

December 1, 2022

Governor JB Pritzker Members of the General Assembly Illinois State Capitol Building 401 S. 2nd Street Springfield, IL 62701

Dear Governor and Members of the General Assembly:

The following report fulfills the statutory directive that the Hydrogen Economy Task Force (the "Task Force") provide the Governor and the Members of the General Assembly with a report by December 1 of each year on the Task Force's activities, findings, and recommendations. The Public Act 102-1086 (the "Hydrogen Economy Act" or the "Act") established the Task Force and directed the Department of Commerce & Economic Opportunity (the "Department") to provide administrative support to the Task Force.

# **Reporting Requirements**

## 1. Task Force Activities

The Task Force's activities in 2022 focused on creating the Task Force (i.e., member nominations and appointments) and holding the first meeting.

Per Section 5(a) of the Act, the Task Force is composed of twenty-four (24) members, and twenty-three members have been appointed. A list of the Task Force members is included in Appendix A.

The Task Force held its first meeting on November 29, 2022, during which it fulfilled the requirements of Section 5(d) of the Act by electing a Chair. The Task Force further adopted bylaws, discussed Task Force objectives and strategies for accomplishing such, and proposed a schedule for further meetings. Draft minutes from the meeting are included in Appendix B.

The next meeting will be scheduled for December 2022 or January 2023 and is expected to include a presentation by the Midwest Alliance for Clean Hydrogen. The Task Force will finalize a working group structure to accomplish its objectives and vote on a structure at the second meeting. The adopted working groups will develop the findings and recommendations that will included in the next Task Force report.

#### 2. Task Force Findings and Recommendations

The Task Force is not prepared to provide findings and recommendations to the Governor and General Assembly at this time. The Task Force's activities in 2022 focused on creating the Task Force and holding the first meeting, which consisted of administrative actions (e.g., election of Chair, adoption of by-laws, etc.), organization, and developing a plan to accomplish the Task Force's objectives. The Task Force will provide an additional report in 2023 that includes its findings and recommendations.

Please feel free to contact the Department with any questions about this report.

Sincerely,

Sylvia I. Garcia

Sylvia I. Hancia

Director

# Appendix A.

# Task Force Composition

Name (Last, First)	Member Since	Appointed By	Position	Title
Costa Howard, Rep. Terra	9/6/2022	Speaker of the House of Representatives	Member	Member of the House Representatives
Devaney, Patrick	10/7/2022	Governor	Member	Member representing a statewide labor organization
Duffy, Sarah	8/3/2022	Statute	Member	Director of the Illinois Power Agency or his or her designee
Ellman, Sen. Laura	8/31/2022	Senate President	Member	Member of the Senate
Evans, Patrick	9/6/2022	Speaker of the House	Member	Representative of a trade association representing the investor-owned electric and natural gas utilities and power generation companies in the State of Illinois
Hoke, Haley	10/31/2022	Governor	Member	Member representing the Governor's Office of Management and Budget
Horek, Jon	10/4/2022	Senate President	Member	Representative of a trade association representing wind and solar electric generators, renewable transmission companies, and storage companies
Hoyt, Jim	11/14/2022	Director of Department of Commerce and Economic Opportunity	Member	Representative of a manufacturing association
Irvin, Elizabeth	9/9/2022	Statute	Member	Secretary of Department of Transportation or his or her designee
Kruse, Chad	7/14/2022	Director of the Illinois Environmental Protection Agency	Member	Member from the Office of Energy

Name (Last, First)	Member Since	Appointed By	Position	Title
LeFevers, Daniel S.	10/24/2022	Director of Department of Commerce and Economic Opportunity	Member	Member representing a trade association
Letavish, George		Statute	Member	Director of Department of Commerce and Economic Opportunity or his or her designee
McCrory - McKay, Carly	10/24/2022	Director of Department of Commerce and Economic Opportunity	Member	Member representing local economic development interest
Ortiz, Dulce	10/24/2022	Director of Department of Commerce and Economic Opportunity	Member	Representative of a community- based organization that supports environmental justice communities
Parker, Chad	7/28/2022	Statute	Member	Director of Department of Natural Resources or his or her designee
Rezin, Sen. Sue	6/15/2022	Minority Leader of the Senate	Member	Member of the Senate
Sofronis, Dr. Petros	10/12/2022	President of the University of Illinois System	Member	Member representing the University of Illinois Institute for Sustainability, Energy, and Environment
Stashak, Catherine	7/27/2022	State Fire Marshal	Member	Member with knowledge of public safety
Vacant		Governor	Member	Member representing a non-profit energy research organization
Wang, Michael	11/10/2022	Governor	Member	Member representing a national laboratory that researches alternate fuels, energy, and environmental impacts
Wheeler, Rep. Keith	7/8/2022	Minority Leader of the House of Representatives	Member	Member of the House of Representatives
Woods, Michael	9/27/2022	Statute	Member	Director of Department of Agriculture or his or her designee

