# PointLogic: User Interface and API Guide

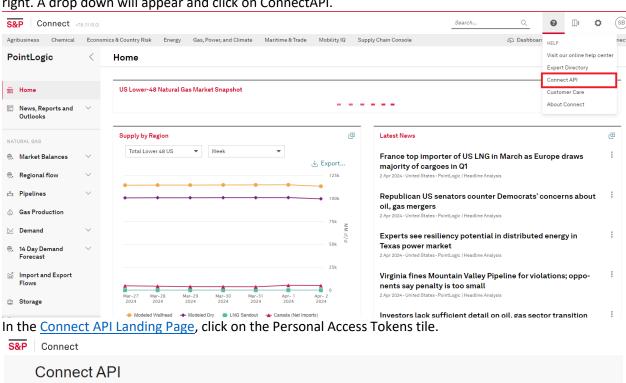
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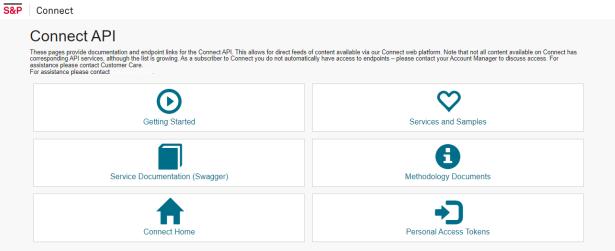
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This document serves as a guide to enable users to connect to navigate PointLogic application and API.

## Getting Started with the API

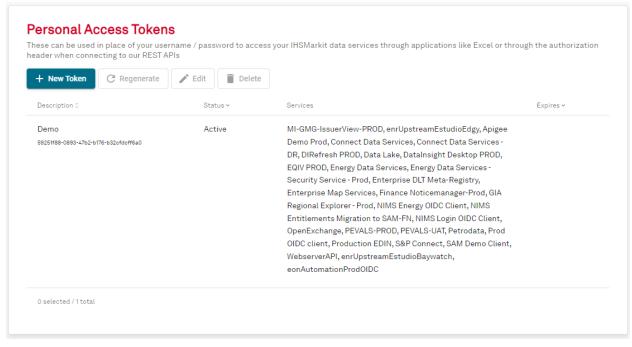
To reach the Connect API Page, you can find it in the <u>Connect website</u> in the Question symbol in top right. A drop down will appear and click on ConnectAPI.





S&P Global

There you'll find all your active tokens. Click on New Token, give a name to this token, check the "Never expire" box, and click Create. A one time pop-up will show your username and password, save these as they won't show up again. If you ever want to change your token, you can delete the old one and generate a new one with the prior process.



## PointLogic in the User Interface and Their Corresponding API Endpoint

When pulling from the APIs, if you leave the parameter or filter sections blank, the API will return all the data in the default amount of time. PointLogic API endpoints are paginated, with a default of 10,000 rows of data by default at the max amount, whereas PointLogicViews are a single page. All API endpoints have their specific parameters while the syntax is the same. The difference between PointLogic and PointLogic Views is that Views are preprepared reports with rolling data and PointLogic has more cutomizable results.

#### **Syntax**

#### **PointLogic**

startDate: "MM/DD/YYY" or "YYYY/MM/DD" or "MM-DD-YYYY" or "YYYY-MM-DD"

endDate: "MM/DD/YYY" or "YYYY/MM/DD" or "MM-DD-YYYY" or "YYYY-MM-DD"

historyRecords: Integer or Number

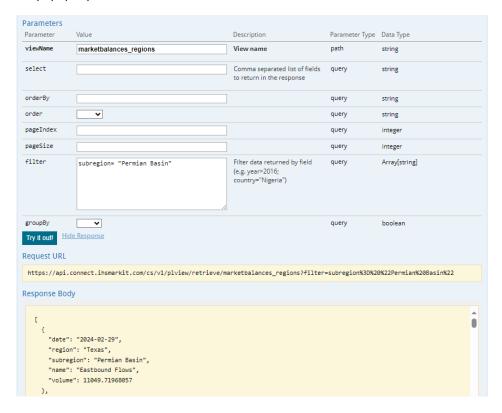
Any Id parameter: Integer or Number

pageIndex: Integer or Number of the page you'd like to look at

pageSize: Integer or Number of how many rows of data per page you'd like.

#### **PointLogic Views**

Filters are dependant on what the outputs for a specific view are, but they all use the same arguments of =, >, <, >=, or <=

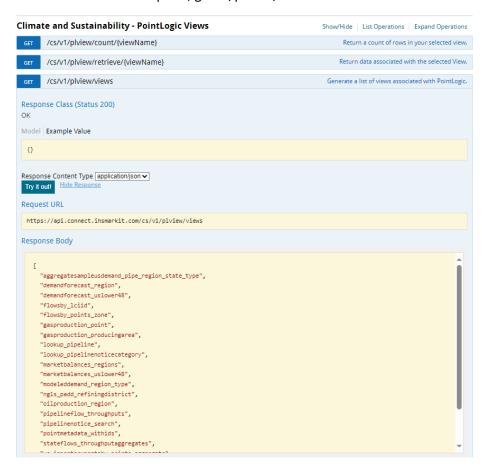


## PointLogic Views Endpoints

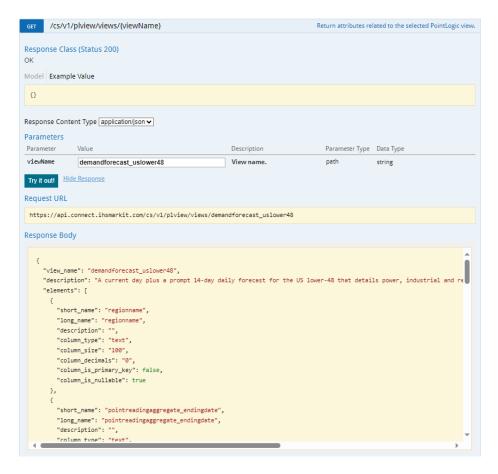
PointLogic Views are prepared reports that have a rolling number of days included.

