STANDARDS ADOPTION COUNCIL UPDATE

- Standards adoption is an initiative from PIDX Innovation Day 2020

- New Work Group (WG 05) initiated in 2021

- Charter approved by Standards & Guidelines Committee June 25, 2021

- Approved by PIDX Executive Committee August 18, 2021

- Aparna Kakani nominated and elected as Chair January 19, 2022
  (confirmed at Annual Member Meeting 2022)

- Kickoff meeting on February 17, 2022

PIDX INNOVATION DAY ➡ WORK GROUP & CHARTER FORMED ➡ CHAIR ELECTED ➡ KICKOFF MEETING

2020   **2021**   **2022**

STANDARDS ADOPTION COUNCIL UPDATE

CHARTER

The **Standards Adoption Council** has been established to develop an adoption strategy at the time that a standards project is proposed, including (1) defining real-world use cases the standards seek to solve, (2) setting clear KPIs around standards adoption success, and (3) implementing proof of concepts (POCs) with Project Team participants prior to the voting and approval processes for standardization.

STANDARDS ADOPTION COUNCIL UPDATE

ADVANCE ADOPTION AND IMPLEMENTATION

1. Understand the current standards adoption

2. Understand the real use case and value for a standard definition

3. Get involved at the standard concept definition phase

4. Set KPIs when a standard is published

5. Understand the usage and adoption for a defined standard

STANDARDS ADOPTION COUNCIL UPDATE

STATUS & ACTIONS

- Building into the standards adoption itself

- Survey: who is using PIDX standards and how?

- Testing of implementation with POC from PIDX

  Emissions Transparency Data Exchange (ETDX)

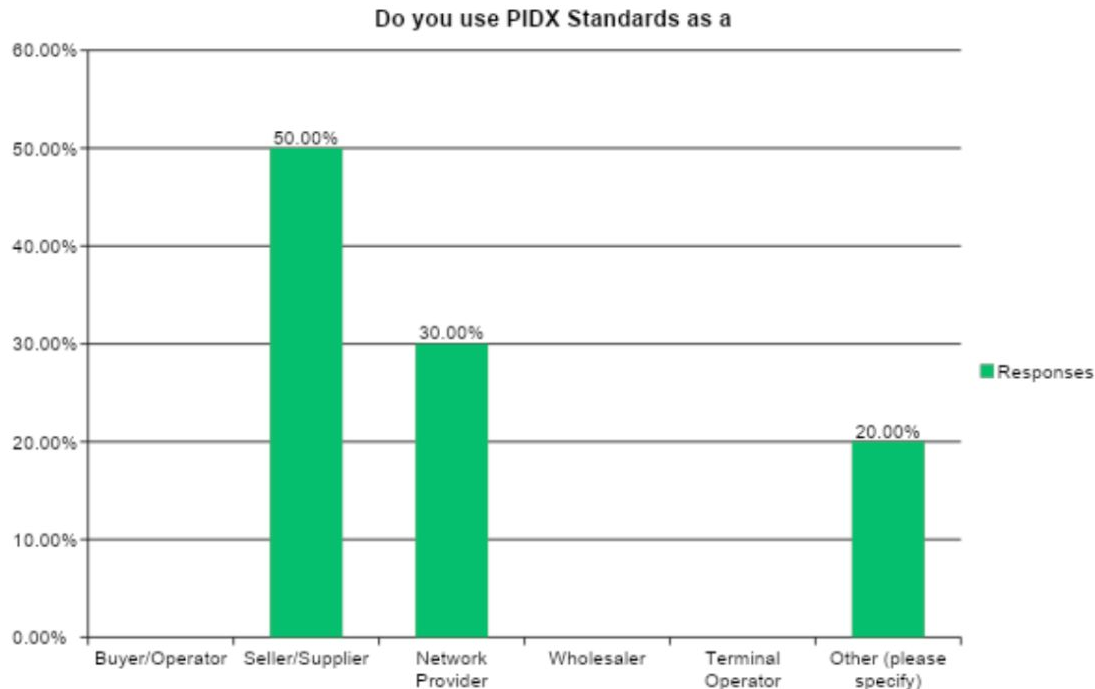 -- PIDX v.1.7 (draft)

