## Next Steps in New York's Climate Leadership: The Draft Scoping Plan

Thursday, May 5, 2022, 2:00-3:00 p.m.

Hudson River Estuary Program Conservation and Land Use Webinar Series

## Webinar transcript

```
1
00:00:03.653 --> 00:00:16.134
Good afternoon, everyone. My name is Laura Heady. I'm with the Hudson
River Estuary Program and Cornell University, and I thank you for joining
us for today's conservation and land use
00:00:16.283 --> 00:00:26.574
webinar. Before we get into the formal presentation, I want to go over
few housekeeping items and then also have some introductions for you.
00:00:27.234 --> 00:00:34.673
First, just to remind you that participants have the option to connect to
audio through the computer or by phone.
00:00:34.704 --> 00:00:45.743
And so, if your computer speaker isn't working, well, you can select
switch audio by clicking on the black circle with 3 white dots at the
bottom of the screen, which is shown here.
00:00:47.094 --> 00:00:57.835
You can then choose to receive a call by entering your phone number, or
you can call in yourself and if you do need to call in yourself, you'll
need your unique ID number from the webinar registration.
6
00:00:58.104 --> 00:01:03.295
And if you're having computer Internet connection issues, we do recommend
phone.
00:01:05.245 --> 00:01:15.114
As always during the webinar, please direct your questions for our
speaker to the Q and A box and just limit the chat box for technical
difficulties.
00:01:15.415 --> 00:01:26.394
And if you are not seeing either the Q and A, or chat boxes in the panel,
on the right of your screen, you can click on the 3 dots next to the chat
icon in the lower right. Hand corner.
00:01:26.724 --> 00:01:36.355
And once we get started, I will be monitoring questions for our speaker
in the Q and a box. And there will be time at the end of her presentation
for some questions.
10
00:01:36.599 --> 00:01:43.260
Finally, just a few notes. All attendees are muted. Video is not needed.
00:01:43.260 --> 00:01:54.480
```

```
This webinar is being recorded and will be made available to view as
recording on the DEC website and will share that link with you in a
follow up email after today's webinar.
12
00:01:54.480 --> 00:02:06.599
There'll be a brief survey at the very end of the webinar. Please click
through those pop up boxes when the webinar is over so that you can
provide your feedback, which we really value.
13
00:02:06.599 --> 00:02:19.110
And finally, you will automatically receive an email confirmation of
attendance, right after the event that can be used to submit for
municipal training credit for those of you on planning and zoning boards.
00:02:19.110 --> 00:02:31.740
I'd like to also thank my colleague at the Hudson River program, Ingrid
Haeckel, who will be watching the chat box to assist with anyone having
technical difficulties today.
1.5
00:02:32.185 --> 00:02:40.435
So now that I've covered housekeeping, I'd like to formally welcome you
to this month conservation and land use webinar, as I said, I'm Laura
Heady.
16
00:02:40.465 --> 00:02:48.775
I'm the conservation and land use program coordinator from the DEC Hudson
River program through our partnership with Cornell university's.
00:02:48.775 --> 00:02:51.985
Department of natural resources and the environment,
00:02:52.014 --> 00:02:56.485
and this webinar series is offered through the Hudson River program,
19
00:02:56.844 --> 00:03:04.314
which is a unique program within the New York State Department of
Environmental Conservation and it was established to help people enjoy,
00:03:04.344 --> 00:03:08.574
protect and revitalize the Hudson river and it's watershed.
21
00:03:08.875 --> 00:03:12.474
And the program is guided by our 5 year action agenda,
00:03:12.925 --> 00:03:16.104
and the program works throughout the watershed counties,
00:03:16.134 --> 00:03:23.965
bordering the tidal part of the Hudson river from upper New York harbor
to the federal dam in Troy to achieve the key benefits listed here.
00:03:23.995 \longrightarrow 00:03:27.625
And you can learn more about the program at the website.
25
```

```
00:03:29.280 --> 00:03:30.414
And just to remind you that,
00:03:30.414 --> 00:03:33.354
if you're involved in conservation and land use planning,
00:03:33.564 --> 00:03:37.705
I encourage you to visit our website hosted by Cornell University,
28
00:03:37.944 --> 00:03:45.235
and we designed it to serve as a clearing house of information about
natural areas and biodiversity in the watershed.
00:03:45.509 --> 00:04:00.330
Also conservation and land use, planning, approaches and resources to
assist in these efforts. We also keep a current list of news about Hudson
Valley communities, funding opportunities, and also events on the
homepage.
30
00:04:01.740 --> 00:04:13.375
I also want to remind you, because we're frequently asked about webinar
recordings that all of our webinar recordings are available on the DEC
website for viewing at a later time. And that's what you can see on the
left side of the screen.
31
00:04:13.375 --> 00:04:20.725
There is just a snapshot of the list of webinars that are available and
there's also registration links for upcoming webinars on that page.
00:04:22.829 --> 00:04:37.019
Okay, but today's webinar is focused on the New York state climate action
council and specifically the process of developing the state's draft
scoping plan to achieve the goals of the climate leadership and community
Protection Act.
33
00:04:37.019 --> 00:04:51.689
I'm really happy that joining us today is Maureen. Leddy, the director of
the DEC climate office, she'll be talking about the process, the draft
plan, the kinds of recommendations the draft plan includes, and how you
can get involved and I'll introduce Maureen shortly, but.
34
00:04:51.689 --> 00:05:02.968
i wanted to briefly share why I invited Maureen here today. And why I
think it's so important for everyone to learn about the scoping plan and
how to get involved.
35
00:05:02.968 --> 00:05:13.559
And so, for those of you who have been following along with the scoping
process, thank you and please do help spread the word. but for anyone,
new to the plan.
36
00:05:13.559 --> 00:05:26.663
```

```
I am aware that the draft and the appendices are many hundreds of pages,
and some of the strategies related to industry sectors may feel out of
your sphere of influence in roles that you're in.
37
00:05:26.934 --> 00:05:39.444
And so I've been concerned that municipal officials and planners and land
managers. And watershed groups, and others involved in conservation
planning might not be paying super close attention.
38
00:05:40.223 --> 00:05:54.413
But this is like a huge and exciting and important opportunity to address
the global climate crisis right here through actions in New York while
also incorporating climate justice and inclusion of disadvantage
00:05:54.413 --> 00:05:55.254
communities.
40
00:05:55.499 --> 00:06:09.264
So, based on what we know about our webinar audience and what you all
care about, I just wanted to point you to a few elements of the plan
before Maureen gives a larger overview and a deeper dive into the process
and the plan.
41
00:06:09.923 --> 00:06:23.004
So, last year I was involved with a working group for the land use and
local government advisory panel, which is 1 of 7 advisory panels to the
climate action council and many of the recommendations that came out of
that panel.
42
00:06:23.004 --> 00:06:37.584
And that working group related to how we use land, what we develop, where
we develop how we develop and what we conserve. And all of those factors
contribute to carbon emissions, carbon, sequestration and carbon storage.
43
00:06:38.663 --> 00:06:43.673
And they all will help the state of New York to reach net 0 emissions,
00:06:43.944 --> 00:06:50.603
but not only helping to reduce the release of greenhouse gases through
things like smart growth strategies,
4.5
00:06:50.603 --> 00:06:54.834
such as transit oriented communities that reduce the need for,
00:06:54.863 --> 00:06:55.343
47
00:06:55.374 --> 00:06:57.144
individual vehicle dependence.
00:06:57.504 --> 00:07:08.184
But also, by removing and reducing greenhouse gases that are already in
the atmosphere by sequestering carbon, for example, by conserving and
restoring forest wetlands and soils.
```

```
49
00:07:09.204 --> 00:07:23.483
And so there are, at least 3 chapters. I'm sure there are probably more,
but there are at least 3 chapters that I suspect many of you will be
especially interested in reviewing and that's 19,20 and 21. chapter 19 on
land use presents a number of strategies to mitigate
00:07:25.319 --> 00:07:38.244
Carbon emissions, including conservation of natural areas, smart growth
and planning and these are just a few examples of what I thought would be
of interest to you, just to pique your interest. There are many more
which we'll hear about.
51
00:07:38.274 --> 00:07:50.723
but, for example, protection of forest, there are strategies that
include keeping existing forests as forests, but also restoring trees
through reforestation and afforestation.