Climate and Sustainability - FastLMP	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - Gas Markets - beta	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - Investing in Energy - beta	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - LNG Analytics	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - LNG Markets	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - North America Power Analytics - beta	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - PointLogic	Show/Hide   List Operations   Expand Operation	
Climate and Sustainability - PointLogic Views	Show/Hide   List Operations   Expand Operation	
GET /cs/v1/plview/count/{viewName}	Return a count of rows in your selected view	
GET /cs/v1/plview/retrieve/{viewName}	Return data associated with the selected View.	
GET /cs/v1/plview/views	Generate a list of views associated with PointLogic	
GET /cs/v1/plview/views/{viewName}	Return attributes related to the selected PointLogic view	

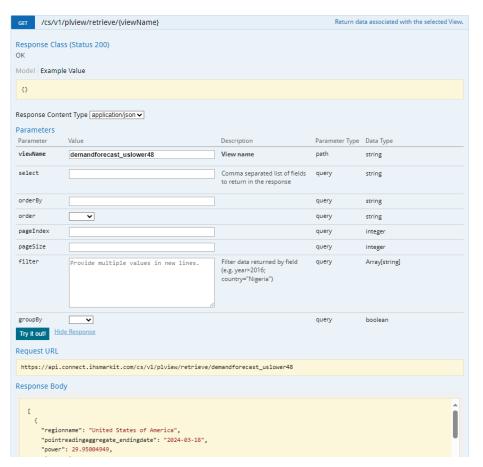
#### To view a list of these reports, go to /plview/views



To view a description of the report, use /plview/views/{viewName} with the name of the report you want to look at.



## To retreive the data, use plviews/retrieve/{viewName}



## PointLogic Lookup Endpoints

In PointLogic, instead of using words to show or filter, parameters use an Id for values like States, Region, PipelineId, and many more. You'll find these Id's in the PointLogic/lookup. Some lookups require other lookup values to return the values.

Climate and Sustainability - PointLogic	Show/Hide   List Operations   Expand Operations
GET /cs/v1/pointlogic/lngFlowByFacility	LNG activity by facility
GET /cs/v1/pointlogic/lookup_county/{stateId}	Gets list of counties for the state.
GET /cs/v1/pointlogic/lookup_facility/{pointTypeId}	Gets list of facilities for particular type.
GET /cs/V1/pointlogic/lookup_pipeline	Gets list of active pipelines.
GET /cs/v1/pointlogic/lookup_pipelineNoticeCategory	Gets list of pipeline notice categories.
GET /cs/v1/pointlogic/lookup_point	Gets list of points per criteria.
GET /cs/v1/pointlogic/lookup_pointStatus	Gets list of point statuses.
GET /cs/v1/pointlogic/lookup_pointType	Gets list of point types.
GET /cs/v1/pointlogic/lookup_region	Gets list of regions.
GET /cs/v1/pointlogic/lookup_state	Gets list of US states.
GET /cs/v1/pointlogic/lookup_subregion/{regionId}	Gets list of subregions for a region.
GET /cs/v1/pointlogic/production/naturalGas	Modeled Production - Natural Gas
GET /cs/v1/pointlogic/production/oil	Production Data - Oil
GET /cs/v1/pointlogic/regionalFlows/pipelineSummary	Subregion flows by pipeline
GET /cs/v1/pointlogic/regionalFlows/regionSummary	Region to region summary flows
GET /cs/v1/pointlogic/sectorDemand	Sector-level Demand by Geography
GET /cs/v1/pointlogic/shortTermOutlook/annual	Short-Term Outlook annual
GET /cs/v1/pointlogic/shortTermOutlook/monthly	Short-Term Outlook monthly
/cs/v1/pointlogic/shortTermOutlook/seasonal	Short-Term Outlook Seasonal
сы /cs/v1/pointlogic/supplyDemand/marketsHistory	Gets supply and demand history for Lower 48 markets

## PointLogic Endpoints

#### Market Balance

A rolling 21 day accounting of all the supply and demand elements pertaining to the lower 48 or a region. Volumes are expressed as million cubic feet per day (MMcf/d).

