



NOVEMBER 2022

AVEVA World 2022

Presenter, Kenneth Guidry

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- How bp use AVEVA PI products today

- Production and Operations
- Manufacturing and Refining
- bp Onshore Wind
- BPX Energy

- How bp leverage AVEVA PI products as a data enabler

- Production Management Unit (PMU)
- CO2 modeling use case
- bp digital twin

- Questions and thank you



How bp use AVEVA PI products today

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bp approximate usage of AVEVA PI products



Business areas

4

PI servers

60+

PI interfaces

318+

PI tags

3.9m+

PI AF analyses

187k+

PI Vision analytics

12.5k+



bp usage of AVEVA PI products



- Production and Operations
- Refining
- bp Onshore Wind
- BPX Energy



BPX Energy

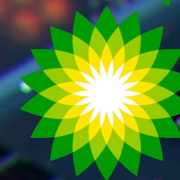
Video

BPX is currently **modernizing and upgrading** their infrastructure.

Watch this video to hear what they are doing from **Steven Boor**, Midstream developer engineer.

The logo for BPX Energy is displayed in a white rectangular frame against a green background. The text "bpx energy" is written in a lowercase, sans-serif font. The letters "b", "p", and "e" are green, while the "x" is yellow.

bp



How bp leverage AVEVA PI products as a data enabler

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Usage of AVEVA PI products - Production Management Unit (PMU)

Objective: To deliver a data model that **enables PMU engineers to find and trend relevant equipment and sensor data within 30 seconds**, regardless of site/system familiarity and with easy-to-understand descriptions

Value: Searchable attributes that have been added to both the equipment and sensor records will allow end-users to have **access to consolidated, trusted data to make decisions**.





Successful CO₂ modeling use case

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bp's commercial modeling of CO₂ emissions in refinery operations using AVEVA Unified Supply Chain



Modelling CO₂ emissions to help drive reductions

- Adding CO₂ modeling capabilities into existing AVEVA Unified Supply Chain solution built on the existing strong co-innovation partnership. This enables bp to better understand the options that could potentially reduce CO₂ emissions within each of its refineries.
- bp introduced the enhancements to its AVEVA Unified Supply Chain solution running across seven refineries, taking only weeks to complete. AVEVA's solution models CO₂ emissions from the consumption of energy used to power the plants, and from the refinery operations themselves, using the data to build a pattern-based model of CO₂ emissions. This integrated model enables bp's teams to understand and evaluate the impact of CO₂ emissions for different scenarios.