52
00:07:51.178 --> 00:07:58.468
Identifying priority areas for farmers, restoration, and even providing
assistance and grants for municipal tree planting programs.
00:07:58.468 --> 00:08:11.038
The draft plan also makes recommendations about wetland protection and
restoration, including things like allowing for Marsh migration of tidal,
wetlands and incentivizing nature based features.
54
00:08:11.038 --> 00:08:22.348
And also, there was a recommendation to expand protection of New York's
freshwater wetlands a strategy. We were very excited to see already
funded, uh, in a historic state budget this year.
55
00:08:23.064 --> 00:08:27.384
There's also recommendations about updating mapping of natural areas,
00:08:27.384 --> 00:08:36.323
both regulated natural areas and unregulated and developing a
conservation framework for the state to help guide planning whether it's
local planning County,
00:08:36.323 --> 00:08:36.774
planning,
58
00:08:36.774 --> 00:08:37.254
watershed,
00:08:37.254 --> 00:08:37.583
planning,
00:08:37.583 --> 00:08:45.293
regional planning that's also recommended along with providing assistance
and funding to municipalities on everything from smart growth,
00:08:45.293 --> 00:08:49.703
```

```
planning to comprehensive planning development of model laws,
62
00:08:49.734 --> 00:08:51.683
and also streamlining funding.
00:08:51.683 --> 00:09:05.573
So it's more accessible and there's also incentives for landowners that
are recommended to help support stewardship on private lands. And, as I
said, there's much more, including related recommendations.
00:09:06.119 --> 00:09:09.239
From everything to research to better understanding the
00:09:09.533 --> 00:09:23.484
Carbon sequestration potential of wetlands and forests and so forth all
the way to green career development through things like conservation
corps. so I hope you these highlights, you know, peak your interest as I
said, and you'll, you'll dig in a little bit deeper.
00:09:23.754 --> 00:09:31.553
I also wanted to point out chapter 20, uh, includes strategies to help
local governments with energy policy and energy siting.
67
00:09:32.033 --> 00:09:41.004
And then chapter 21 continues with adaptation strategies that also builds
capacity for planning and decision making building community resilience,
68
00:09:41.004 --> 00:09:48.984
and also enhancing the resilience of living systems by addressing risks
to ecosystems, biodiversity, and working lands.
00:09:51.083 --> 00:10:06.024
So, that was just a snapshot and I do hope you'll take a closer look at
the plan. If you haven't already, because many of these development and
conservation actions are really influenced by local county and regional
planning and conservation efforts.
00:10:06.024 --> 00:10:09.833
And it's a lot of the work that all of you on the webinar do yourselves.
00:10:10.678 --> 00:10:25.344
but to give you a greater context context, about the process, and the
plan and vast expertise on how the draft scoping plan supports New York's
very ambitious climate law. I'm really happy to introduce our speaker.
Maureen
00:10:25.344 --> 00:10:39.293
Leddy, uh, who's been leading this incredibly complex process, and the
many involved staff stakeholders and advisers in her role as director of
the office of climate change in partnership with NYSERDA.
00:10:39.323 \longrightarrow 00:10:44.693
Maureen leads implementation of the climate leadership and community
Protection Act,
```

```
74
00:10:44.724 --> 00:10:59.364
including supporting the climate action Council's development of the
scoping plan as well as issuing the annual emissions inventory for state
agencies and regulations to ensure achievement of the statutory emissions
limits.
7.5
00:10:59.609 --> 00:11:13.528
She was formerly a project manager in the large scale renewables program
at NYSERDA and while there, one of her roles, also involved developing
strategies for smart siting of large scale, renewable energy projects.
00:11:13.553 --> 00:11:26.244
Maureen has also worked in carbon finance and she holds the masters in
natural resource management and environmental planning from Simon Fraser
University in British Columbia. And we're really glad you're here
Maureen. So thank you so much.
77
00:11:26.244 --> 00:11:31.374
Let me, assign you a speaker mode here. So you can.
00:11:32.068 --> 00:11:36.239
Share your presentation just.
00:11:36.239 --> 00:11:40.649
Give me a minute, because every time I do this, I'm fumbling along.
80
00:11:44.219 --> 00:11:52.769
Maureen Leddy speaking: Okay, thank you so much, Laura, thank everybody
for
81
00:11:52.769 --> 00:11:57.928
joining.
82
00:11:57.928 --> 00:12:01.469
How does that look.
00:12:03.384 --> 00:12:13.974
Okay, awesome thanks. So much thanks. Everybody for joining us today to
hear about the, the draft scoping plan as Laura mentioned. I'll, I'll
talk a bit about process.
84
00:12:13.974 --> 00:12:22.524
How we got to where we are today where we are going next and we'll
provide some high level information on the land use chapter.
85
00:12:22.553 --> 00:12:32.364
And the adaptation and resilience chapter, we are right now in the public
comment, period, the public comment, period is open until the 10th of
June.
86
00:12:32.698 --> 00:12:43.259
```

```
And the council is hosting hearings at this point at this point yeah,
there's a, through this process now for a number of weeks we have some
virtual hearings on the agenda and 1 scheduled in peekskill.
87
00:12:43.259 --> 00:12:56.879
For those of you in the Hudson Valley, that would be local, but the
hearings are really just an opportunity to provide comment. There is no
dialogue. There's no chance to ask guestions or get clarification. So it
events like this are an opportunity.
00:12:56.879 --> 00:13:11.214
For you to have a chance to to ask questions, and to get answers that
will help inform the comments. We hope you will provide, uh, to support
this process. A public comment period and process is so important to to
the final.
89
00:13:11.908 --> 00:13:18.418
So, just a high level overview of the climate leadership and community
Protection Act, it was passed in 2019.
90
00:13:18.418 --> 00:13:23.308
it mandates that we have a carbon neutral economy by 2050.
00:13:23.308 --> 00:13:36.749
And then we achieve certain very aggressive emission reduction. So we
need an 85% reduction in our statewide greenhouse gas emissions by 2050,
a 40% reduction by 2030. it's an interim step.
00:13:36.749 --> 00:13:45.778
And that's based off of where we were in 1990 and it uses a different GHG
accounting method than we had used in the past oris typical for most
jurisdictions.
93
00:13:45.778 --> 00:13:50.068
It also took a lot of our energy efficiency and clean energy
00:13:50.068 --> 00:13:55.558
Targets and goals that are managed by the public service commissionand
NYSERDA and set them into law.
00:13:55.558 --> 00:14:01.678
So, now we have to have 100 carbon free electricity, emissions free
electricity by 2040.
00:14:01.678 --> 00:14:08.249
70% renewable by 2030, which is part of our clean energy standard. This
is now codified in law.
97
00:14:08.249 --> 00:14:12.958
And certain targets for installation of offshore wind, solar and storage.
98
00:14:12.958 --> 00:14:21.149
And fundamentally, it's not just about emissions reductions. The law is
creates a lot of imperatives around insuring.
```

```
99
00:14:21.149 --> 00:14:31.619
Climate justice, and that is ensuring the communities that have been
previously burdened by environmental injustice and are vulnerable to
climate impacts
100
00:14:31.619 --> 00:14:39.448
are protected, and, you know, in benefit, you know, the plan is
structured to benefit those communities. So they, they come out as
winners in this process.
101
00:14:39.448 --> 00:14:51.389
And there's also a lot of protections for just transition, which deals
with our workforce to ensure that our workforce are also winners in this
process. It's a fundamental shift on how our economy works.
102
00:14:51.389 --> 00:15:01.403
Here in New York, moving from a, you know, carbon based energy system and
really change lots of very, very significant changes. So there's gonna be
changes in the economy.
103
00:15:01.403 --> 00:15:07.043
There's gonna be changes in workforce and we want to ensure that the New
York state workers are benefiting.
1 0 4
00:15:07.379 --> 00:15:13.798
So, the process for developing the, the law also created a climate action
Council.
105
00:15:13.798 --> 00:15:28.494
Which was charged with creating this draft plan. That's their, their
number 1 job is that they have to create the scoping plan, which is a
roadmap of how we're going to get there. How are we going to achieve
these ambitious emissions reductions, climate justice requirements, and
just transition requirements?
106
00:15:28.943 --> 00:15:30.504
So, the law set up
107
00:15:30.778 --> 00:15:38.759
6 advisory panels, and the council added a 7th, which was an advisory
panel onthe waste management system.