116.58

13.40

6.05

0.13

34.36

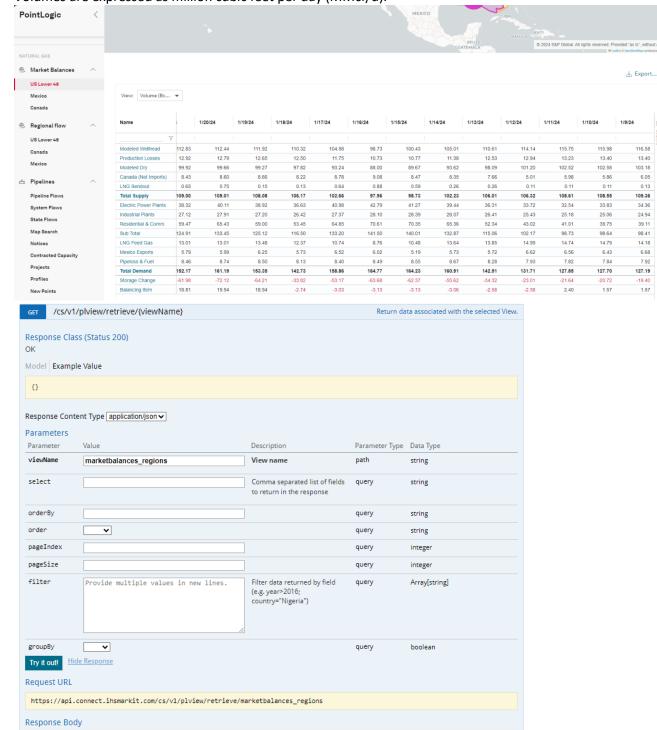
24.94

98.41

14.18

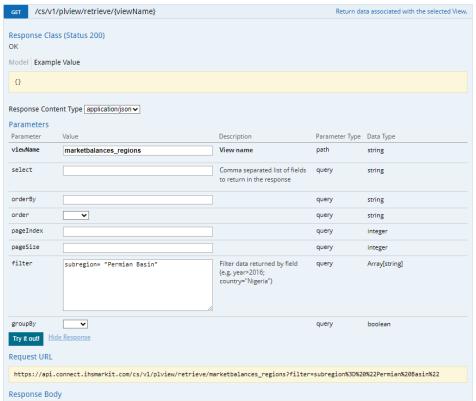
127.19

1.57



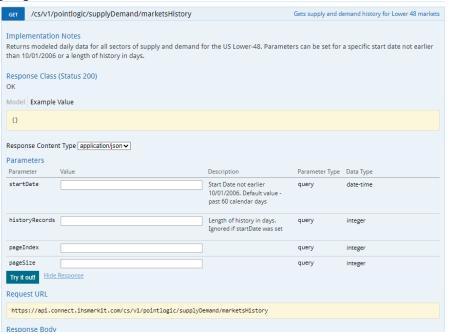
https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/marketbalances uslower48 https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/marketbalances regions

## Example:



https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/marketbalances\_regions?filter=subregion%3D %20%22Permian%20Basin%22

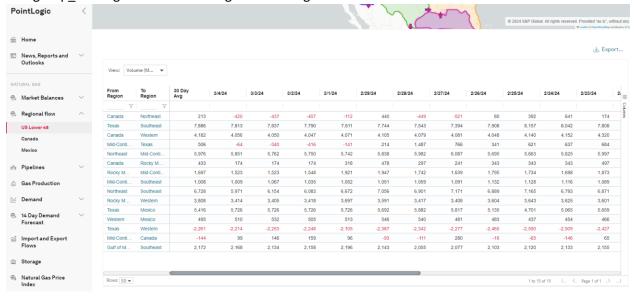
For a historical pull, you can find Market Balance History at pointlogic/supplyDemand/marketHistory, going back till 2006.

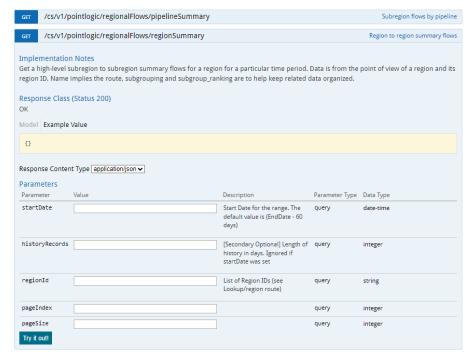


https://api.connect.ihsmarkit.com/cs/v1/pointlogic/supplyDemand/marketsHistory

#### **Regional Flow**

Get a summary of the flows between subregions in a region for a specific time period. The data is presented from the perspective of the region and its region ID. The terms "name," "subgrouping," and "subgroup\_ranking" are used to categorize and organize related data.



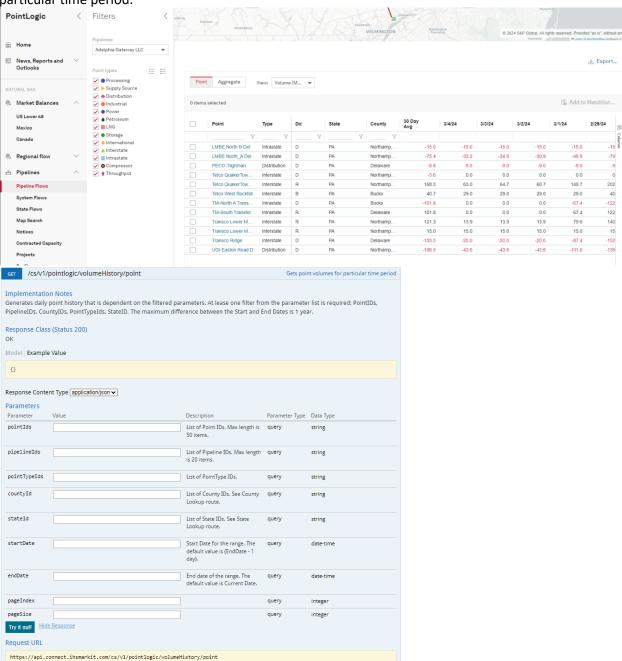


https://api.connect.ihsmarkit.com/cs/v1/pointlogic/regionalFlows/pipelineSummary
https://api.connect.ihsmarkit.com/cs/v1/pointlogic/regionalFlows/regionSummary