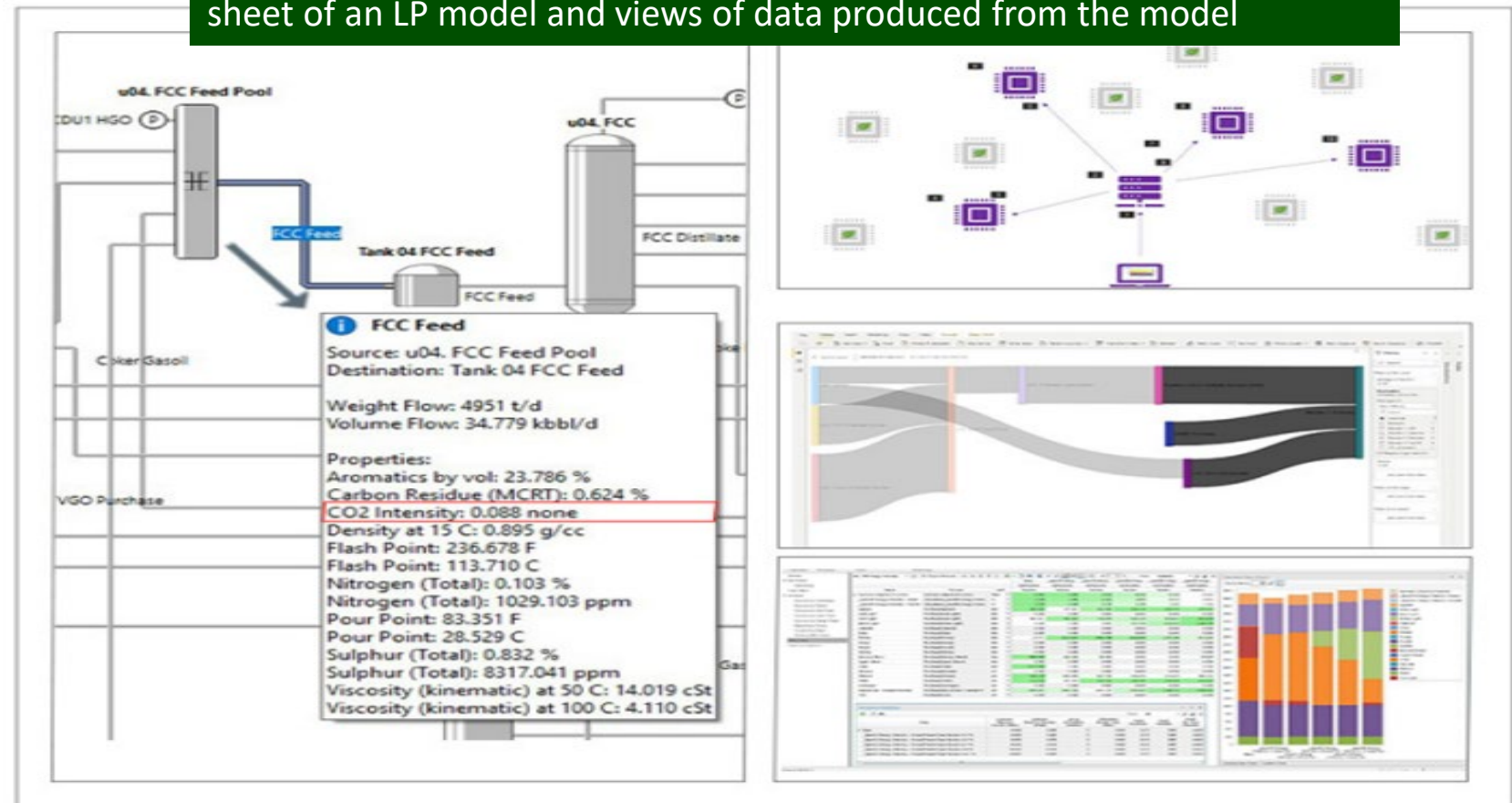
[bp sets up CO₂ emission commercial modeling for refinery operations using AVEVA supply chain optimization](#)

bp's commercial modeling of CO₂ emissions in refinery operations using AVEVA Unified Supply Chain



Screenshot from Unified Supply Chain Software – there is a graphical flow sheet of an LP model and views of data produced from the model

Finding the most profitable and green scenario with fast, comprehensive results and rapid interpretations.





“We’ve seen the commercial benefit from our cloud-based AVEVA Unified Supply Chain solution – improved margins, and faster data access and decision-making in our refineries – by modeling and optimizing our downstream value chain. We recognized that we could gain further value from our solution by introducing a CO₂ layer to model emissions”

