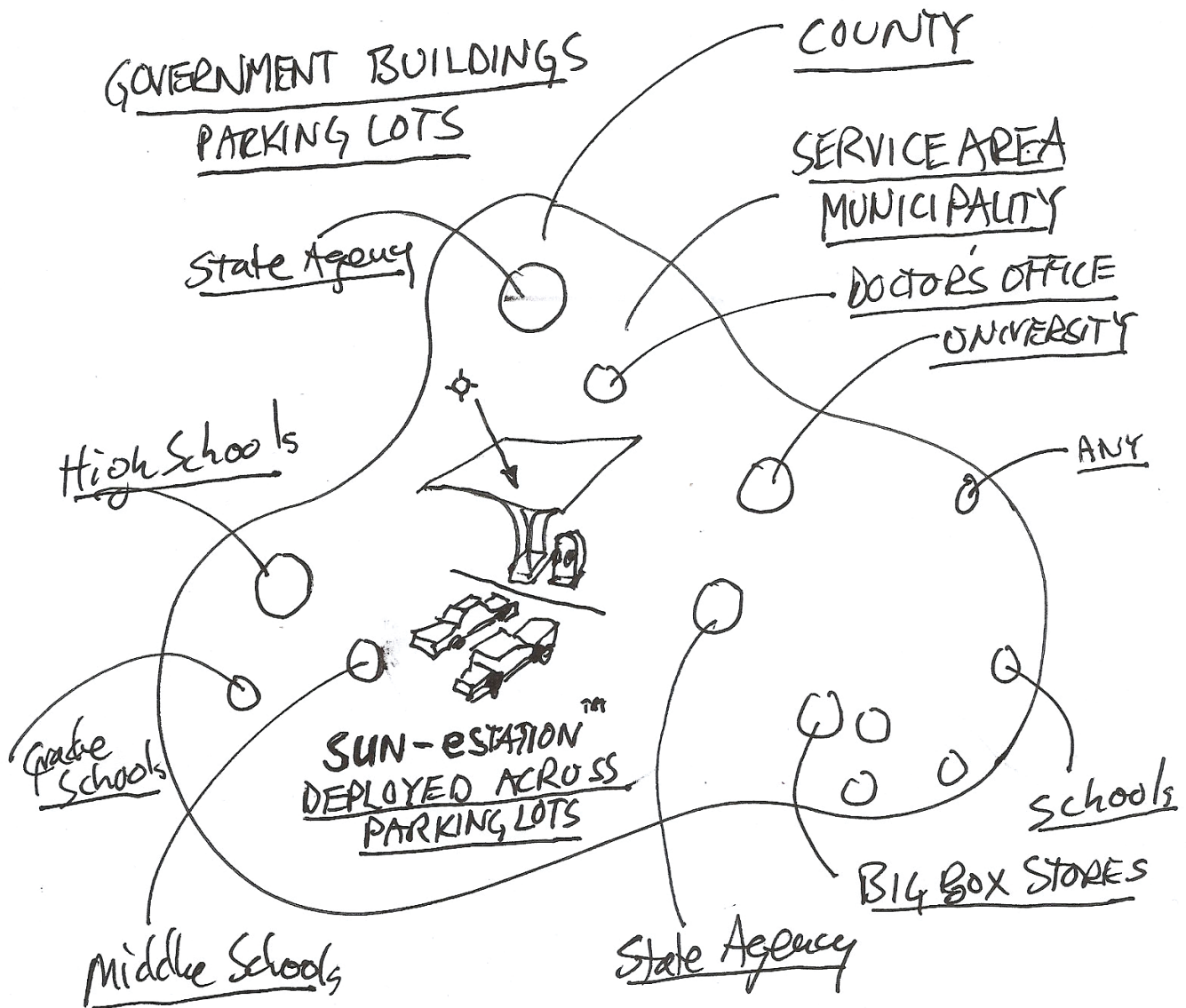
MARITIME



UNIVERSAL POWER BLOCK



INSTALL ACROSS OREGON



<p>420</p> <p>4,200</p> <p>42,000</p>	<p>SUN-ESTATIONS</p> <p><u>2023</u></p> <p><u>2024</u></p> <p><u>2025</u></p>	<p>= 1 MILLION <u>MILES</u> <u>MONTH</u></p> <p>= 10 MILLION <u>MILES</u> <u>MONTH</u></p> <p>= 100 MILLION <u>MILES</u> <u>MONTH</u></p>
--	---	---