108
00:15:38.759 --> 00:15:42.384
And these advisory panels were mostly external experts,
109
00:15:42.384 --> 00:15:44.964
some state agency representation,
00:15:45.203 --> 00:15:48.203
and they were supported by a really large staff group,
00:15:48.264 --> 00:15:51.864
which Laura was really a very vibrant and active participant along,
```

```
112
00:15:51.864 --> 00:15:54.053
with hundreds of other agencies staff from,
113
00:15:54.474 --> 00:15:56.724
from all across state government the,
114
00:15:56.754 --> 00:15:57.114
115
00:15:57.144 --> 00:16:02.004
the council itself is made up of 12 agency heads and 10 appointees,
116
00:16:02.004 --> 00:16:03.624
either from (appointed by) the legislature, assembly,
00:16:03.624 --> 00:16:04.374
or the governor.
118
00:16:04.678 --> 00:16:11.999
also all of those agency has have dedicated staff and resources to
ensuring that this planning process is successful.
119
00:16:11.999 --> 00:16:19.288
The law also created a just transition working group to provide
consultation to the.
120
00:16:19.288 --> 00:16:24.658
climate action council in developing the plan, and it also created a
climate justice working group.
00:16:24.658 --> 00:16:32.519
Which is housed within and it's they are, they're separate from the
council. They do provide consulting.
00:16:32.519 --> 00:16:35.729
services, let's say to the council to to ensure.
00:16:35.729 --> 00:16:45.683
That the plan is meeting the climate justice requirements, but they also
had a very big job in developing what is known as disadvantage community
criteria.
124
00:16:45.833 --> 00:16:51.173
And this is a new way of identifying communities in the state of New York
that are.
125
00:16:51.533 --> 00:16:56.663
Meet a certain set of indicators to be qualified as what's considered a
disadvantage community.
126
00:16:56.663 --> 00:17:09.834
So, it's not the same as what we think of in terms of environmental
justice. There can be lots of commonalities but this is a new definition,
```

and the law references, these disadvantage communities over and over and over again, in terms of the benefits that must accrue to them. 127 00:17:10.193 --> 00:17:24.203 In dollars of spending by the state, in terms of investments in energy efficiency and clean energy, and also emission reduction in emissions reduction in CO pollutants and health benefits that these disadvantaged communities need to realize. 128 00:17:24.473 --> 00:17:31.163 So, the climate justice working group worked really hard on developing those criteria, not an easy task and they have released those. 129 00:17:31.409 --> 00:17:39.449 For comment, they are also in a comment, uh, process right now, and they will be starting a series of hearings in the middle of May, 130 00:17:39.449 --> 00:17:47.159 to receive public comments on those indicators that are used to define what it needs to be a disadvantaged community. 00:17:47.159 --> 00:17:57.088 So, the advisory panels met, they worked really hard, they pulled together all their recommendations on what the state should do to reduce emissions. 132 00:17:57.088 --> 00:18:09.959 they presented those to the council and the council incorporated them into the draft plan. Uh, we had to look at upstream emissions from fossil fuel combustion in the state. That's a that's slightly different. Typically we are only 133 00:18:09.959 --> 00:18:20.159 in charge of what happens within our borders, but the law requires that we not only consider the amount of fuels that are combusted in our state, but where they came from and what happened along the way. 134 00:18:20.159 --> 00:18:26.219 So, emissions associated with their [fossil fuel] extraction, and transportation are counted in our inventory. 135 00:18:26.219 --> 00:18:38.068 And there was a comprehensive benefit societal benefit/cost analysis, looking at the plan's recommendations. So, what is it going to cost on a high level? And what are we going to get? What are the benefits? 136 00:18:38.068 --> 00:18:45.719 The plan itself put out 3 scenarios and modeled 3 scenarios that are 00:18:45.719 --> 00:18:59.939 potential pathways or potential combinations of strategies that would achieve the emissions reductions, and the plan includes those strategies and that's part of the public comment period is to evaluate those side by side.

```
138
00:19:01.558 --> 00:19:06.959
So that was, you know, the law required that the council produced the
plan by the
139
00:19:06.959 --> 00:19:20.663
1st of 2022, and we need to finalize the plan by the 1st of 2023. so this
is a very busy slide that shows a lot of the work the council has been
doing and also the work that agencies have been doing to implement CLCPA
over the past 2 and a half years.
140
00:19:22.828 --> 00:19:25.858
So, as I mentioned, the advisory panels got to work.
00:19:25.858 --> 00:19:26.398
142
00:19:27.263 --> 00:19:28.703
Notable here is,
143
00:19:28.703 --> 00:19:43.673
this is all during the covid 19 pandemic where we were on lockout orders
and shelter in place throughout the state so that these groups were
organized and pulled together work has been done remotely and virtually
and it's
144
00:19:43.673 --> 00:19:43.973
just,
00:19:43.973 --> 00:19:44.364
it was
146
00:19:44.608 --> 00:19:49.979
a fantastic experience. People were able to work and dedicate their
time.
147
00:19:49.979 --> 00:19:56.489
the, you know, not being having the option of meeting in person did not
slow the process down or.
148
00:19:56.489 --> 00:20:02.548
Have any negative impact on the quality of the work, you know, it has
really worked outreally, really well.
149
00:20:02.548 --> 00:20:14.159
So, then those recommendations were developed. I will also say that the
Council, directed the advisory panels to also produce recommendations on
adaptation and resilience.
150
00:20:14.159 --> 00:20:27.568
And there was not a separate panel, an adaptation or resilience panel,
but it was a work group that pulled membership from all of the other
panels because adaptation and resilience is, uh, an issue that spans
across all sectors.
151
```

```
00:20:27.568 --> 00:20:35.098
And they came together and brought their own unique expertise to develop
those adaptation and resilience strategies.
152
00:20:35.098 --> 00:20:40.199
So the council received all this information from the the 7 sectoral
00:20:40.199 --> 00:20:41.038
panels,
154
00:20:41.064 --> 00:20:41.394
um,
155
00:20:41.423 --> 00:20:43.104
from the just transition working group,
00:20:43.134 --> 00:20:43.493
00:20:43.523 --> 00:20:45.983
from the adaptation and resilience work group,
00:20:46.403 --> 00:20:53.304
and they received comment from the climate justice working group on the
work of the advisory panels,
00:20:53.304 --> 00:20:57.384
and all of this was wrapped up into this integration analysis.
00:20:57.598 --> 00:21:04.439
Where all this information was fed into an analytical engine that then
spat out what would happen if we did all this stuff.
161
00:21:04.439 --> 00:21:16.888
And all of this was kind of wrapped up into the, into the scoping plan
and that is the, you know, the hundreds of pages of information that are
out there for the public to consume and comment on right now. So we are
in the open comment period.
162
00:21:16.888 --> 00:21:25.193
And once the hearings and the comment closes, we will work really
diligently the rest of the year to wrap up and issue the final scoping
plan.
00:21:25.463 --> 00:21:26.034
And then,
164
00:21:26.094 --> 00:21:26.963
after that,
165
00:21:26.993 --> 00:21:27.324
vou know,
166
00:21:27.324 --> 00:21:34.253
```

```
the law puts as being required to implement regulations based upon the
information in the scoping plan,
167
00:21:34.344 --> 00:21:40.943
to achieve those emissions reductions. Regulations aren't the only way
we're gonna get there. There's a lot of different strategies.
168
00:21:41.189 --> 00:21:46.588
But that is 1 thing that is, is listed in the law as a requirement,
that's put on our department.
169
00:21:47.213 --> 00:21:55.284
So, as I mentioned, the accounting is slightly different under the law.
The law requires that New York do things differently in lots of ways.
170
00:21:55.284 --> 00:22:07.013
But 1 significant way is we have to, as I mentioned, include the upstream
emissions related to fossil fuel combustion, and we also have to look at
greenhouse gases under a different time scale.
171
00:22:07.044 --> 00:22:15.233
We have to look at them as under a 20-year global warming potential
versus a 100-year, which is more typical for other states, nations, and
other jurisdictions.
172
00:22:16.469 --> 00:22:20.818
And the implication of the 20-year global warming potential is, it puts
00:22:20.818 --> 00:22:25.679
greater emphasis on shorter lived greenhouse gases, predominantly
methane.
174
00:22:25.679 --> 00:22:37.554
So now emissions from the natural gas system and from landfills has an
outsized contribution to our statewide emissions as compared to if we
would have done it the typical way using a 100-year global warming
potential.
