

Austin Energy Operational Update Q4 FY19

Austin Energy Utility Oversight Committee – November 2019

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Austin Energy Operational Update

Discussion Topics



Safety

Performance



Carbon Footprint

Power Production



On-Site Energy
Resources

Future State



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Safety



Safety

Data	Q3 FY19 (4/19 – 6/19)	Q4 FY19 (7/19 – 9/19)	
Total Near Misses	14	7	↓
Total Injuries	10	18	↑
Total Recordable Cases	5	13	↑
Total Vehicle Accidents	16	16	—



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Performance



Commercial Availability & Start Success

Commercial Availability

Generation Resource	Target Seasonal Commercial % Availability (Jul-Sep)	Commercial Availability Actuals (%)	
		Q3 FY19 AVG	Q4 FY19 AVG
Decker Steam Units	95	67.4	66.3
Sand Hill Combined Cycle	95	72.9	99.8
Fayette Units	97	89.5	98.9
South Texas Project	100	100	100

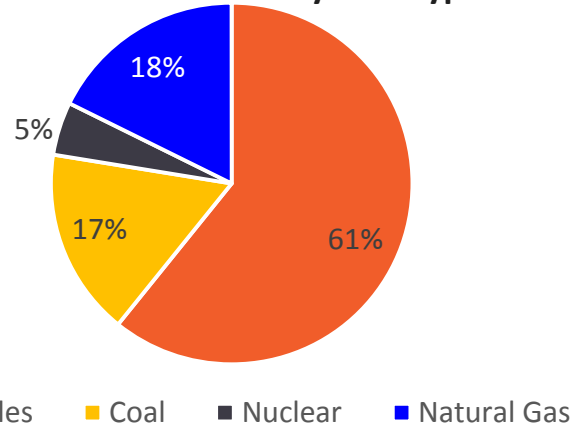
Start Success

	Start Success Target(%)	Start Success Actuals (%)	
		Q3 FY19 AVG	Q4 FY19 AVG
Simple Cycle Start Success	99	100	100



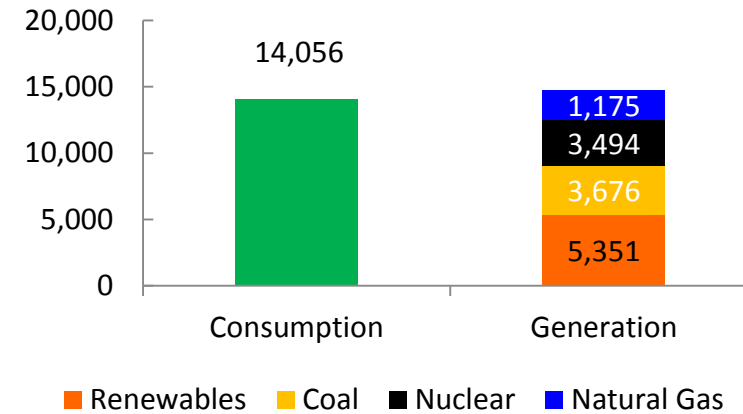
Net Generation and Load Analysis FY 2019 Q4

Power Generation Cost by Fuel Type

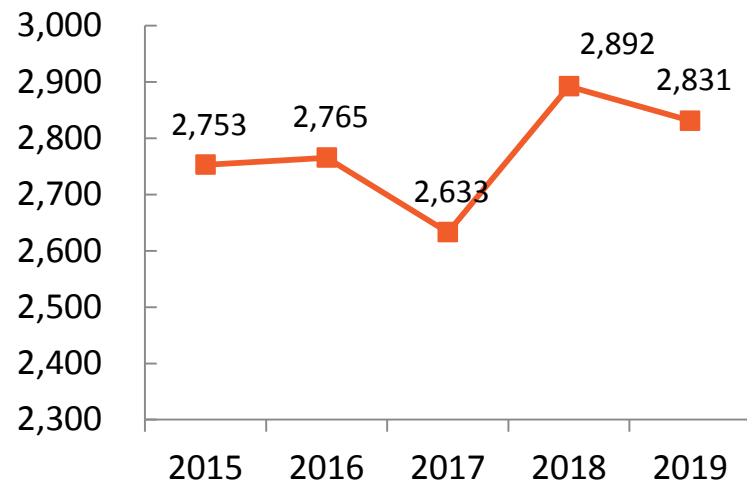


**Costs include fuel for generation, fuel transportation, renewable Power purchases agreements*

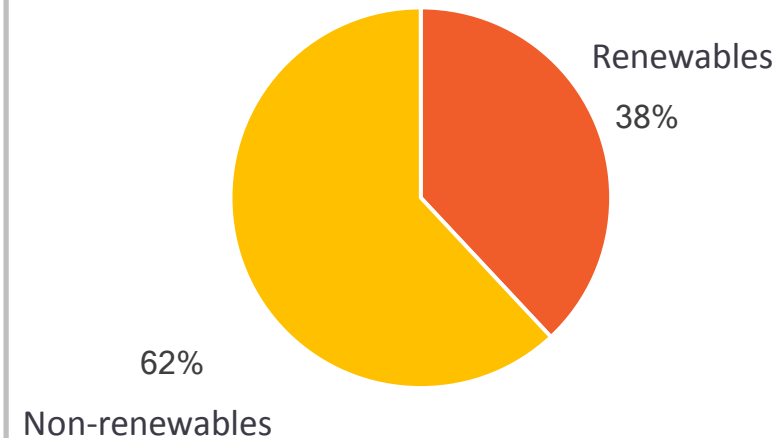
Consumption vs. Generation (GWh)