From: Alexander Davis <amdavis@lclark.edu>
Sent: Wednesday, September 6, 2023 7:35 PM
To: Oregon GWC * ODOE
Subject: Finding a study/report
Attachments: OGWC chart.png

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from amdavis@lclark.edu. [Learn why this is important](#)

Hello,

Can you help me locate the full study or report from which the attached graph comes?

I originally found it through this news article, <https://www.hcn.org/issues/50.11/climate-change-timber-is-oregons-biggest-carbon-polluter>

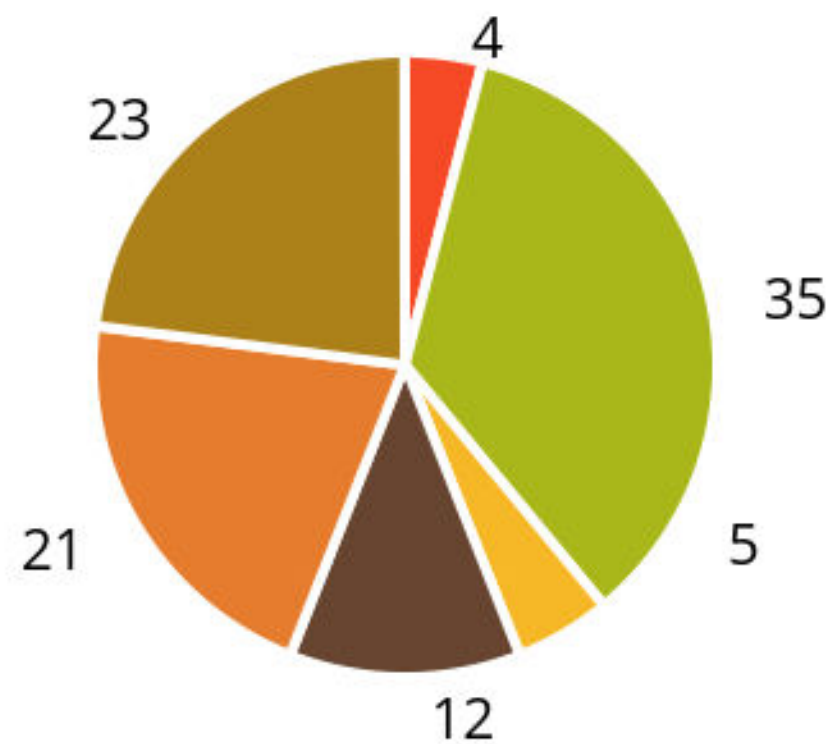
I see that the Oregon Global Warming Commission is listed as the source, but I cannot find the corresponding report on your website.

Thank you,
Alex

Alex Davis, Development Associate | Earthrise Law Center | Lewis & Clark Law School | [\(503\) 768-6728](tel:5037686728) | <http://earthriselaw.org>



Percent carbon dioxide emissions by sector in Oregon 2011-2015



● Fires ● Wood Products ● Agricultural ● Industrial
● Residential and Commercial* ● Transportation

Sources: Oregon Global Warming Commission and Oregon State/University of Idaho Study

Note: Utility fuel use is subtracted from residential and commercial data reported by the Oregon Global Warming Commission

From: jan.lee@oacd.org
Sent: Thursday, September 21, 2023 9:40 AM
To: Oregon GWC * ODOE
Subject: INR Report

Follow Up Flag: Follow up
Flag Status: Flagged

Do you have an estimate of when the INR report resulting from work of the advisory committee will be publicly available? Jan