175
00:22:37.554 --> 00:22:38.153
So.
176
00:22:38.453 --> 00:22:43.104
it changed the composition of our statewide greenhouse gases. Buildings
that use,
177
00:22:43.104 --> 00:22:44.034
you know,
178
00:22:44.034 --> 00:22:45.443
lots of natural gas for space
179
00:22:45.443 --> 00:22:52.824
heating and water heating are now a really much larger contribution to
our statewide emissions and transportation because of the upstream
```

```
180
00:22:53.939 --> 00:23:03.838
fuels, and way exceed the energy sector. Which electricity generation
used to be bigger. And now waste is a far bigger contributor. And you can
see from that.
181
00:23:03.838 --> 00:23:07.409
Pie chart on the left hand side.
182
00:23:07.409 --> 00:23:12.808
My left hand side that, how the, how our sectors stack up.
00:23:12.808 --> 00:23:21.023
And the bar graph on the right hand side is illustrative of the
reductions that we need to see from 1990 using our new accounting where
we are in 2019,
184
00:23:21.023 --> 00:23:23.513
which is the most recent year for which data is available on state,
185
00:23:23.513 --> 00:23:29.453
wide greenhouse gas emissions, and where we need to go from there so
where we need to be in 2030 and in 2050..
00:23:31.679 --> 00:23:38.999
The 2050 bar, there represents 85% reduction and as I mentioned, there is
a goal for 0 by 2015.
187
00:23:41.308 --> 00:23:47.038
So, as I mentioned, there was a large body of analytical work that was
done to help
188
00:23:47.038 --> 00:23:55.078
generate, an assessment of how much emissions reductions we would get
from the advisory panel recommendations and what the costs and benefits
00:23:55.078 --> 00:24:02.338
of that would be. So the advisory panel recommendations were fed into
this analytical engine and they fell short. And
00:24:02.338 --> 00:24:12.898
so, just going with what the advisory panels had recommended, which was
incredibly aggressive, was not enough to achieve the 40% and 85%
reductions.
191
00:24:12.898 --> 00:24:20.818
So the analytical work was tweaked. There was, changes in different
levers.
192
00:24:20.818 --> 00:24:25.229
How much EV adoption? How much electrification? How soon?
00:24:25.229 --> 00:24:31.288
```

```
so they were, they modeled scenarios working backwards that say, okay,
well, we have to achieve these
00:24:31.288 --> 00:24:34.739
emissions limits; how do we do that? So if we start
195
00:24:34.739 --> 00:24:41.189
in 2050 and work backwards, what are some of the strategies that we can
do to hit those targets?
196
00:24:41.189 --> 00:24:52.979
And they ended up modeling 3 scenarios that are fundamentally very
similar. They all have 0 emission electricity by 2040, which is really
biq.
197
00:24:52.979 --> 00:24:59.848
They all have, expansion of transit, reductions of vehicle miles
traveled, like, fairly significant.
00:24:59.848 --> 00:25:05.818
They have really rapid widespread electrification across the buildings
and transportation sectors.
199
00:25:05.818 --> 00:25:13.769
There is a lot of methane mitigation from agriculture, you know, from
animal manure and from landfilling.
200
00:25:13.769 --> 00:25:25.348
And there is also a lot of electric load flexibility, because it's as we
transition into a more electrified transportation and building sector,
00:25:25.348 --> 00:25:34.378
we're going to have an increased electric load, which is going to require
a different way of delivering and managing electricity to ensure that our
electric system peaks
202
00:25:34.403 --> 00:25:44.064
are manageable. That we are, you know, that we can provide reliable
electricity service and on our own higher load scenario. So they all
fundamentally have those at their core.
203
00:25:44.064 --> 00:25:50.513
It's just little tweaks around the margins in terms of how different
different things can come into play to help to get us there.
00:25:50.818 --> 00:26:00.808
So the 1 scenario had a use of low carbon fuels. So there was bio energy.
There's, there's bio energy across all of the scenarios, but scenario 2.
00:26:00.808 --> 00:26:05.159
Had a little more strategic use of low carbon fuels than the other
scenarios.
206
00:26:05.159 --> 00:26:08.848
```

```
So, they're taking bio energy from waste from agriculture.
207
00:26:08.848 --> 00:26:13.499
And green hydrogen for different difficult to electrify applications. So
they're.
208
00:26:13.499 --> 00:26:19.259
They are getting that harder to reduce emissions from some uses of bio
energy.
209
00:26:19.259 --> 00:26:23.249
Scenario 3 reduces the amount of bio energy.
210
00:26:23.249 --> 00:26:28.618
But accelerated electrification, so the electrification was happening
faster.
211
00:26:28.618 --> 00:26:32.638
And in scenario 4, there was levers pulled
212
00:26:32.638 --> 00:26:47.219
to say, okay, well, if you're saying we're gonna get an 85% reduction in
greenhouse gas emissions, and we're going to be net 0, that 15% that
we're going to have left in 2050 should be balanced out by sequestration.
213
00:26:47.219 --> 00:26:57.054
So, our carbonsequestration in our lands, and our forests needs to at
least equal 15%. But what, if we can't get 85% reduction? And we need to
ramp up sequestration
214
00:26:57.054 --> 00:27:04.673
so that we actually are still hitting net 0, even if our, our 85%
reduction is compromised. So that has
215
00:27:08.368 --> 00:27:17.128
more electrification, low carbon fuels, there's some direct air capturing
of methane emissions, a slightly different technological mix to get
there.
216
00:27:17.128 --> 00:27:20.219
So, as I mentioned, this is a a busy graph as well.
00:27:20.219 --> 00:27:33.743
The scenarios, we're all working backwards from a point in time. So if we
start in 2050, we work back to 2030 and to present day, what has to
happen in order to achieve those emissions reduction. So they're layered
on and you see, they're all fairly similar.
218
00:27:33.743 --> 00:27:44.844
You know, there's not major differences beyond the, uh, greater than
20, greater than 85% reduction in green line, that one gets gets really
down there a bit further. But they, you know, they
219
00:27:47.788 --> 00:27:57.898
```

The black text is what everybody is doing, and then the color text layers in the additional additional levers 220 00:27:57.898 --> 00:28:03.479 from how the, how the scenarios differ slightly from each other, you 221 00:28:03.479 --> 00:28:14.459 Beyond 85% reduction shows, a 70% use of renewable distillatein 2030, which is unique to that strategy and different from how the other scenarios are modeled. 222 00:28:16.199 --> 00:28:29.189 So this is interesting information. It's informative information, but it's, these are not the only 3 ways. These combinations are not the only 3 ways of that can our emissions reductions can be achieved. 223 00:28:29.189 --> 00:28:36.838 They're just illustrative of the different combinations of actions that the state would need to undertake to get there because our reductions are aggressive. 224 00:28:38.398 --> 00:28:48.628 So, the findings is that that the but this is achievable, right? So, our while, our emissions reductions are aggressive, they're not impossible. So they can be achieved. 225 00:28:48.628 --> 00:28:53.548 But it's going to take a lot of work and it's going to require action across the entire economy. 226 00:28:53.548 --> 00:29:05.844 And that increasing energy efficiency and use electrification are absolutely essential. So we are going to have to electrify a lot of our energy needs and we're going to have to increase our energy efficiency. 227 00:29:06.023 --> 00:29:09.294 So that electrification is the most efficient it can be. 228 00:29:09.598 --> 00:29:17.638 And that you will need to substantially reduce our vehicle miles traveled and increase access to public transportation. 229 00:29:17.638 --> 00:29:20.939tTo help reduce the transportation emissions. 230 00:29:20.939 --> 00:29:34.528 And then really key part of all of this is consumer and community decision, it's going to require individuals to make choices in terms of how they heat their homes, how they fuel their vehicles. 231 00:29:34.528 --> 00:29:40.439

That are individual consumer choices, and also for communities to help

support that decision making.

```
232
00:29:40.439 --> 00:29:47.429
Also of note is a transition to, is refrigerants. Refrigerants are
fairly,
233
00:29:47.429 --> 00:29:50.818
as we move to electrification of heating and cooling with
00:29:50.818 --> 00:29:58.558
talking about using a lot of heat pumps, which at present, the majority
of them use a refrigerant that has a very high
00:29:58.558 --> 00:30:02.608
it's a very important greenhouse gas. So
00:30:02.608 --> 00:30:10.348
switching to lower global warming potential refrigerants as we increase
the number of heat pumps that are being used in the state
00:30:10.348 --> 00:30:16.169have to be hand in hand, otherwise the
impact from refrigerants will get to be too great.