WORLDWIDE USE OF PIDX STANDARDS

SURVEY TO PIDX MEMBERSHIP

GENERAL INFORMATION

- 13 Questions: Developed by Standards Adoption Council, PIDX Downstream, S&G, and Executive Committee
- Survey Sent September 1, 2022
- Closed September 30, 2022 (4 Weeks)
- Sent to 20 PIDX Member Companies
- 10 Replies to Survey (50%)
- No Responses are Identifiable to a Specific Company

PIDX SURVEY—QUESTION 1

Do you use PIDX Standards as a

Answer Choices	Responses	Other
Buyer/Operator	0	
Seller/Supplier	5	
Network Provider	3	
Wholesaler	0	
Terminal Operator	0	
Other (Please Specify)	2	• Third-Party Vendor • Consulting Organization

PIDX SURVEY—QUESTION 2

Which of the following PIDX Standards do you use? (check all that apply)
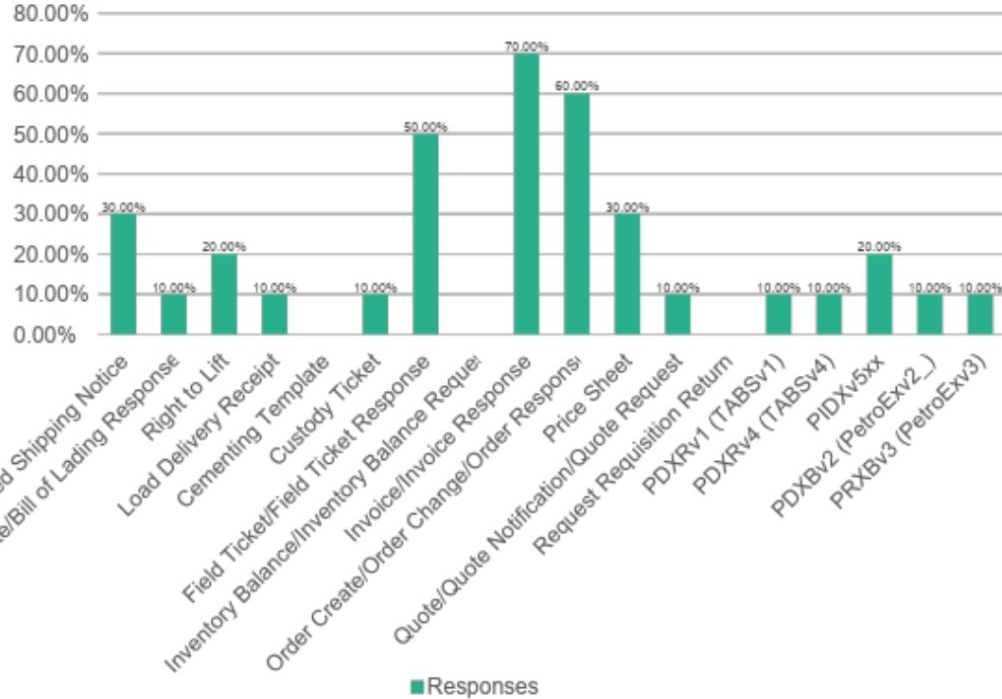
Answer Choices	Responses
Advanced Shipping Notice	3
Bill of Lading Create/Response	1
Right to Lift	2
Load Delivery Receipt	1
Cementing Template	0
Custody Ticket	1
Field Ticket/FT Response	5
Inventory Balance/Balance Request	0
Invoice/Invoice Response	7
Order Create/Change/Response	6
Price Sheet	3
Quote/Notification/Request	1
Request Requisition Return	0
PDXRv1 (TABSv1)	1
PDXRv4 (TABSv4)	1
PIDXv5xx	2
PDXBv2 (PetroExv2_)	1
PDXBv3 (PetroExv3)	1