Name (Last, First)	Member Since	Appointed By	Position	Title
Wynn, Dana	7/12/2022	Statute	Member	Chair of the Illinois Community College Board or his or her designee
Zalewski, Carrie	7/28/2022	Statute	Member	Chairman of the Illinois Commerce Commission or his or her designee

# Appendix B.

# **State of Illinois Hydrogen Economy Task Force** November 29, 2022 9:00am - 11:00am **DRAFT Minutes**

#### **Locations:**

In-person Illinois Department of Commerce & Economic Opportunity 555 W. Monroe Street **Suite 1200** Room 12N.501 Chicago, IL 60601

Virtual

WebEx Video Conference

Join link: https://illinois.webex.com/illinois/j.php?MTID=m57a3266bb1c95cf2b4d514b424704daf

Webinar number: 2454 166 5516

Webinar password: NPnENV4ZM25 (67636849 from phones)

Join by phone

+1-312-535-8110 United States Toll (Chicago)

+1-415-655-0002 US Toll Access code: 245 416 65516

#### Agenda:

I. Call to Order – George Letavish, Senior Advisor, Federal Policy, Illinois Department of Commerce & Economic Opportunity (DCEO).

The meeting was called to order by George Letavish at 9:02 am.

a. Roll Call of Membership

George Letavish conducted a roll call of task force members.

Rep. Terra Costa Howard: Yes

Patrick Devaney: Yes Sarah Duffy: Yes Sen. Laura Ellman: Yes Patrick Evans: Yes Haley Hoke: Yes Jon Horek: Yes Jim Hoyt: Yes Elizabeth Irvin: Yes Chad Kruse: Yes Dan LeFevers: Yes

George Letavish: Yes Carly McCrory-McKay: Yes

Dulce Ortiz: Yes Chad Parker: Yes Sen. Sue Rezin: Yes Dr. Petros Sofronis: Yes Catherine Stashak: Yes Michael Wang: Yes Rep. Keith Wheeler: No Michael Woods: Yes Dana Wvnn: Yes Carrie Zalewski: Yes

Note: Sen. Rezin was not initially present due to technical difficulties but joined the meeting after roll call was conducted during section IV of the meeting agenda.

There were initially 21 of 23 appointed members present at the time of roll call and 22 of 23 appointed members present at the meeting. Quorum was established (13 of 23).

## II. Introduction of Membership - George Letavish, Senior Advisor, Federal Policy, DCEO

George Letavish asked the task force members to provide their name, title, organization, and a statement regarding their role and objectives related to the task force. Each member introduced themselves and provided a brief statement.

#### III. Election of Chair

George Letavish asked members for a motion to move for the election of the Task Force Chair. The motion was made by Carrie Zalewski and seconded by Cathy Stashak.

George Letavish asked task force members for nominations for Task Force Chair. Dan LeFevers nominated Sen. Laura Ellman, which was seconded by Rep. Terra Costa Howard. There were no further nominations, and Senator Ellman was declared the Chair of the Task Force.

Senator Ellman began presiding over the Task Force meeting.

# IV. Review of the Task Force's Objectives

# a. December 1 Report

George Letavish provided an overview of the Task Force's objectives per the Public Act that created the Task Force including the report requirement which states: "The Task Force shall report to the Governor and the General Assembly by December 1 of each year on its activities, findings, and recommendations." George Letavish provided recommendations for how the Illinois Department of Commerce and Economic Opportunity (DCEO), which is tasked with providing support to the task force, could file an interim report prior to the December 1, 2022 deadline with the understanding that the first task force meeting is occurring on November 29, 2022. DCEO will provide a summary of the activities completed to-date, which will primarily focus on task force appointments and organization and the first meeting, including draft minutes and recommended actions or next steps. The items associated with findings and recommendations will be addressed in a future task force report in the spring of 2023.

There were no objections from task force members, and Senator Ellman agreed with the proposes approach for the December 1st filing requirement.

# V. Review & Approval of By-Laws

George Letavish provided an overview of the draft by-laws that were sent out to the task force to review, and Senator Ellman asked if any members had comments. Dan LeFevers asked for more information on the training requirements referenced. Kate Exo from DCEO's legal department provided an overview on the trainings associated with the Open Meetings Act, diversity, and ethics. George Letavish stated that he would send out follow-up information for the members on how to review and complete the trainings.

Pat Devaney made a motion to approve the by-laws, and the motion was seconded by Carly McCrory-McKay. Senator Ellman called for a voice vote and the by-laws were adopted.