238
00:30:17.219 --> 00:30:28.763
Uh, the integration analysis also found that low carbon fuels and bio
energy and hydrogen have a role ,that there are going to be sectors and
applications that are going to be challenging to electrify.
239
00:30:28.973 --> 00:30:32.784
Either the electricity just won't generate that heat level that's needed
240
00:30:33.118 --> 00:30:45.689
or it's so prohibitively expensive to electrify that we would drive
businesses out. State law has protections to avoid that scenario. It's
called leakage. You can call it economical or emissions leakage.
2.41
00:30:45.689 --> 00:30:53.638
But if the actions the state takes to reduce emissions, simply results in
businesses leaving the state,
242
00:30:53.638 --> 00:30:57.328
we haven't reduced emissions. They are going to go set up shop
00:30:57.328 --> 00:31:05.669
elsewhere, potentially even greater levels of emissions, so we don't want
that outcome to happen. We want these to be sensitive to the fact
244
00:31:05.669 --> 00:31:10.409
that if we just push businesses out of the state, we don't solve the
problem.
245
00:31:10.409 --> 00:31:19.558
So that's, you know, what's key is to understand where it becomes
prohibitively expensive. We need to think of other alternatives and bio
energy can be a solution there.
```

```
246
00:31:19.558 --> 00:31:23.219
And as I mentioned the electricity, the electric system,
247
00:31:23.219 --> 00:31:30.538
beyond 2040 we are going, we have the models show, Are we going to turn
into a winter peaking?
248
00:31:30.538 --> 00:31:39.449
Right, right now we're summer peaking when it's hot and everybody's using
air conditioning, but when everybody's heating using electricity, that
will cause us to be a winter peaking.
249
00:31:39.449 --> 00:31:54.088
And our load will nearly double, so we're not only going to be a, we're
not not only shifting our seasonality, but we're also shifting our total
electric load across our grid. So, a lot of implications there in terms
of planning and reliability.
250
00:31:55.588 --> 00:32:02.009
The recommendations for reducing methane emissions from waste
andagriculture
251
00:32:02.009 --> 00:32:07.499
will require a completely different way of handling waste in the state.
00:32:07.499 --> 00:32:12.449
Not that that's impossible, but it's, it's transformative and it's going
to be totally different.
253
00:32:12.449 --> 00:32:24.898
And that are carbon sequestration opportunities in our lands and forests
are key, you know, so we need to get that strategic land use planning to
balance the carbon
2.54
00:32:24.898 --> 00:32:30.028
with whatever remaining emissions are there in 2050 so we can achieve
that goal.
255
00:32:30.028 \longrightarrow 00:32:34.949
So, a quick couple of quick slides on the benefit/cost findings.
00:32:34.949 --> 00:32:49.554
So, again, these are societal costs, they're not getting down to what
it's going to cost, uh, what the utility bill will look like, or what an
individual's cost will be. But looking at a societal level there's a
certain amount of spending that we do every year on
257
00:32:50.128 --> 00:33:04.584
maintaining our electric system, on buying fuels to generate power
plants. Right? So, there's a certain level of spending that's going to
happen. How much more spending needs to happen under these different
scenarios and what are those costs?
258
```

```
00:33:04.614 --> 00:33:05.993
And what are those benefits?
00:33:06.179 --> 00:33:15.534
So, the, the integration analysis shows, and you can sort of see that
these bar charts, they're fundamentally the same across all the
scenarios.
260
00:33:15.534 --> 00:33:28.884
It's not like 1 scenario's costs are double or triple or even, you know,
25% higher than the other. They're, they're all within the bounds of each
other, in terms of the margins of error when you start, to forecast
things out into the future.
261
00:33:28.884 --> 00:33:39.923
They're all fairly similar in terms of costs and benefits, and the costs,
while they're real costs, they're not-- they're manageable, you know,
they're reasonable costs that are a small share of our total.
262
00:33:41.128 --> 00:33:44.848
domestic state product in 2050 and 2030.
00:33:44.848 --> 00:33:49.138
And that the benefits that we are realizing are coming from.
264
00:33:49.138 --> 00:33:53.818
Health benefits from having cleaner ai., They are
00:33:53.818 --> 00:33:58.199
benefits from the economic impact of
00:33:58.223 --> 00:34:12.173
greenhouse gas emissions, so, you know, the impact that that causes by
climate change in terms of storm damage, and, you know, all sorts of
other global impacts from climate change that we're avoiding those
economic impacts by not emitting.
267
00:34:12.534 --> 00:34:14.963
That's another large source of benefits.
00:34:15.268 --> 00:34:21.778
And these benefits are not the only benefits. They didn't model all of
the
269
00:34:21.778 --> 00:34:27.958
jobs, you know, that would come. There was a separate study done by the
just transition working group
270
00:34:27.958 --> 00:34:36.509
on the job impacts, and that study found that, you know, the high point
there is that there'll be 10 new jobs for every job lost.
00:34:36.509 --> 00:34:45.268
```

```
Um, a lot of the jobs lost were in gas stations, which doesn't wouldn't
be surprising if we're switching to electrification of vehicles.
00:34:45.268 --> 00:34:49.528
And that there are good paying jobs and clean energy.
00:34:49.528 --> 00:34:53.818
That's another substantial benefit. That's not quantified here.
274
00:34:56.128 --> 00:35:05.369
So, it's just another kind of way of looking at the, the costs and the
benefits you know, it's the same fundamental data was in the other slide,
but just breaking out what are the
275
00:35:05.369 --> 00:35:09.389
benefits, the health benefits, what are the avoided
00:35:09.389 --> 00:35:15.599
emissions (greenhouse gas emissions) benefits and what's the net benefit?
And while it does look like
277
00:35:15.599 --> 00:35:24.778
Scenario 3 has greater net benefit than scenario 2, they really are all
within the error bounds of each other.
278
00:35:24.778 --> 00:35:32.009
Very similar, but the story overall is that there are positive net
benefits across all the scenarios. So
279
00:35:32.009 --> 00:35:35.398
yhe costs of inaction far,
280
00:35:35.398 --> 00:35:47.338
far exceed the cost of these actions. Okay, so that's very high level
overview. Uh, the plan itself is 300+pages.
281
00:35:47.338 --> 00:35:53.009
The technical supplement related to the integration analysis is, is a
wealth of information.
00:35:53.009 --> 00:35:56.309
But it's also hundreds of pages and tables and data sheets.
283
00:35:56.309 --> 00:36:00.599
And so the whole plan itself is quite large. There's a lot in there.
284
00:36:00.599 --> 00:36:06.478
So, we're, we're gonna take a very high level, dip into the land use
and the adaptation strategies.
285
00:36:06.478 --> 00:36:15.179
The plan itself is organized by, there's several chapters and then
there's cross-cutting chapters.
286
```

```
00:36:15.179 --> 00:36:19.498
There are strategies that don't completely fall into any one
00:36:19.498 --> 00:36:23.699
sector and land use local government, adaptation, and resilience
288
00:36:23.699 --> 00:36:29.219
are those that are those strategies that cross over: they deal with all
the sectors.
289
00:36:29.219 --> 00:36:33.838
So there was there was a land use and local government
290
00:36:33.838 --> 00:36:42.329
panel and there is a land use and local government chapter are separate
because land use was also covered by
00:36:42.329 --> 00:36:46.798
the agriculture and forestry panel, and was also covered under
transportation.
292
00:36:46.798 --> 00:36:49.829
So, the plan itself took
00:36:49.829 --> 00:36:53.728
the advisory panel recommendations that deal with land use
294
00:36:53.728 --> 00:36:58.378
and put them into their own chapter so that they could be, you know,
looked at together.
295
00:37:00.358 --> 00:37:05.668
So the land themes and strategies, so the,
296
00:37:07.228 --> 00:37:11.039
largest section is really, it's focusing on
297
00:37:11.039 --> 00:37:14.969
policies that help us achieve carbon.
00:37:14.969 --> 00:37:23.489
And smart growth, so smart growth policies that help reduce
transportation emissions and increase other, um.
00:37:23.489 --> 00:37:26.909
smart planning, the impact of our emissions.