PIDX SURVEY—QUESTION 3

What version(s) of the standard(s) do you use? (check all that apply)
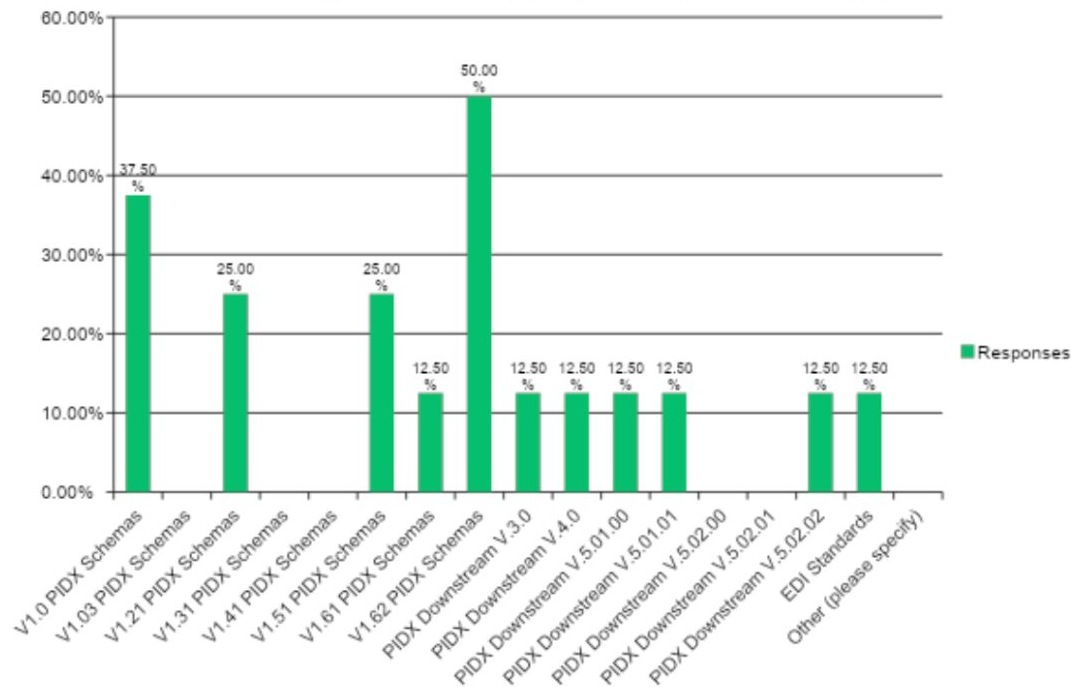
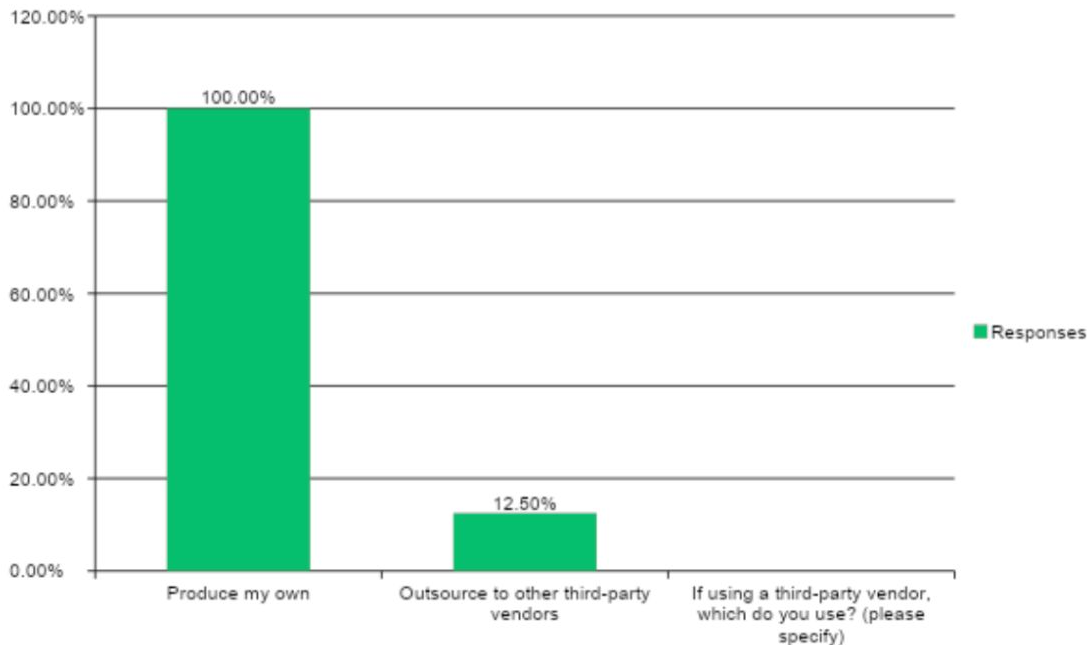| Answer Choices	Responses
V1.0 PIDX Schemas	3
V1.03 PIDX Schemas	0
V1.21 PIDX Schemas	2
V1.31 PIDX Schemas	0
V1.41 PIDX Schemas	0
V1.51 PIDX Schemas	2
V1.61 PIDX Schemas	1
V1.62 PIDX Schemas	4
PIDX Downstream V.3.0	1
PIDX Downstream V.4.0	1
PIDX Downstream V.5.01.00	1
PIDX Downstream V.5.01.01	1
PIDX Downstream V.5.02.00	0
PIDX Downstream V.5.02.01	0
PIDX Downstream V.5.02.02	1
EDI Standards	1
Other (please specify)	0
Skipped Question	2