Richard Goddard, commercial tools and development manager, bp



BP ACE

bp digital twin summary

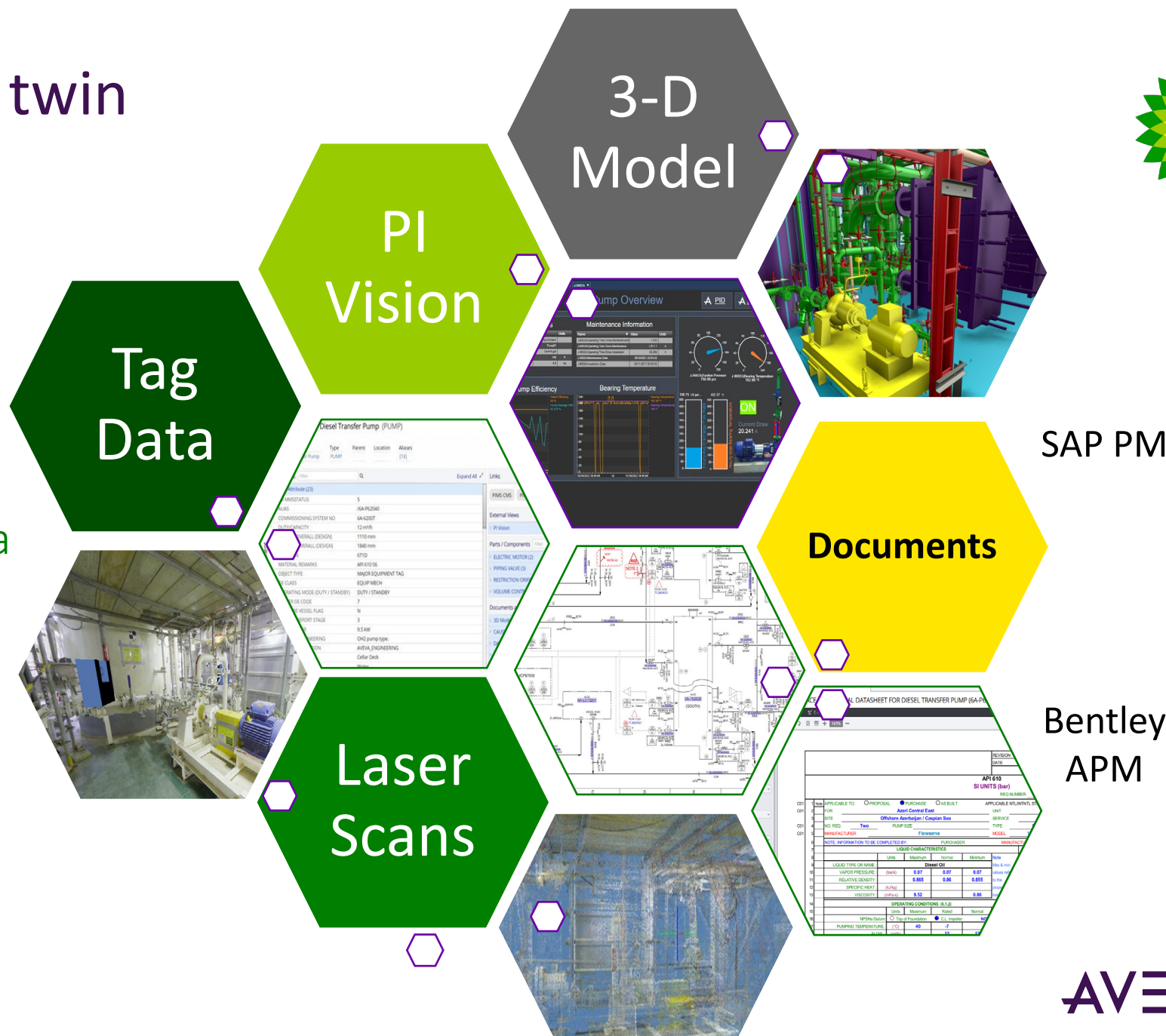
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AVEVA AIM digital twin



All in a single connected environment accessed via a standard web browser



Azeri Central East Digital Twin





Kenneth Guidry

Product Manager

- I&E DPM - Production & Projects Digital Portfolio Delivery
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bp team in attendance at conference

Refining



Susanna Wong
Senior process engineer,
& product owner - AIMS



Richard Goddard
Commercial tools support &
development manager – CO2
modeling

Productions & Operations



Casey Denny
RTPA, product owner
– unit analytics

BPX Energy



Steven Boor
Midstream developer



John Burroughs
Field data manager

bp Onshore Wind



Chris Lohner
Senior application engineer

bp team not in attendance

Sammie Ross
Real time staff data manager

Christina Gonzales
PMU acceleration project delivery lead

Brian Grant
Project information manager – ACE
digital twin

Questions?

Please wait for the microphone.
State your name and company.



Please remember to...

Navigate to this session in the mobile app to complete the survey.



Thank you!