#### **Pipelines**

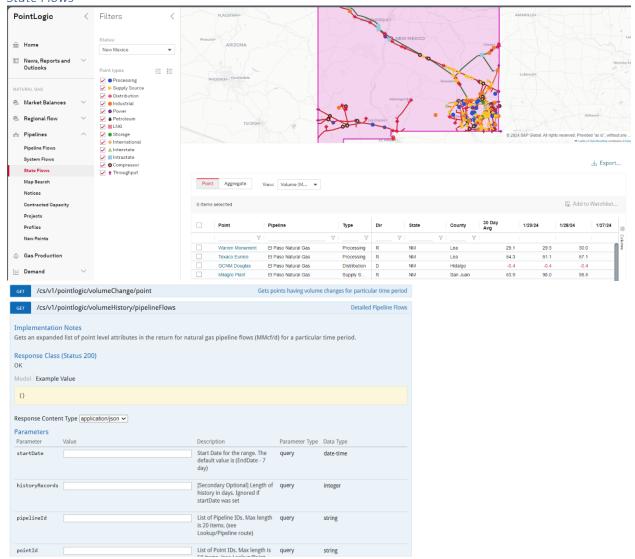
#### Pipeline Flows

Gets an expanded list of point level attributes in the return for natural gas pipeline flows (MMcf/d) for a particular time period.



https://api.connect.ihsmarkit.com/cs/v1/pointlogic/volumeHistory/point https://api.connect.ihsmarkit.com/cs/v1/pointlogic/volumeHistory/point?startDate=2024-01-01

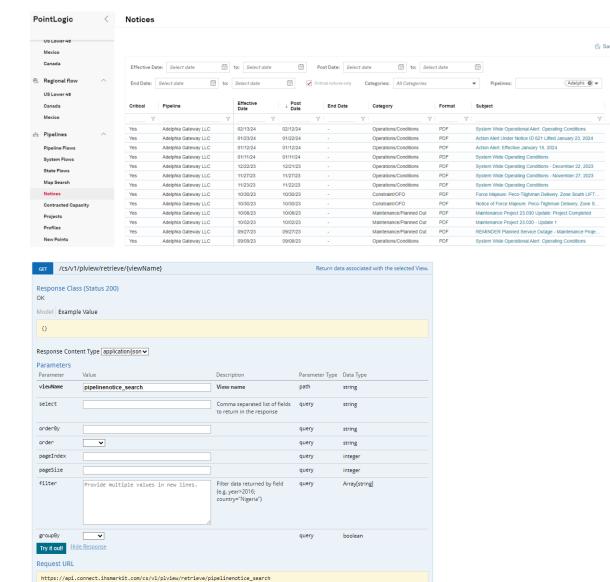
#### State Flows



https://api.connect.ihsmarkit.com/cs/v1/pointlogic/volumeHistory/pipelineFlows?stateId=4549

#### **Notices**

This is a database of natural gas pipeline notices that covers the period from the current day to late-March 2016. Each notice includes important information such as the subject, format, post date, external ID, category ID, end date, critical notice designation, content link, notice ID, pipeline ID, and effective date. You can access the actual notice text through a unique content link URL, which contains an exact copy of the text as it was posted at the time.

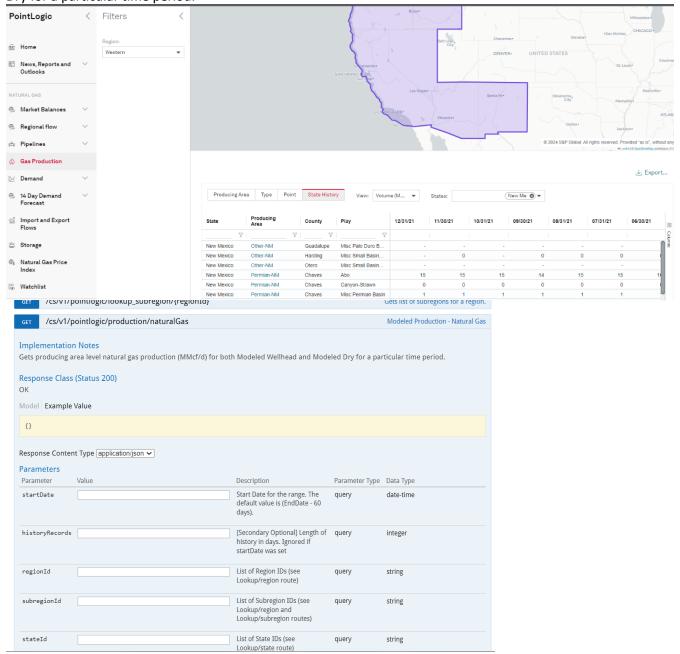


https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/pipelinenotice\_search

https://api.connect.ihsmarkit.com/cs/v1/pointlogic/lookup\_pipelineNoticeCategory

#### **Natural Gas Production**

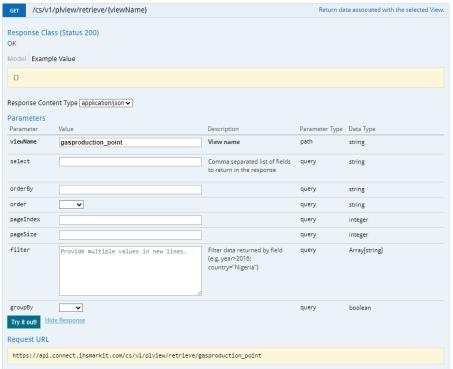
Gets producing area level natural gas production (MMcf/d) for both Modeled Wellhead and Modeled Dry for a particular time period.