PIDX SURVEY—QUESTION 4

How do you access PIDX standards? (check all that apply)
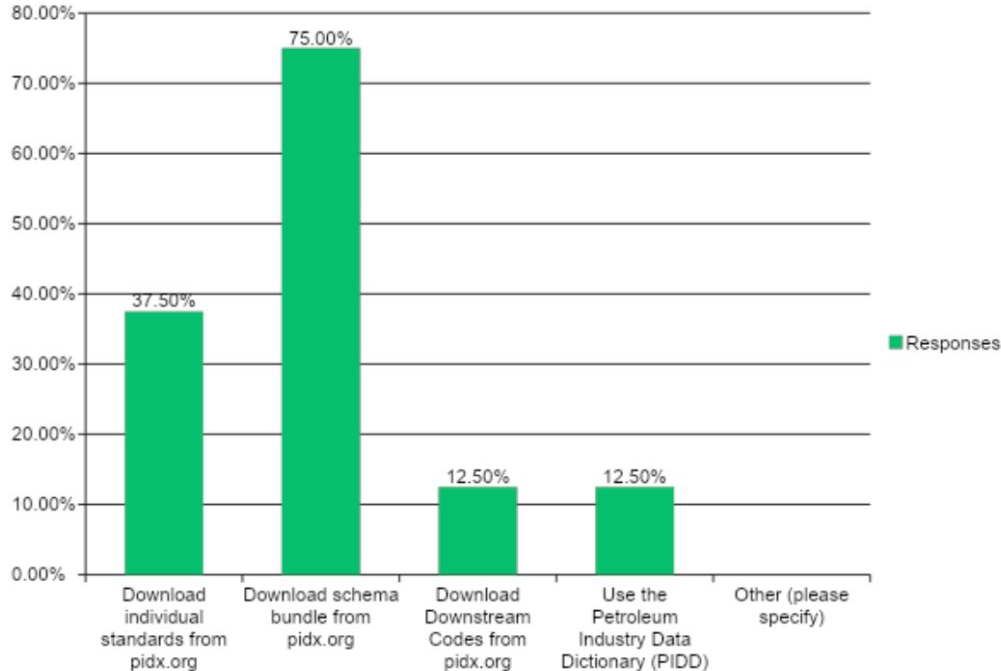
Answer Choices	Responses
Download individual standards from pidx.org	3
Download schema bundle from pidx.org	6
Download Downstream Codes from pidx.org	1
Use the Petroleum Industry Data Dictionary (PIDD)	1
Other (Please Specify)	0
Skipped Question	2

PIDX SURVEY—QUESTION 5

Do you produce your own PIDX documents, or outsource to other third-party vendors?

Answer Choices	Responses
Produce my own	8
Outsource to third-party vendors	2
If using a third-party vendor, which do you use? (please specify)	0
Skipped Question	2

Note: More than one option could be selected for this question. Some of the respondents who chose "produce my own" also selected "outsource to third-party vendors."
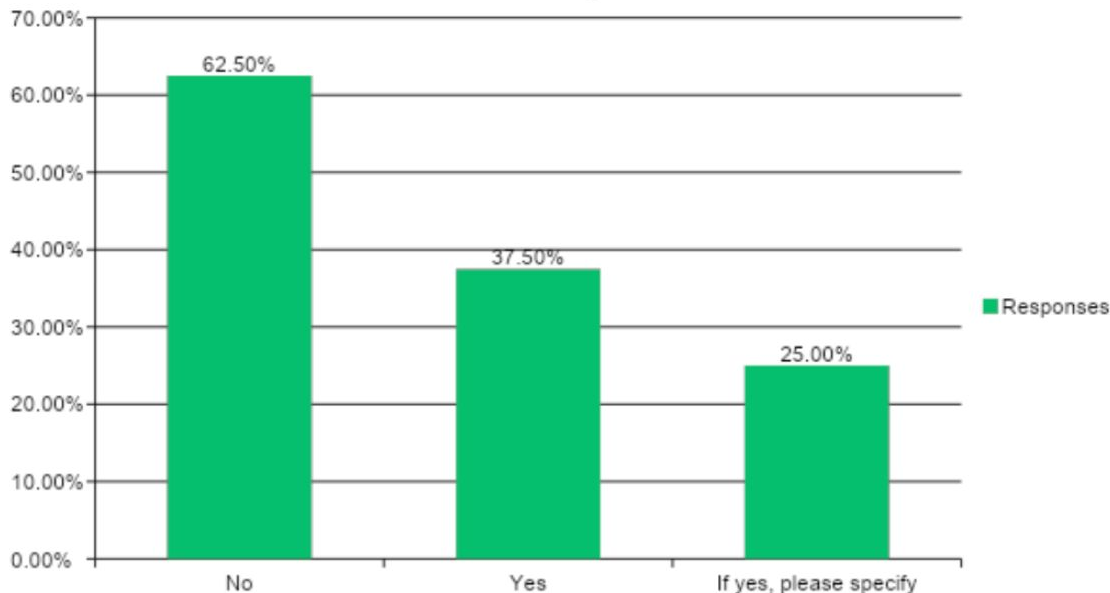
PIDX SURVEY—QUESTION 6