Historical FY Q4 System Peak Demand (MW)



Renewable Power as Percent of Consumption



System Reliability

CAIDI = Customer Average Interruption Duration Index

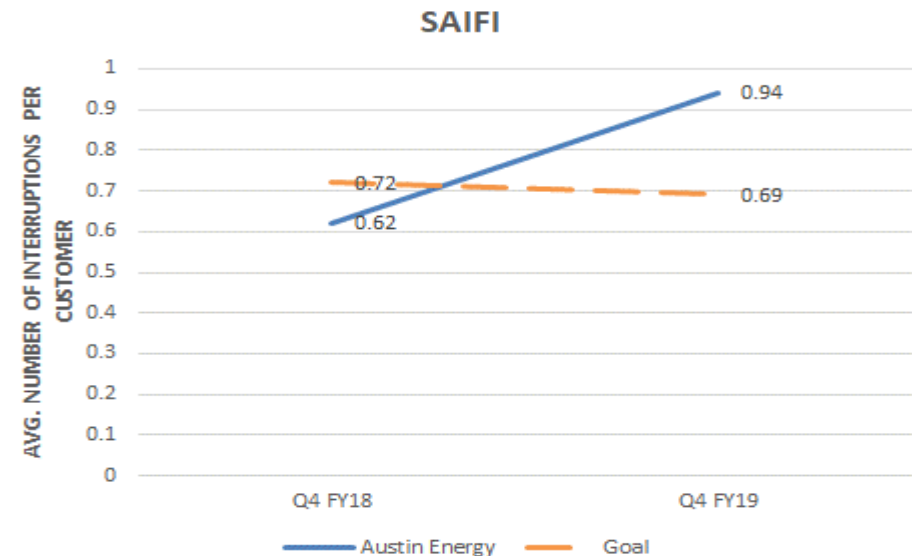
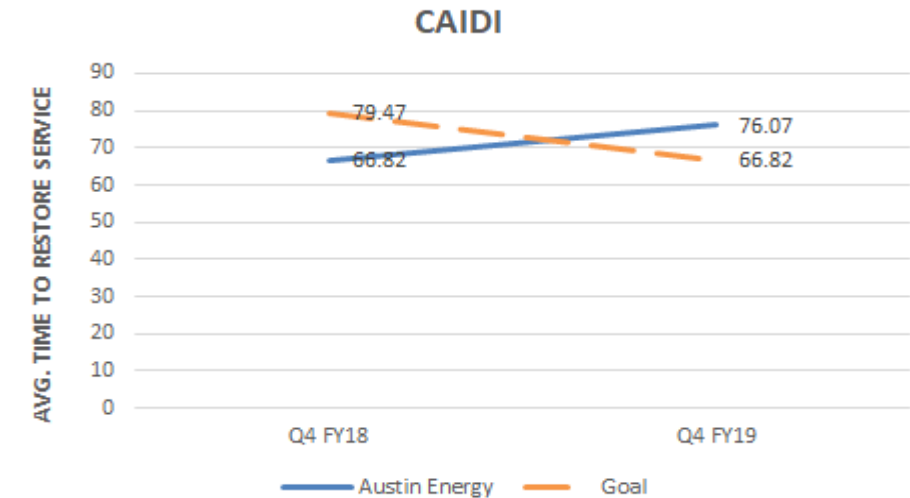
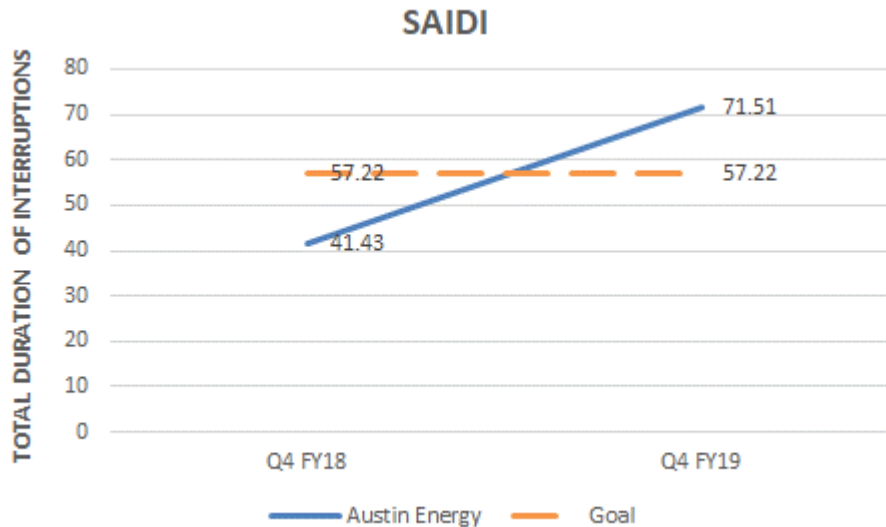
Average time to restore service.