https://api.connect.ihsmarkit.com/cs/v1/pointlogic/production/naturalGas?stateId=4549

#### **Gas Production by Point**

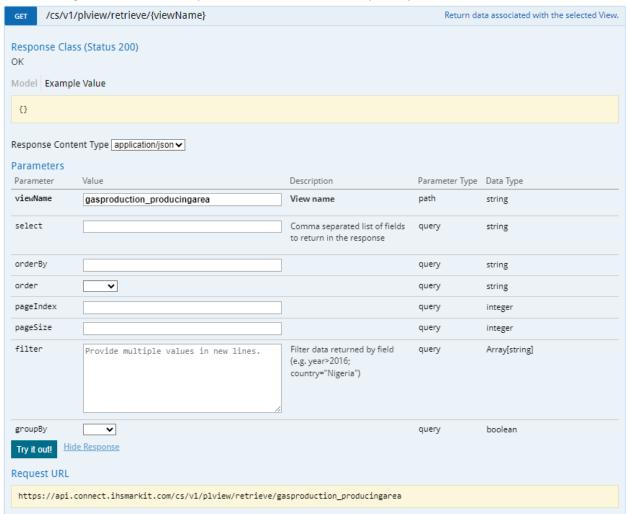
A rolling 31 day accounting of all supply and gas processing plant point types within PointLogic's production sample. The data is organized by report date, production date, LCI ID, point name, volume, pipeline name, producing area name, state, county, point type, direction, point design capacity and DRN number. Volumes are expressed as million cubic feet per day (MMcf/d).



https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/gasproduction point

#### **GasProduction by Producing Area**

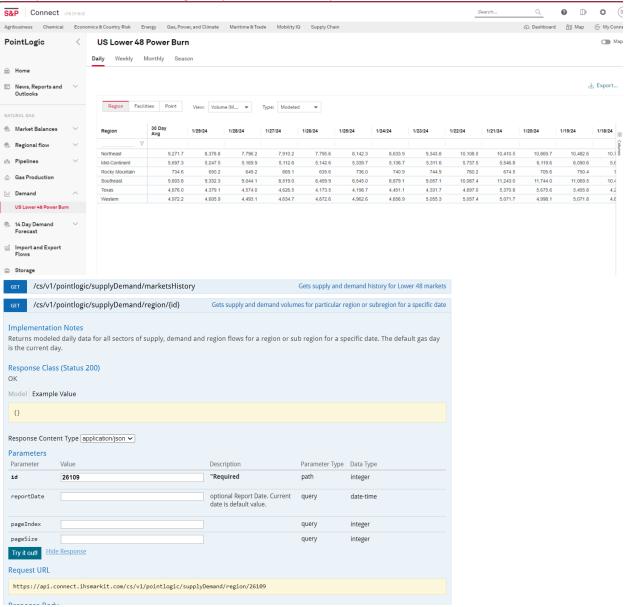
A rolling 31 day accounting of modeled natural gas production at a wet gas (wellhead) value and dry gas value (pipeline grade). The modeled production is aggregated by producing area and their respective state and region. Volumes are expressed as million cubic feet per day (MMcf/d).



https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/gasproduction\_producingarea

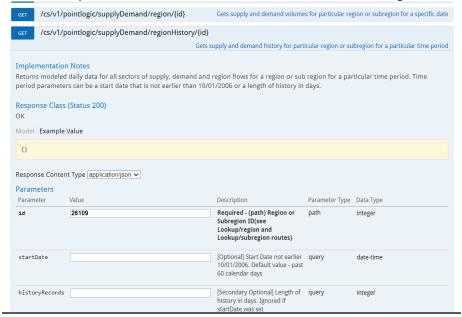
#### **Demand**

Returns modeled daily data for all sectors of supply, demand and region flows for a region or sub region for a specific date. The default gas day is the current day.



https://api.connect.ihsmarkit.com/cs/v1/pointlogic/supplyDemand/region/26109

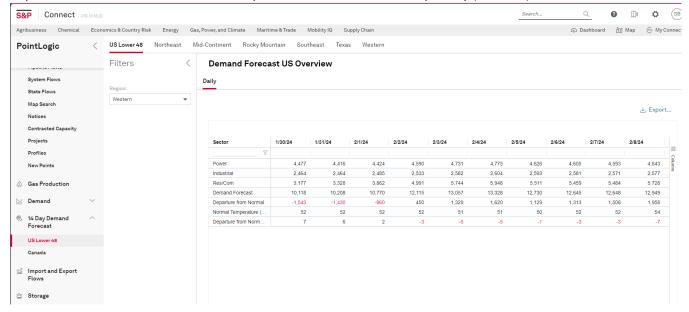
Returns modeled daily data for all sectors of supply and demand for the US Lower-48. Parameters can be set for a specific start date not earlier than 10/01/2006 or a length of history in days.



https://api.connect.ihsmarkit.com/cs/v1/pointlogic/supplyDemand/regionHistory/26109

#### **Demand Forecast**

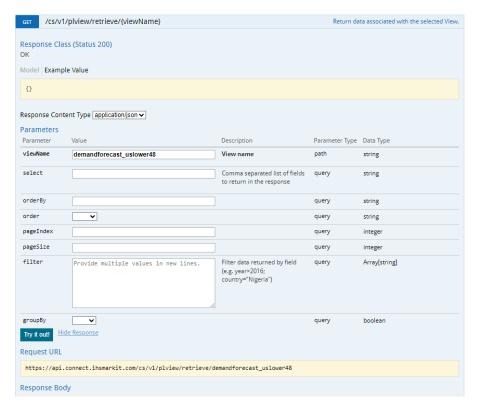
A current day plus a prompt 14-day daily forecast by region and sub region for power, industrial and residental/commercial demand. It also includes population-weighted regional temperatues and departures from normal. Volumes are expressed as million cubic feet per day (MMcf/d).