What are the benefits of using the PIDX standards for buyers/operators, network providers, sellers/suppliers, wholesalers, terminal operators, etc? (Check all that apply)
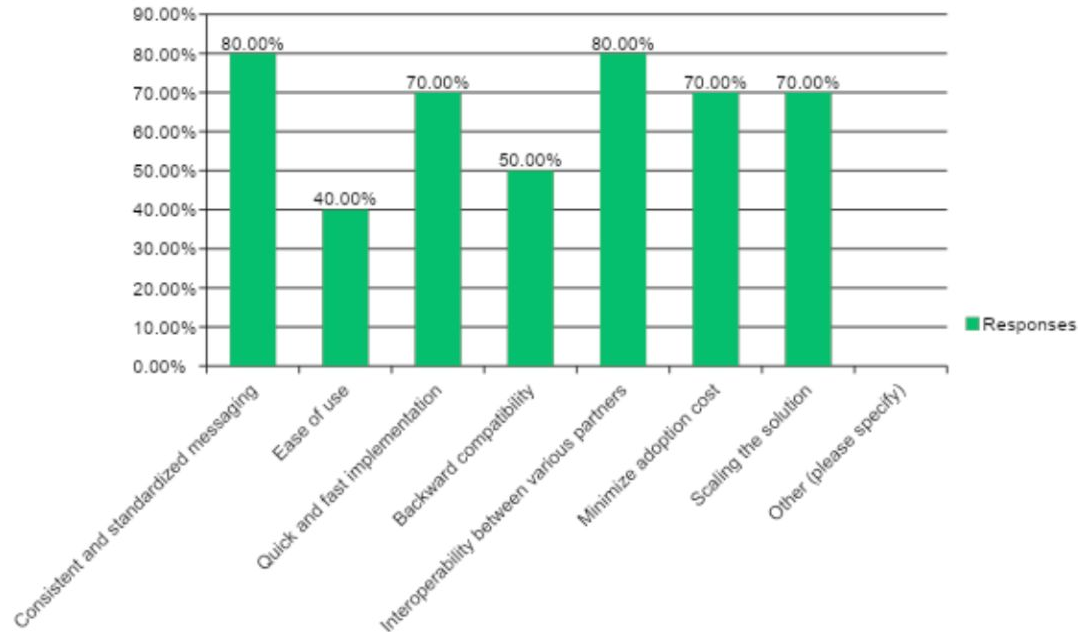
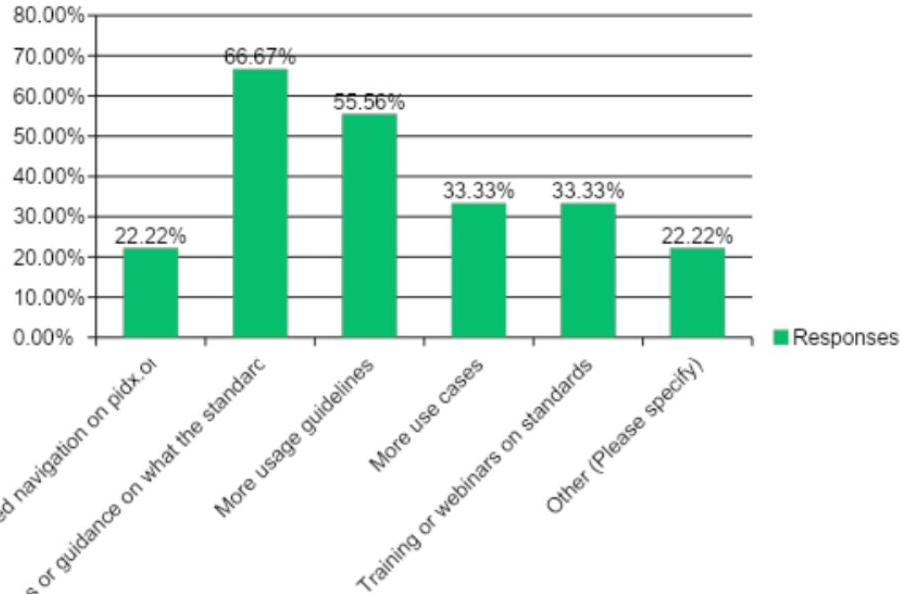| Answer Choices	Responses
Consistent and standardized messaging	8
Ease of use	4
Quick and fast implementation	7
Backward compatibility	5
Interoperability between various partners	8
Minimize adoption cost	7
Scaling the solution	7
Other (please specify)	0