#### VI. Task Force Member Discussion

#### a. Task Force Topics

George Letavish reviewed the duties of the Task Force as stated in the Public Act: "Section 10. Duties. The Task Force shall have the following duties: (1) establish a plan to create, support, develop, or partner with a Hydrogen Hub in this State, and determine how to maximize federal financial incentives to support Hub development; (2) identify opportunities to integrate hydrogen in the transportation, energy, industrial, agricultural, and other sectors; (3) identify barriers to the widespread development of hydrogen, including within environmental justice communities; and (4) recommend government policies to catalyze the deployment of hydrogen in the State economy."

Senator Ellman asked the task force members to discuss the first duty. Dr. Sofronis provided an overview of the Midwest Alliance for Clean Hydrogen (MACH) H2 proposal that is currently being developed for a U.S. Department of Energy hydrogen hub grant. Senator Ellman stated that she would like the MACH H2 coalition to present at a future meeting. Dulce Ortiz emphasized that she would like to hear what efforts have been taken by the coalition to engage with environmental iustice communities.

Senator Ellman asked the task force members to discuss the second duty. Michael Wang highlighted the state's broad economy and the unique opportunity for Illinois, which has several different sectors with applicable use applications including transportation, agriculture, etc., and Dr. Sofronis noted the opportunity with transportation assets including rail and heavy-duty trucks.

Sen. Rezin stated that there are end users in Will County who may have a good perspective and asked if there were any representatives from the area. Senator Ellman stated we can have representatives from Will County present at a future meeting including the Will County Center for Economic Development.

Michael Woods highlighted the importance of agriculture to the state's economy and opportunities for clean hydrogen to be incorporated into agricultural applications.

Catherine Stashak and Michael Wang commented on transportation use cases and the California Fuel Cell Partnership as an example to look at.

Jon Horek discussed examples of current industrial demand for hydrogen, the difficulties of getting users to switch to green hydrogen due to cost, opportunities with current users, and long-term transportation factors to consider.

Carrie Zalewski, Sarah Duffy, Dan LeFevers, and Michael Wang discussed the need for hydrogen as a generation source and opportunities to bridge transitions to clean energy, including the importance of end storage, the impact on different sectors, and production costs and cost competitiveness for different users, such as users in the transportation sector and refineries.

Sarah Duffy asked for more clarity regarding the priority of the task force, including success measures and prioritization, such as job creation, economic development, reducing the carbon footprint, etc. Senator Ellman stated that a future agenda item should include measures and priorities that the task force will recommend.

Dan LeFevers and Dr. Sofronis discussed the commercial feasibility and viability factors that are necessary for the MACH to consider as part of their application, which include a balance of cost effectiveness and reducing emissions. Dr. Sofronis referenced future U.S. Department of Energy (DOE) initiatives that may be forthcoming, and Senator Ellman stated that a future task force meeting should include a presentation of federal programs that have been enacted or are likely to be enacted to educate the task force members about the types of resources available from different federal entities.

Senator Ellman asked task force members to discuss the third duty. Senator Rezin emphasized the importance of recommending methods to go through the regulatory process in a timely manner when discussing barriers and burdens.

Pat Evans referenced <u>HB5818</u>, pending legislation which creates the Hydrogen Fuel Replacement Tax Credit and could help mitigate costs of transitioning to hydrogen.

Chad Parker and Sarah Duffy discussed that the task force should consider legislation that would help with energy legislation to handle an increased electricity load and ensure an ample supply of hydrogen including for a potential hydrogen hub.

Dan LeFevers discussed the importance and current status of storing hydrogen and how this compares to the storage of other gases. Dulce Ortiz commented that there needs to be an evaluation included for the environmental impact of hydrogen projects on communities. Jon Horek noted that a positive impact could be the replacement of diesel fuel, especially in areas that have multimodal hubs and experience a lot of heavy-truck traffic. Michael Wang commented on efforts by the federal government including the Environmental Protection Agency (EPA) to work together to improve the permitting process. Elizabeth Irvin suggested that future conversations with the task force include a dedicated conversation around environmental justice issues and bring in additional perspectives and expertise from environmental justice communities.

Sarah Duffy and Dr. Sofronis discussed risks from pipelines and their potential to impact communities including examples where pipelines are operated safely and there are strong standards in place to protect communities. Dan LeFevers stated that most of the hydrogen moved in Illinois today is via truck and this may not be the best model for the expansion of pipelines for future applications. Illinois may need to consider an industrial utility model that is supported by industry to lower the cost and provide more flexibility, but this is also a major regulatory issue that has to be reviewed.

Senator Ellman asked the task force to discuss the final duty and referenced Dr. Sofronis's statements about national measures and technical standards that Illinois could adopt, which requires engagement with Illinois state agencies such as Agriculture, Natural Resources, and the Environmental Protection Agency.