00:37:26.909 --> 00:37:33.389
So they are, um, there's regulatory and investment strategies to maximize
301
00:37:33.389 --> 00:37:38.369
what we can achieve now. There is the a recommendation
302
00:37:38.369 --> 00:37:45.719
```

```
to develop a state wide conservation framework, uh, for the protection of
forest land and avoid conversion of forest land.
303
00:37:45.719 --> 00:37:53.849
And, you know, understanding the balance between a renewable energy
development and conservation to understand where we need
304
00:37:53.849 --> 00:37:56.878
clean energy to fund our transition,
00:37:56.878 --> 00:38:02.188
to support our transition to a clean grid, but we also need to protect
certain habitats.
306
00:38:02.188 --> 00:38:10.559
And as Laura alluded to there was calls for improved wetlandsprotection,
which, you know, we can see positive progress on. And, you know, this,
this plan is out.
307
00:38:10.559 --> 00:38:22.559
And the legislature and others are looking at it for ideas and that's
that has been, um, I think has been a recurrent theme this legislative
session, is items that are in this plan.
00:38:22.559 --> 00:38:29.940
And there are quite few legislative needs that are recommended; certain
things that require action by the legislature. The chief them
[legislators],
309
00:38:29.940 --> 00:38:34.469
they're reading it and they're taking it seriously. So that is really
helpful.
310
00:38:34.469 --> 00:38:41.070,
Um, so there's, you know, forest, farmlands and municipal land use
policies to understand how
311
00:38:41.070 --> 00:38:44.340
the recommendations from the agriculture and forestry
00:38:44.340 --> 00:38:53.309
panel that are under the guise of what municipalities are in control of,
how can they, you know, they're contained in this chapter as well.
00:38:53.309 --> 00:38:59.460
And there was a lot of work on smart growth. Smart growth is is very
important.
314
00:38:59.460 --> 00:39:08.670
Um, and it's very much more than a land use strategy then that that has a
lot of transportation benefits. So that's here.
00:39:10.320 --> 00:39:14.519
i the land use chapter so those are the 3
```

```
316
00:39:14.519 --> 00:39:21.090
larger themes that the, the land use strategies are organized under.
317
00:39:21.090 --> 00:39:24.719
So, a quick overview is.
318
00:39:24.719 --> 00:39:32.159
the land use chapter looks at the use of land and how it affects our
emissions,
319
00:39:32.159 --> 00:39:35.340
our sequestration and carbon storage.
320
00:39:35.340 --> 00:39:46.590
So, there's, you know, it's important. This is a really important
consideration in terms of, yes, it's obvious we need to reduce vehicle
emissions from the tailpipe. But these are other decisions that have
321
00:39:46.590 --> 00:39:50.250
incredible implications to how we achieve our emissions reductions.
00:39:50.250 --> 00:39:56.010
So using land use with land use patterns to reduce transportation
emissions;
323
00:39:56.010 --> 00:40:03.570
Sustainable land use planning that that is, uh, cognizant of renewable
energy as well as conservation priorities;
324
00:40:03.570 --> 00:40:11.639
And how the protection of forest and wetlands is totally critical to that
level of carbon sequestration. And the amount of sequestration
325
00:40:11.639 --> 00:40:20.610
that we need by 2050 is not insignificant. It's not like that's a done
deal and we don't have to worry about it. There's a lot of work that we
need to do to ensure that we
326
00:40:20.610 \longrightarrow 00:40:25.050
grow the amount of sequestration that we currently have.
327
00:40:25.050 --> 00:40:33.780
And protect what we already have, so we don't have backslides. So it's,
it's protection of our current levels and, and a lot of expansion.
328
00:40:35.699 --> 00:40:42.869
So, that's, uh, the smart growth and local government planning. They are
00:40:42.869 --> 00:40:57.030
incredibly important strategies to shift from more dense infill
development, reducing sprawl, reducing conversion of forest and farm land
for development for, you know, housing developments.
330
```

```
00:40:57.030 --> 00:41:02.039
And helping to create transit-oriented development as a way to reduce
00:41:02.039 --> 00:41:05.369
vehicle miles traveled. And all with the focus on
332
00:41:05.664 --> 00:41:14.934
creating more vibrant communities, particularly in our disadvantaged
communities. So that's a great open space conservation story there.
00:41:15.474 --> 00:41:21.114
Really good transportation story and using less automobiles
334
00:41:21.420 --> 00:41:28.860
and reducing greenhouse gas emissions. More active transport, increasing
health benefits as well.
335
00:41:30.929 --> 00:41:39.030
So, yep, so smart growth and and clean energy siting, they have to be
done side by side. So we can balance our land use priorities and
pressures.
336
00:41:39.030 --> 00:41:50.730
So, the key approaches in the land use chapter are to identify areas for
reforestation. afforestationand to fund those. So that
337
00:41:50.730 --> 00:42:01.230
local governments are identifying priority areas, and that there is a way
to plant trees on them. There's expanding our nursery capacity
338
00:42:01.230 --> 00:42:04.440
and doing replanting programs and conservation corps.
00:42:04.440 --> 00:42:07.739
And that understanding where farmland
00:42:07.739 --> 00:42:14.190
protection should be incorporated into municipal comprehensive plans and
zoning regulations.
00:42:14.190 --> 00:42:20.489
And to prioritize this smart growth, compact, mixed-use community
development
342
00:42:20.489 --> 00:42:27.989
that has active transport, reducing vehicle miles traveled, transit
oriented.
343
00:42:29.039 --> 00:42:37.590
So, then there's 3 key themes that can enable emissions reduction in land
use practice. So, protection, restoration, and monitoring of
344
00:42:37.590 --> 00:42:48.599
```

```
natural and working lands, um, forest and farmlands and municipal land
use policies andsmart growth. So, those are the 3 major themes under
which a lot of strategies are
345
00:42:48.625 --> 00:42:53.574
organized.
346
00:42:53.605 --> 00:43:05.965
So again, as I mentioned adaptation and resilience was a multi sector
working group that brought together expertise from power generation,
transportation, agriculture, and forestry across the board
347
00:43:06.269 --> 00:43:11.820
to provide their perspectives and their, um, their brain power into
developing these
348
00:43:11.820 --> 00:43:21.210
recommendations, so there's about 60 or more recommendations in the draft
plan on adaptation and resilience.
349
00:43:21.210 --> 00:43:28.559
And they're grouped under 12 major initiatives under these 3 broad
themes: Building capacity,
00:43:28.559 --> 00:43:31.559
Communities and infrastructure, and Living systems.
351
00:43:33.510 --> 00:43:42.239
Uh, building capacity is 4 initiatives are related to state wide planning
and the consideration of future conditions
352
00:43:42.239 --> 00:43:49.769
in state decision-making, enhancement of our general understanding of
climate change and improvements of the public adaptive capacity.
353
00:43:49.769 --> 00:43:56.010
The plan recommends a process to identify and examine options for
financing and for reducing
354
00:43:56.010 --> 00:44:00.449
or shifting risk, and
00:44:00.449 --> 00:44:07.889
you know, it's important to note that the land use and local government
advisory panel's adaptation recommendation is
356
00:44:07.889 --> 00:44:15.869
to have the governor appoint in the executive chamber a chief resilience
officer to oversee all this work.
357
00:44:15.869 --> 00:44:22.170It's sort of a vital role in order to ensure
success because
358
00:44:22.170 --> 00:44:27.840
```

```
each agency running its adaptation shop its own way, 359
00:44:27.840 --> 00:44:31.530
is gonna come up with different outcomes than in a coordinated response
360
00:44:31.530 --> 00:44:35.849
And that is the best way to go about putting this
361
00:44:35.849 --> 00:44:50.280
Adaptation work into practice, is create a, you know, to create this
chief resilience officer that has the ability to work with all the
agencies to advance what would be, you know, a comprehensive plan for the
state on adaptation.
362
00:44:53.579 --> 00:44:57.989
The communities and infrastructure theme,
00:44:57.989 --> 00:45:04.170there's 5 initiatives to help
municipalities, prepare for severe climate hazards.
00:45:04.170 --> 00:45:07.230
And this is, you know, it's really important.
00:45:07.230 --> 00:45:10.440
You all have experience in
366
00:45:10.440 --> 00:45:15.269
the reactive response to tragedy once a severe storm hits, but.
00:45:15.269 --> 00:45:21.269
there is a much smarter way to be prepared for severe climate hazards
rather than
368
00:45:21.269 --> 00:45:29.130
reacting to them and fixing the problem after it's occurred. There's a
recommendation to expand state support369
00:45:29.130 --> 00:45:34.650
for regional and local planning to incorporate these future conditions
into these decisions.