https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/demandforecast\_region

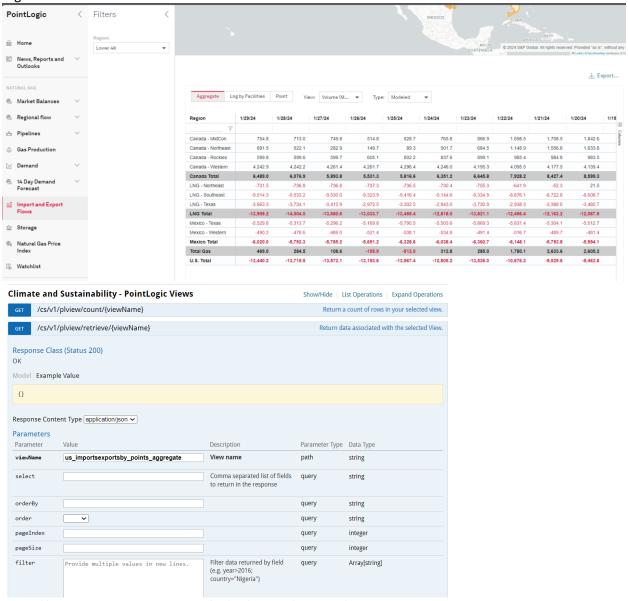
A current day plus a prompt 14-day daily forecast for the US lower-48 that details power, industrial and residental/commercial demand. Volumes are expressed as billion cubic feet per day (Bcf/d).



https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/demandforecast\_uslower48

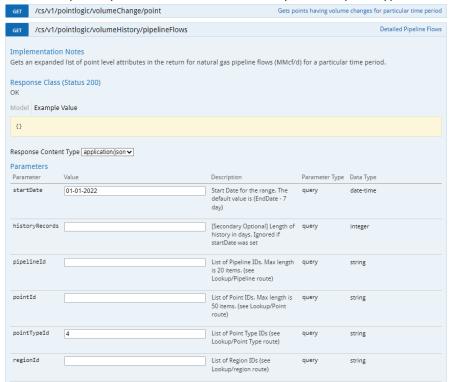
#### **Import and Export Flow**

Contains Import/Export volumes including run date, flow date, volume, point name, pipeline name, ledger side, state, county, type, point group name, district name, and an aggregate subtotal for each region.



https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/us\_importsexportsby\_points\_aggregate

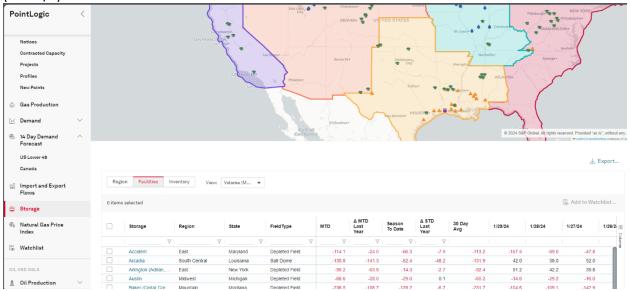
#### In order to pull Import data from VolumeHistory, use the pointTypeId = 4



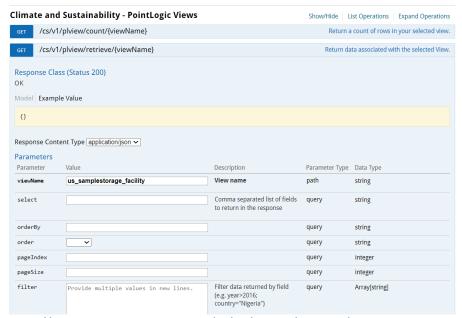
 $\frac{https://api.connect.ihsmarkit.com/cs/v1/pointlogic/volumeHistory/pipelineFlows?startDate=01-01-2022\&pointTypeld=4$ 

#### Storage

A daily sample of natural gas storage facility activity spanning current day up to 122 days back. The data return is organized by report date, flow date, field name, EIA region, state, field type and volume (MMcf/d).



To receive a 122 historical sample of Natural Gas storage facility activity

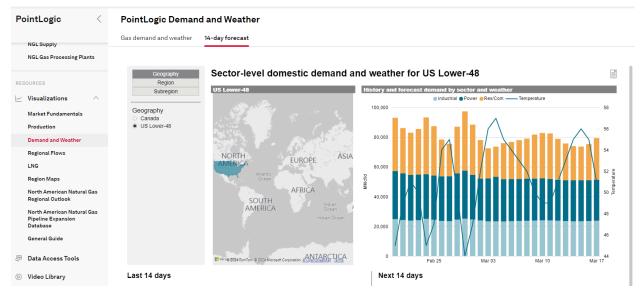


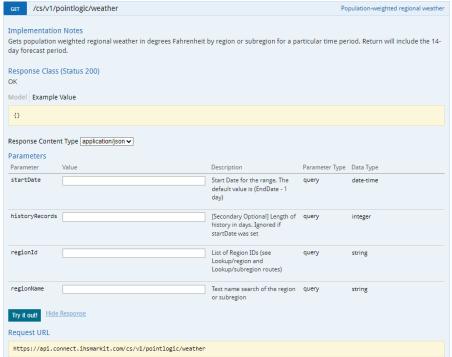
https://api.connect.ihsmarkit.com/cs/v1/plview/retrieve/us samplestorage facility

To retreive longer historical Natural Gas storage facility activity data, export the full history from the Connect Page above.