PIDX SURVEY—QUESTION 7

Are there any areas where PIDX could help develop a standard for the industry?

Answer Choices	Responses	If yes, please specify
No	5	
Yes	3	
If yes, please specify	2	• REST API and JSON standards • Resource management of loading terminals – availability, time slot booking
Skipped Question	2	

PIDX SURVEY—QUESTION 8

How can existing PIDX standards be improved? (check all that apply)

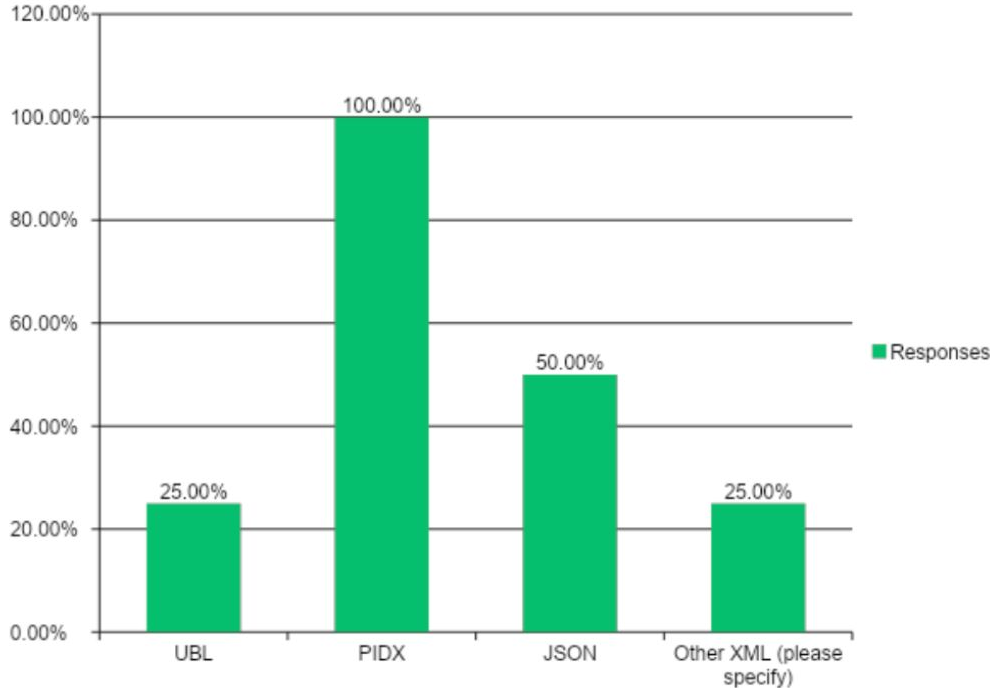| Answer Choices	Responses	If yes, please specify
Ease of access/improved navigation on pidx.org	2	
Descriptions or guidance on what the standards are used for (process flow)	6	
More usage guidelines	5	
More use cases	3	
Training or webinars on standards	3	
Other (please specify)	2	• Deprecate old versions and field options • CPDC
Skipped Question	1	

PIDX SURVEY—QUESTION 9

If you indicated corrections are required to the standards, please provide detail below:

Answer Choices	Responses	Comments
Answered	1	• It is difficult to find older schemas on the site. Descriptions/process guidelines for some standards are nonexistent. There is no training available. Webinars (if you could call them that) seem to be limited to taking place during conferences (which typically have a theme and don't really address functional issues).
Skipped Question	9	

PIDX SURVEY—QUESTION 10

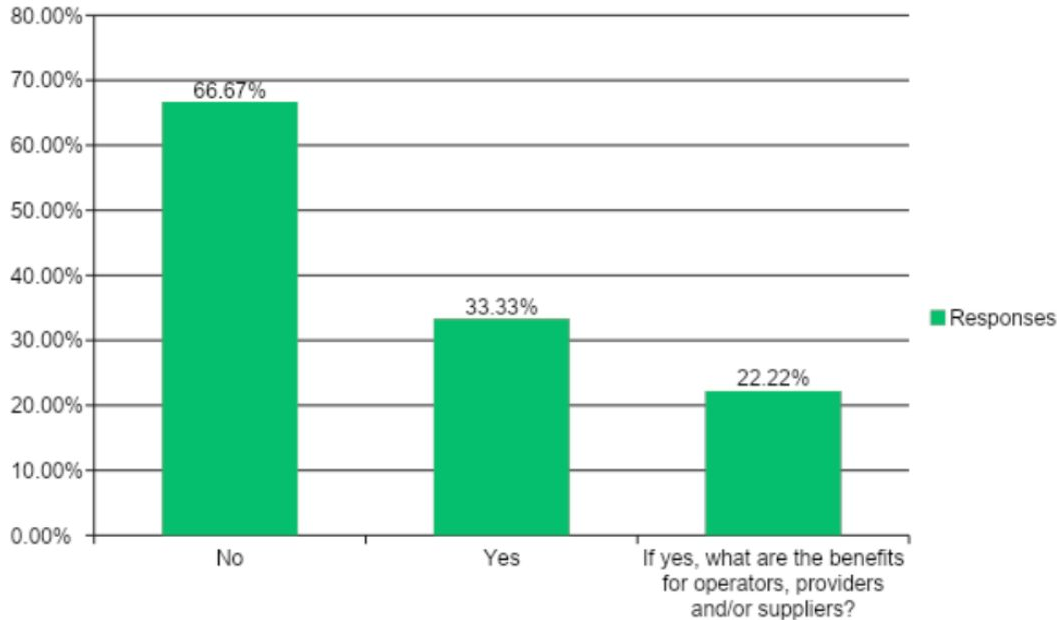## What are the standards used for your B2B transactions data format?

Answer Choices	Responses	Other XML (please specify)
UBL	2	
PIDX	8	
JSON	4	
Other XML (please specify)	2	• v5 • xCBL
Skipped Question	1	

Note: More than one option could be selected for this question. Some of the respondents who chose "PIDX" also selected other options as well.
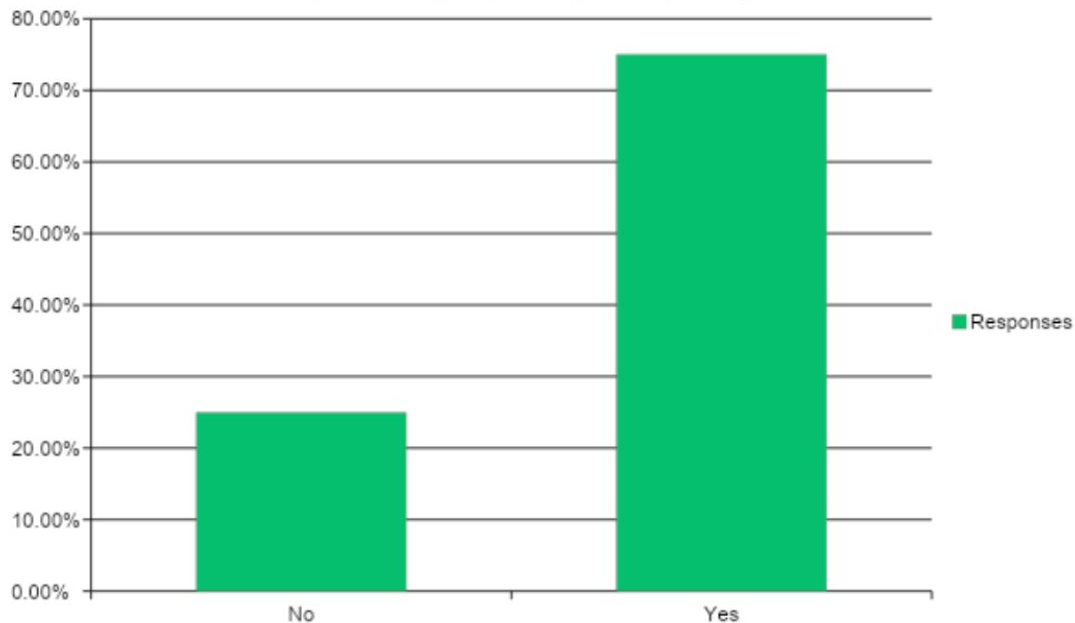
PIDX SURVEY—QUESTION 11