370
00:45:34.650 \longrightarrow 00:45:42.719
And that support would be guidance, would be information, would be
decision support tools and as well as direct technical and financial
assistance.
371
00:45:42.719 --> 00:45:53.280
Flooding and how to address risks and flooding through flooding
assessments and right-sizing the road crossings and changes in building
code are also incorporated into this chapter.
00:45:53.280 --> 00:45:57.659
And recommendations around extreme heat.
00:45:57.659 --> 00:46:03.630
```

```
And that is another item that moved forward with the executive budget,
was the governor directed
374
00:46:03.630 --> 00:46:09.059
agencies to develop an extreme heat action plan. So that's a process that
has been started
00:46:09.059 --> 00:46:14.429
just recently, so more to come on that as that
00:46:14.429 --> 00:46:22.500
as that evolves. And I will say Mark Lowery here in the office of
climate change has been taking the lead pulling together an agency
workgroup
377
00:46:22.500 --> 00:46:31.469
to develop that key action plan and then, of course, the, the resilience
of the energy system is part of the communities and infrastructure team.
378
00:46:31.469 --> 00:46:36.269
The requirements for utilities and power generators to assess their
vulnerabilities
379
00:46:36.269 --> 00:46:39.300
on extreme weather, you know, to be prepared.
00:46:39.300 --> 00:46:42.539
For to, to be prepared for those eventualities.
00:46:42.539 --> 00:46:49.409
And then the other theme was living systems. So this was 3 broad
initiatives.
382
00:46:49.409 --> 00:46:58.199
Uh, 1, being focused on addressing risk to ecosystems in biodiversity
with the need to ensure conservation and connectivity between critical
habitat.
383
00:46:58.199 --> 00:47:04.530
There are recommendations around wetland protections, which weare
384
00:47:04.530 --> 00:47:07.829
very happy to see come forth in the executive budget.
00:47:07.829 --> 00:47:13.079
And there were recommendations for the
00:47:13.079 --> 00:47:18.929
agricultural sector, and the forestry sector so that they can ensure
their ability to be
00:47:18.929 --> 00:47:22.170carbon sinks
388
00:47:23.965 --> 00:47:29.184
```

```
There were more specific recommendations that deal with agriculture,
389
00:47:29.184 --> 00:47:33.744
in terms of water efficiency and energy efficiency improvements on farms,
00:47:33.775 --> 00:47:39.985
and the promotion of agriculture and watershed based best management
practices for flood attenuation and mitigation.
391
00:47:41.579 --> 00:47:55.380
So, there are more slides in this deck and I'm happy to share them that
get into a little bit more detail. There's, there's quite a few that
definitely wouldn't have been enough time in this presentation to go into
great level of detail.
392
00:47:55.380 --> 00:48:00.420
Um, so I'm happy to share those, and then you can take a look at them at
your leisure.
393
00:48:00.420 --> 00:48:08.340
As I mentioned, we are currently in the public comment, period, the draft
plan was released at the end of the year, last year in late December.
394
00:48:08.340 --> 00:48:18.809
It's been open for public comments since then. This is the schedule of
public hearings. You see, the next one now is scheduled for this
Saturday at 10 o'clock in the morning. It's virtual.
00:48:18.809 --> 00:48:31.769
And if you go to the climate act website, which is climate dot ny dot
Gov, you can find all of the information on how to sign in to view if
you're so interested. All of these are webcasts so you can view
00:48:31.769 --> 00:48:35.280
the hearings, and also to register if you want to testify.
00:48:35.280 --> 00:48:42.480
So, oral comments and written comments are considered the same way.
There's no special
00:48:42.480 --> 00:48:46.739
treatment given to individuals that choose to testify in person.
399
00:48:46.739 --> 00:48:52.320
Um, there is a limit for oral testimony to 2 minutes and that's strictly
to
400
00:48:52.320 --> 00:49:06.840
provide enough time for everybody to be able to speak, but there is no
limit in terms of the written comments and those can be emailed to the
email address here on the screen. They can be sent by U. S. mail. There's
also an online form on the climate act website where you could submit
your comment.
401
```

```
00:49:06.840 --> 00:49:15.989
I think there is a character limit on that, but you can submit
attachments to the online form as well if there's additional
documentation.
402
00:49:17.159 --> 00:49:26.159
Uh, if you, if you want to attend any of the upcoming in person hearings,
I strongly recommend that you Pre registeredNot required
403
00:49:26.159 --> 00:49:34.349
but, Pre registration does ensure that you have priority in speaking. So
if there are more speakers, then there is time.
404
00:49:34.349 --> 00:49:38.550
It's first, come first served so the first Pre-registered is the first
405
00:49:38.550 --> 00:49:48.389
up to speak. So that's a good way to ensure that you won't spend 3 hours
sitting in your room and not be able to get up to the mic and state your
piece.
406
00:49:48.389 --> 00:49:52.050
407
00:49:52.050 --> 00:50:02.400
Next week is gonna be a busy week. There's 3 hearings. The Wild Center is
hosting us. Uh, There'll be another virtual hearing on Wednesday and
thenthe final in person hearing in Peekskill.
00:50:02.400 --> 00:50:11.010
And as I mentioned, even though the hearings themselves will be winding
down, the comment period is open until the 10th of June. I
409
00:50:11.010 --> 00:50:16.590
very much encourage everybody to get out and comment and please
410
00:50:16.590 --> 00:50:21.329
contribute to the process, because it's incredibly important to hear
00:50:21.329 --> 00:50:27.300
Ffom the public on this information. We have great expertise to help
develop these, but
00:50:27.300 --> 00:50:32.280
we don't know everything, and we really do want the public comment to be
substantive.
413
00:50:32.280 --> 00:50:41.010
Okay, as I mentioned, there's a whole bunch of other slides here that I'm
happy to provide. Um, but we just don't have time to get into those
today.
414
00:50:41.010 \longrightarrow 00:50:44.159
So, with that, I think we'll open it up for Q and A.
415
```

```
00:50:44.159 --> 00:50:48.480
Laura Heady speaking: That's great, thank you so much, Maureen and
onequestion I
416
00:50:48.480 --> 00:51:02.519
will ask, just to help guide our audiences, are there any certain kinds
of, or are there ways they can shape their feedback or certain kinds of
feedback that the DEC would find most useful?
417
00:51:02.519 --> 00:51:10.739
Maureen Leddy speaking: So, yeah, this is a good question and I feel in
my mind, I feel the most useful comment is
418
00:51:10.739 --> 00:51:20.610
if you think about educating the Council on something that it seems like
they either don't have a good understanding of in the plan, or
419
00:51:20.610 --> 00:51:23.670
is not there.
420
00:51:23.670 --> 00:51:28.650
Comments support or oppose, [are]great, and they're going to come in.
421
00:51:28.650 --> 00:51:33.239
But it's really that sort of, "here's an aspect of the plan that
00:51:33.239 --> 00:51:39.659
from my point of view, this is not captured, you know, like, here's some
information on how this actually works."
423
00:51:39.659 --> 00:51:44.340
I think those are really helpful comments that will be really valuable to
the council.
424
00:51:44.340 --> 00:51:47.460
Not everybody is an expert in everything.
425
00:51:47.460 --> 00:52:00.355
And there's, you know, there's really good information to be gained by
people providing their pragmatic, practical on the ground experience with
doing, you know, in implementing these strategies. "Here's what you
should be considering;"
426
00:52:00.385 --> 00:52:05.304
H"ere's an important step that you shouldn't exclude," you know, things
like that I think are the most helpful.
00:52:05.639 --> 00:52:19.260
Laura Heady speaking: Great, thank you. And just before we move into
other questions, onequestion about the public comment sessions is how
long are they? So, there's like the one in Peekskill starting at 4, but
there are 3 hours. Is that right?