#### Weather

Gets population weighted regional weather in degrees Fahrenheit by region or subregion for a particular time period. Return will include the 14-day forecast period.

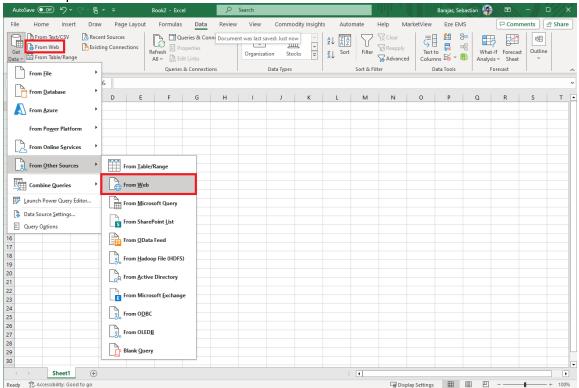




https://api.connect.ihsmarkit.com/cs/v1/pointlogic/weather

## Establishing Initial Connection via Excel and PowerBI

- Open Excel, in the ribbon at the top of the screen, click the "Data" tab.
- Click the "Get Data" button (depending on version, likely on the left side of the ribbon)
- In the dropdown select "From Other Sources" and then "From Web"

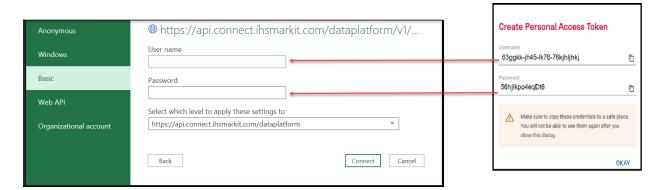


- Enter your chosen URL in the URL window and click OK.
  - The URL you create forms the data query that you request from the API.
  - This is detailed in the chapter above "PointLogic Data in the User Interface and Their Corresponding API Endpoint".

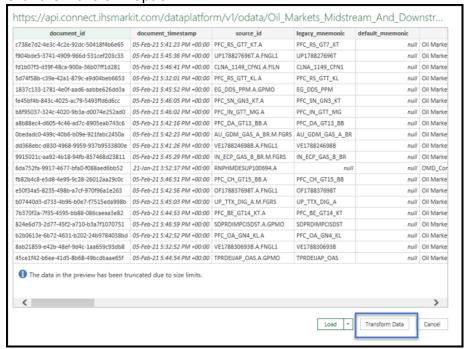


- When running the API in Excel for the first time (i.e., when first following the steps above), you will see a password request window see screenshot below.
- Select "Basic"
- Enter your username and password that you obtained through PAT and click Connect.

Should your credentials expire or are regenerated over time, you will simply be prompted
to enter your password again in the same way. (This password and username are cached
by Excel, and will not to be entered again unless the above mentioned happens)

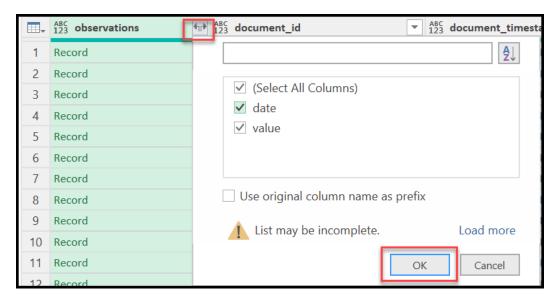


- This will open a new preview window for your data.
- Click the Transform option.

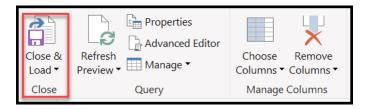


- Clicking transform will open the Power Query Editor window.
- Find the "Observations" column, click the double arrow icon in the header to expand the data and click OK.
  - o This will ensure that the correct attributes show in full for your data.
  - This will also record this action as a step to apply when refreshing your data.
    - "Expand" will appear in the "Applied Steps" section of Power Query
    - Thus, you only need to carry out this expand step once when creating your query – Power Query will record this for you as an action to complete automatically in any subsequent refresh of your data within Excel.

■ Note – if you are running a "full" data query and select to receive data fields whose entries are based on dictionaries or collections (explained in the queries section of this manual below – but including product, concept, etc), you should also expand these fields at the same time.



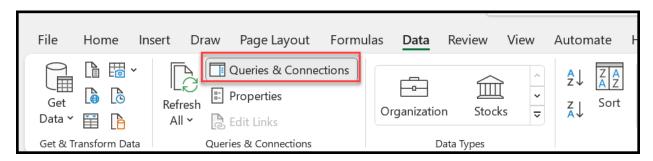
Once complete, click the "Close and Load" button.



Your data will be delivered to you in a standard Excel table.

Your API data pull will now exist in your Excel data file as a Power Query, and you can easily refresh this whenever needed:

- Open your Excel file, click the "Data" tab of the ribbon and "Queries and Connections".
- This will open the Queries and Connections window you will see your query listed.
- Click to "Refresh" and the dataset will automatically update.