Pat Devaney discussed the need for labor standards that support the production of hydrogen and incentivize users to use these labor standards. Pat suggested that the task force use the Climate and Equitable Jobs Act (CEJA) as an example. Pat also asked the task force to consider the impact of any losses especially how those impacted from the reduction of fossil fuels can be incorporated into the hydrogen economy. Dr. Sofronis stated that the hydrogen economy would create more jobs than some other clean energy sectors and that you would also need to train a workforce to have the right skills for these jobs.

Catherine Stashak discussed national codes and standards associated with safety and the workplace such as the Occupational Safety and Health Administration (OSHA) and encouraged the task force to look at existing national standards that can be used or modified in Illinois. Dr. Sofronis stated the U.S. DOE has a committee on codes and standards that has done work which Illinois can use, and professional societies like the American Society of Mechanical Engineers (ASME) may have codes that we can take advantage of.

Dana Wynn stated that it would be important to look for opportunities where workforce programs can have stackable credentials such as driver's requirements and OSHA standards in transportation programs at community colleges.

### b. Task Force Organization

Senator Ellman proposed organizing the task force into four different working groups to accomplish the duties: one focusing on regulatory and safety including agency rules incorporating technical standards and laws; a second group for workforce development, education, and entrepreneurship (grants, apprenticeships, credentials, etc.); a third group exploring hydrogen and its impact on communities (environmental justice, impacted communities that are transitioning from fossil fuels to hydrogen, permitting, siting, public feedback processes, etc.); and a final working group on commercial development and incentives. She noted that these don't include a focus on generation, storage, or use.

Dan LeFevers suggested a Commercial and End Use Development working group that would include outreach to end users to help identify opportunities.

Jim Hoyt discusses the timelines in CEJA and the need for the timelines to be considered in our task force work which can help flag areas and activities that need to be accelerated to hit milestones and deadlines. Senator Ellman asked if the MACH can help us identify realistic timelines.

Jim Hoyt discussed ADM's energy use, cost implications of transitioning to different energy types, and environmental justice impacts. He asked the task force to consider the challenges of transitions and the importance on clearly defining policies including the need to consider timelines and deadlines when defining the policies. Michael Wang suggested adding timeline and scheduling to working group four as the state looks at opportunities for production, end use, regulations, workforce, etc., but also asked if grouping more items into the working group would make it too big. Jim Hoyt emphasized the need for a centralized, macro-level look that includes a master

timeline in the direction of the task force, such as when looking at workforce development and education and when activities need to happen. Jon Horek provided examples of some current and future hydrogen projects and their timelines. Dr. Sofronis proposed that we identify users as we develop the timeline to think about the amount of production required, the necessary infrastructure, and then the timeline that could support those activities including projected commercial development.

Senator Rezin highlighted concerns from businesses about the cost of adhering to changes in energy policies and laws including the impact on any projects that are currently in the pipeline and could be affected. She asked that the task force ensure that additional business and industry representatives have an opportunity to be engaged throughout the process and provide feedback such as the trucking association when discussing the transportation industry.

Senator Ellman, Chad Kruse, and Chad Parker discussed different options for organizing the task force, including modifying working group #4 if it gets too large, establishing an initial working group to focus on the principles of the task force before organizing into groups, and rearranging the working groups by time horizon (i.e., short-term, medium-term, and long-term).

Senator Ellman stated that we should continue to outline options for working groups and make a decision on how to proceed at the next meeting.

# c. Meeting Schedule

Senator Ellman stated that the preference is for another meeting in December; however, this may not be feasible given the holidays. George Letavish will work with the task force members to schedule the next task force meeting and will include options in January in case it is not possible to meet again in December.

Kate Exo discussed the requirements under the Open Meetings Act and that as the task force discusses items via email, substantive non-administrative business should not be discussed if the conversation includes seven (7) or more task force members. Otherwise, a meeting will need to be scheduled and public notice will need to be provided 48 hours prior to the meeting.

#### d. Meeting Topics & Content

Senator Ellman stated that the next meeting should include a presentation by the MACH regarding the MACH H2 proposal if possible, including their application, efforts thus far, potential timelines, environmental justice impacts and outreach, and workforce development proposals.

Dan LeFevers stated that GTI Energy can host a future in-person meeting and also provide a tour of their hydrogen technology center. Senator Ellman also stated that the task force should consider other tours of appropriate facilities.

#### e. Other

N/A

#### VII. **Public Comment**

Two members of the public provided public comment via chat.

Colleen Wright stated that if there is a request for MACH H2 to present, she would encourage that it be scheduled in January. She said that the governance discussions Dr. Sofronis mentioned are in process and waiting until January would allow for a more comprehensive discussion.

Rahul Kalsi, Director of Government at Nicor Gas stated that they would like to make themselves available as a resource for the Task Force.

#### VIII. Close

Senator Ellman adjourned the meeting at 10:58am.

### Materials:

- I. Public Act 102-1086
- II. Membership
- III. By-Laws