428
00:52:19.260 --> 00:52:32.400
```

Maureen Leddy speaking: They are 3 hours. So it depends on the venue. Sometimes they're 3 hours and it's a firm 3 hours. We have to be out of there. Sometimes they're willing to provide us extra time. If we need it. 429 00:52:32.755 --> 00:52:47.125 That was the case just recently in Brooklyn. Uh, though, we actually had an extra hour and we needed it because the final commenter wrapped up there, speaking at, like, 5 minutes before 8 o'clock. So we just got under the wire. Thank goodness. Everybody had a chance. 430 00:52:47.635 --> 00:52:57.655 Uh, but I know that when we were in, uh, Buffalo, the library, they are locking the doors and they're going home. So we had to be out of there by 7 P. M. 431 00:52:59.514 --> 00:53:10.764 Laura Heady speaking: Yeah, and I would just recommend anybody who plans on going to an in- person hearing is to look at the website, which I put in the chat box because there's information on parking and covid rules and all that sort of thing. 432 00:53:10.764 --> 00:53:16.675 So, it's better to be prepared before you drive to the venue. So, Maureen, thank you so much. 433 00:53:16.675 --> 00:53:28.945 This has been really a great overview and it will be helpful to get this whole slide deck from you and we always share a PDF of our presenter slides to everybody who registered. So I can do that. 434 00:53:28.974 --> 00:53:38.364 Um, but in the meantime, there's some really good questions in the Q and A, so I'll start with some of the broader issues you talked about when you gave the intro. 435 00:53:38.639 --> 00:53:48.659 With regarding disadvantage communities, one of our participants asked, will the assistance and funding for disadvantage communities, be more accessible or greater? 00:53:50.250 --> 00:53:53.579 Maureen Leddy speaking: So, there's not a, there's not a dollar amount 437 00:53:53.579 --> 00:53:57.570 put on the funding, it's a percentage. S the law requires 438 00:53:57.570 --> 00:54:05.695 that at least 35 of state investments in , clean energy and energy efficiency accrue to disadvantaged communities, with a goal of 40. 439 00:54:05.695 --> 00:54:14.724 So that's what's in the law. We want to do better than that, but it doesn't say x-billion dollars or so on and so forth has to has to go. So we really,

```
440
00:54:16.230 --> 00:54:21.539
when you think about all the level of investment that's required to
achieve the emissions reductions,
00:54:21.539 --> 00:54:28.920
we have to think about how much of that is public spending and not all of
it will be public spending. Some of it is going to be, um, you know, done
by
442
00:54:28.920 --> 00:54:37.260
private actors that are going to build renewable energy projects, let's
say. You know, only a small portion of those are funded through state
support.
443
00:54:37.260 --> 00:54:45.780
So, that's really what you gotta think about is this transition is going
to be big. There's a lot of investment the state is gonna make in energy
efficiency and clean energy.
444
00:54:45.780 --> 00:54:50.010
And a fairly sizable chunk of that will accrue to disadvantaged
communities.
445
00:54:53.635 --> 00:55:07.764
Laura Heady speaking: Also, somebody was just asking about the
relationship that office of climate change has with NYSERDA and I know
just from being on the inside that we were meeting, you know, all
together all the time.
446
00:55:07.764 --> 00:55:10.554
But I know the public probably doesn't know a lot about that partnership.
00:55:10.800 --> 00:55:16.110
Maureen Leddy speaking: Yeah, great question. I really didn't, I kind of
glossed over that, but
448
00:55:16.110 --> 00:55:26.940
the law names DEC and NYSERDA throughout. So DEC and NYSERDA are the key
implementing agencies for the CLCPA and our leadership are the C-o-chairs
of the Climate Action Council.
449
00:55:26.940 --> 00:55:40.974
So, the office of climate change and staff at NYSERDA work hand in hand,
you know, on all of this together and so it's a true partnership. And I
did mention all the other council agencies that are involved and
contributing all the time.
450
00:55:41.034 --> 00:55:45.744
But it really is DECC NYSERDA that are the lead implementing agencies.
00:55:48.750 --> 00:55:57.510
```

```
Laura Heady speaking: Yeah, I know, like, for example, Department of
State was very involved in the smart growth and land use planning aspect
and I'm sure there's just, there were so many groups.
452
00:55:57.510 --> 00:56:08.159
Now, getting back to the public comment process, one of our participants
asked if there's a stakeholder process after the public comment period,
leading up to the final plan.
453
00:56:08.159 --> 00:56:23.099
Maureen Leddy speaking: So, there's, I mean, the plan itself is, is a,
it'slike a roadmap. It's a strategy document. So there will be
implementation steps that follow and all of those will have robust
stakeholder engagement.
454
00:56:23.099 --> 00:56:31.079
Um, much like we've seen with any sort of DEC regulation or Public
Service Commission proceeding, or what have you.
00:56:31.079 --> 00:56:34.829
So this is not to be all and all. This is really just the beginning.
00:56:34.829 --> 00:56:41.159
So all of the recommendations that end up in the final plan, will all
have to go through their own
00:56:41.159 --> 00:56:49.860iImplementation steps in order to turn those
into, like, active programs in the state. That will all involve a lot of
stakeholder engagement.
458
00:56:51.989 --> 00:57:03.295
Laura Heady speaking: Yeah, I'll just let you guys know too if you hadn't
been tuning in, all of the meetings of the Council, even some of the
advisory panels, were all publicly shown on Webex.
459
00:57:03.324 --> 00:57:14.184
Um, and there were lots of folks attending those and even making comments
sometimes during those, and the representatives to those panels really
represented a wide variety of stakeholders and interest groups too.
00:57:14.184 --> 00:57:20.275
And so all of the names are listed, I believe, still on the NYSERDA
website. For those panels, and for the council.
461
00:57:21.744 --> 00:57:32.514
So let's see a specific question about the graph you had regarding
scenarios. Did scenarios 2 or 3 include nuclear energy options for low
carbon fuel?
00:57:33.269 --> 00:57:41.940
Yeah, so of the the scenarios do model are existing nuclear fleet, so
that's in there.
463
00:57:44.155 --> 00:57:55.585
```

```
Laura Heady speaking: Okay, so this dichotomy of both energy siting and
natural land conservation is obviously an ongoing challenge. So there's a
specific question
464
00:57:55.585 --> 00:58:09.684
whether, well, so current regulations encourage large scale, solar on
undeveloped land, which is especially a problem for farming. Is there
anything here that would reverse or reduce this and encourage solar in
more developed areas or structures like parkinglots?
00:58:10.980 --> 00:58:15.539
Maureen Leddy speaking: There's recommendations in the plan to help
466
00:58:15.539 --> 00:58:20.039
local governments understand where they
467
00:58:20.039 --> 00:58:28.409
are going to put this, but it's so the municipality, but, I mean, it's
about you are making decisions on where they think are the optimal sites
for siting
468
00:58:28.409 --> 00:58:34.079
renewable energy projects where it's within their purview to decide,
right? Like, I mean, we can't.
469
00:58:34.079 --> 00:58:42.505
That's how it's been structured, so we're not re-litigatingthe office of
renewable energy siting or any of that kind of stuff.
470
00:58:42.505 --> 00:58:52.315
But looking at where communities, what's in their purview to be in
charge of, and how we can support them in understanding what they, how
they want this to work in our communities.
471
00:58:54.150 --> 00:58:58.074
Laura Heady speaking: And that's actually, we're, we're at time here it's
a minute to 3.
472
00:58:58.074 --> 00:59:11.695
That's a great note to end on because that's the whole point of all the
work that I know our team does with the program and, and all these land
use officials and municipal officials that are thinking about these local
decisions and how to balance the challenges
00:59:11.695 --> 00:59:26.155
they have with development, with conservation of really important areas,
and that's what's exciting to see this plan. The draft plan does have so
much in the way of providing technical assistance, streamlining funding,
creating models, and providing guidance.
474
00:59:26.664 --> 00:59:38.994
I thank you so much for giving this broad overview into very complex
plan. And kind of distilling down these pieces that I know are really of
```

interest to this group.

```
00:59:39.204 --> 00:59:52.164
There's more questions that are left, but I know we said we're going to
end at 3, so I'll try to maybe link you up with some of those questions,
Maureen and maybe we can get answers out to folks as a follow up today.
Maureen Leddy speaking: Sure.
Laura Heady speaking: But, yeah. Thanks
476
00:59:52.164 --> 00:59:55.764
so much again for the really great presentation. To all of you who joined
477
00:59:55.764 --> 00:59:56.155
I,
478
00:59:56.844 --> 01:00:08.065
thank you for your time and hope you will visit the draft scoping plan
and share your insights and comments and we'll be passing around the link
to today's recording and the slides to all of you who registered.
479
01:00:08.340 --> 01:00:11.639
Thank you so much. Yep. Thanks again.
```

475