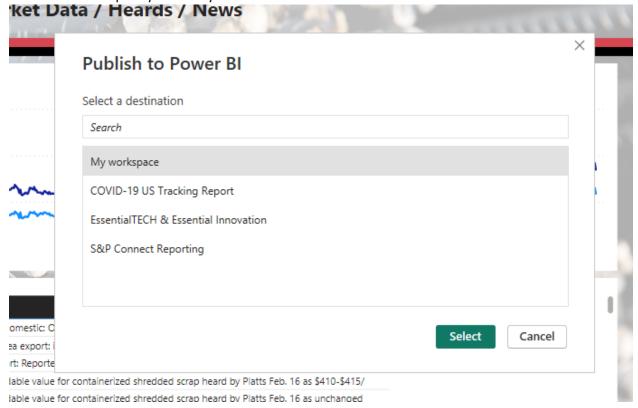


#### Create Auto Refresh in PowerBI Service

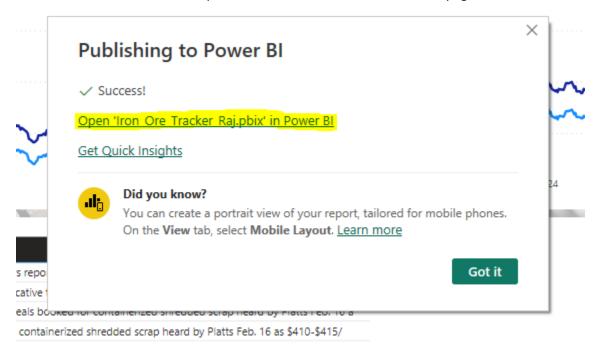
1. Click on the Publish button on the top right



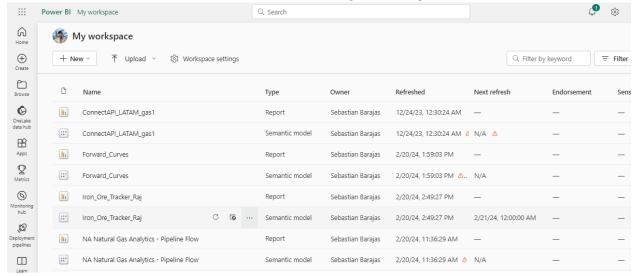
2. Choose the workspace you'd like your Power BI dashboard to be in



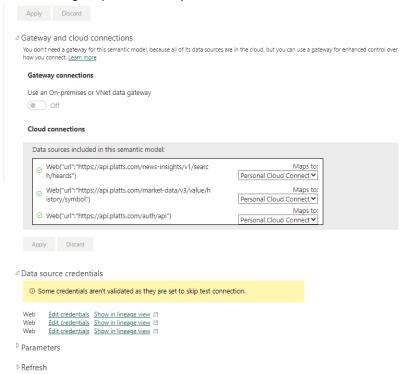
3. Once the Dashboard has been uploaded, follow the link to the Power BI page



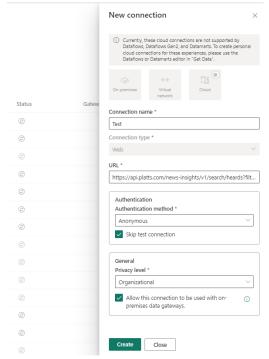
4. Go to the Workspace you placed the Dashboard in. Power BI Service creates an item for the Dashboard Visuals and Data. Click on the 3 dots ( ... ) and go to Settings



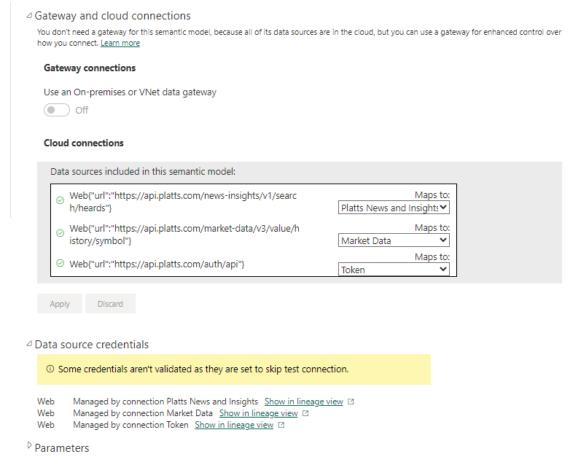
5. In the settings, Open "Gateway and cloud connections" and "Data source credentials"



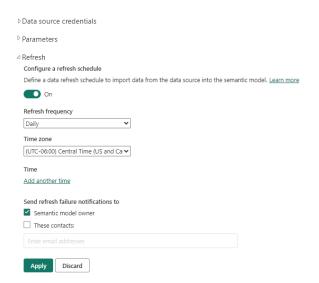
6. In Power BI Service, each API endpoint needs a profile and then set up their Auto Refresh. One by one, click on the drop down and select "Create a connection". Give the connection a name, typically the name of the API endpoint is used (Market Data, Tokenization, News and Insights). Be sure to Select Anonymous in Authentication method and check both boxes before Creating the profile.



- a. For ConnectAPI connections, set the "Authentication method" to "Basic Auth"
- 7. Repeat the steps for each API endpoint and be sure to select them in the drop down. Once all the profiles have been chosen, select Apply. This will also adjust the "Data source credentials" to show that the connection is managed by the profile.



8. Below, there's the Refresh drop down. Here you can set up the frequency of the updates, who receives notifications and the timing. Turn it on with the switch at top and click Apply at the end when you've set it up.



9. Once the refresh has been set up, you'll notice a date and time for the next Refresh. If at any point you change your Platts Password or API key, you'll need to recreate the settings in Power BI and publish it again.