Are you aware of any blockchain implementations in the Energy Industry?

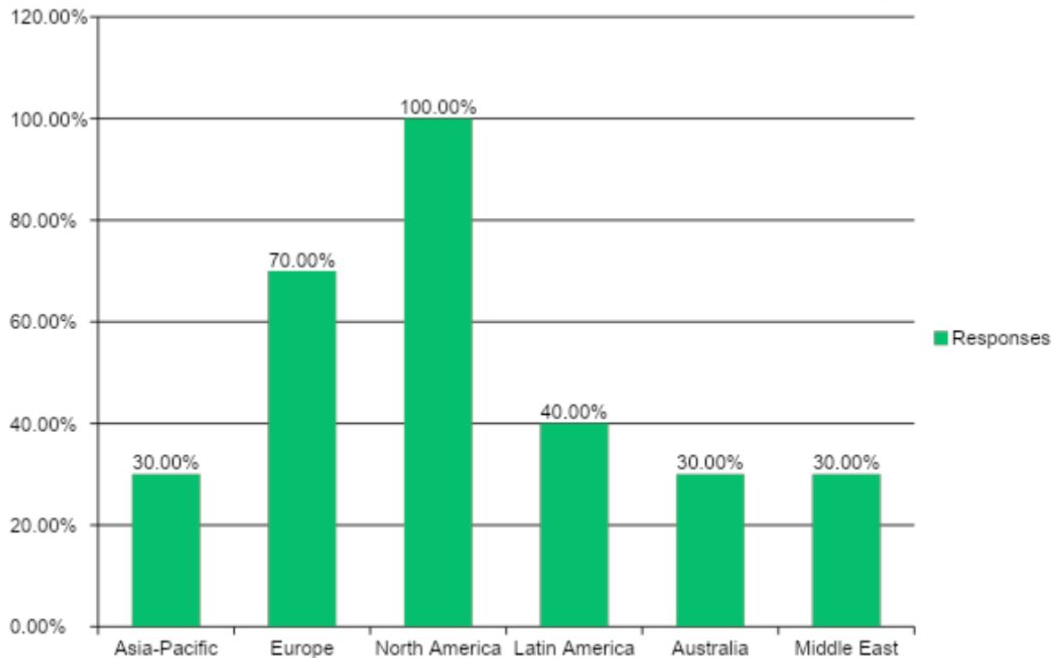| Answer Choices	Responses	Comments
No	6	
Yes	3	
If yes, what are the benefits for operators, providers, and/or suppliers?	2	• Still in the process of formulating the full range of benefits • one source of truth, accessibility
Skipped Question	1	

PIDX SURVEY—QUESTION 12

Are you aware that PIDX is actively developing emissions reporting standards? To learn more about the PIDX Emissions Transparency Data Exchange, visit https://pidx.org/teams/join-a-pidx-team/

Answer Choices	Responses
No	2
Yes	6
Skipped Question	2

PIDX SURVEY—QUESTION 13

In which regions are you using PIDX standards? (check all that apply)

Answer Choices	Responses
Asia-Pacific	3
Europe	7
North America	10
Latin America	4
Australia	3
Middle East	3

CONCLUSION

- No input from Buyer/Operator, Wholesaler, Terminal Operator – how do we reach these audiences?

- Explore retiring standards that are no longer in use

- Explore conversion of XML standards to JSON/REST API

- Look at new areas and topics for standardization

- Outreach efforts to evaluate webinars and training to promote the use of PIDX standards

- Expanding our reach in Australia, Middle East, Asia-Pacific

NEXT STEPS

- Brainstorm Plan for PIDX Website Metrics

- Mandatory Fields to track:

- Name, company, email address

- Download made available via email instead from the website

QUESTIONS?