SAIDI = System Average Interruption Duration Index

Total duration of interruptions for the average customer, during a period of time.

SAIFI = System Average Interruption Frequency Index

How often the average customer experiences a sustain interruption, over a period of time.

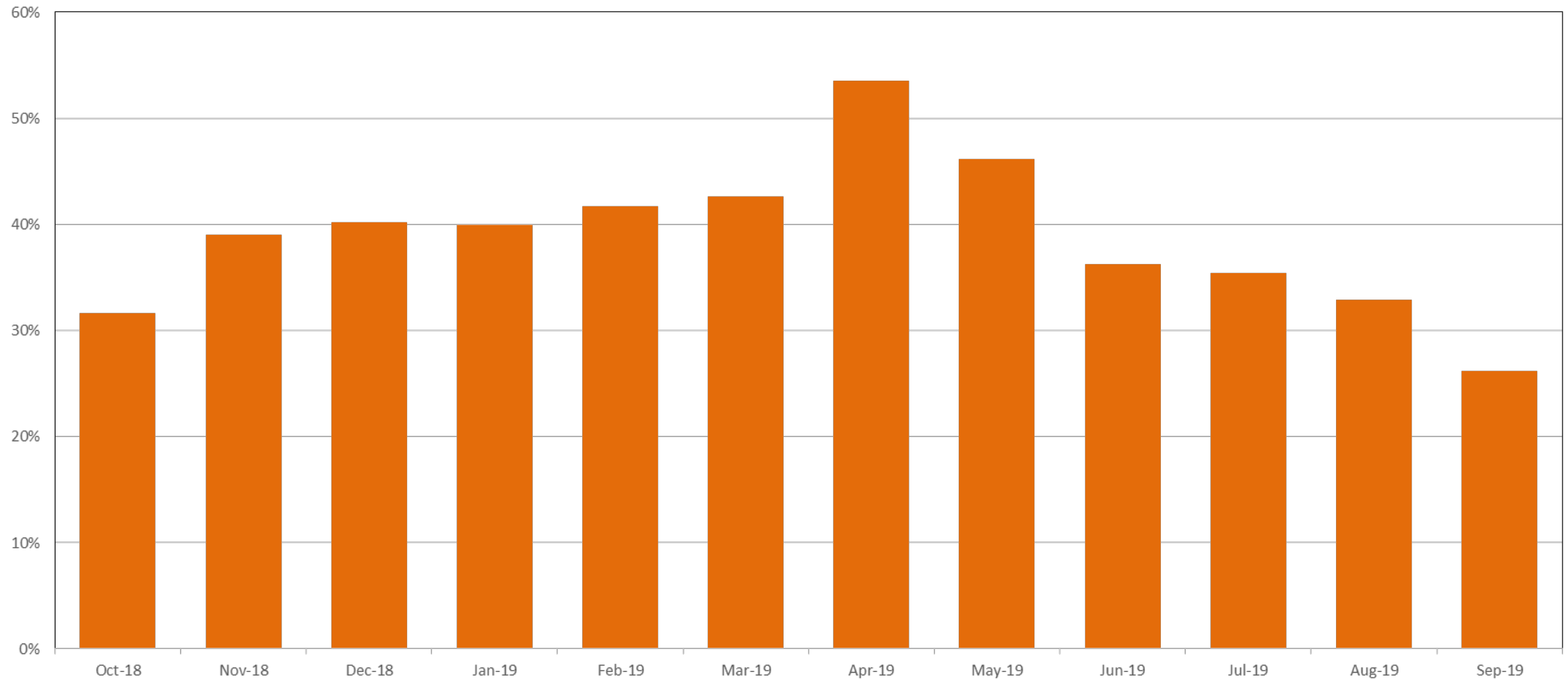


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Carbon Footprint



Renewable Generation as a Percentage of Load



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Power Production & OSER



Key On Site Energy & Power Production Activities

District Cooling Plant #3 (Downtown, Crescent Tract)

Adding 10,000 tons of chiller capacity in the Downtown System

- **Contractor continues to make progress in the erection of the chiller and cooling tower buildings and has procured long lead mechanical and electrical equipment.**
- **On-Target for August 2020 completion**

Austin Community College Highland Campus

Constructing a 6,000 ton chiller plant with thermal energy storage tank and Chemical storage shed

- **Building Shell is in progress and to be complete 1/8/2020**
- **Construction start date is scheduled for 1/9/2020**
- **On-Target for spring-2021 completion**

NEW PROJECT:

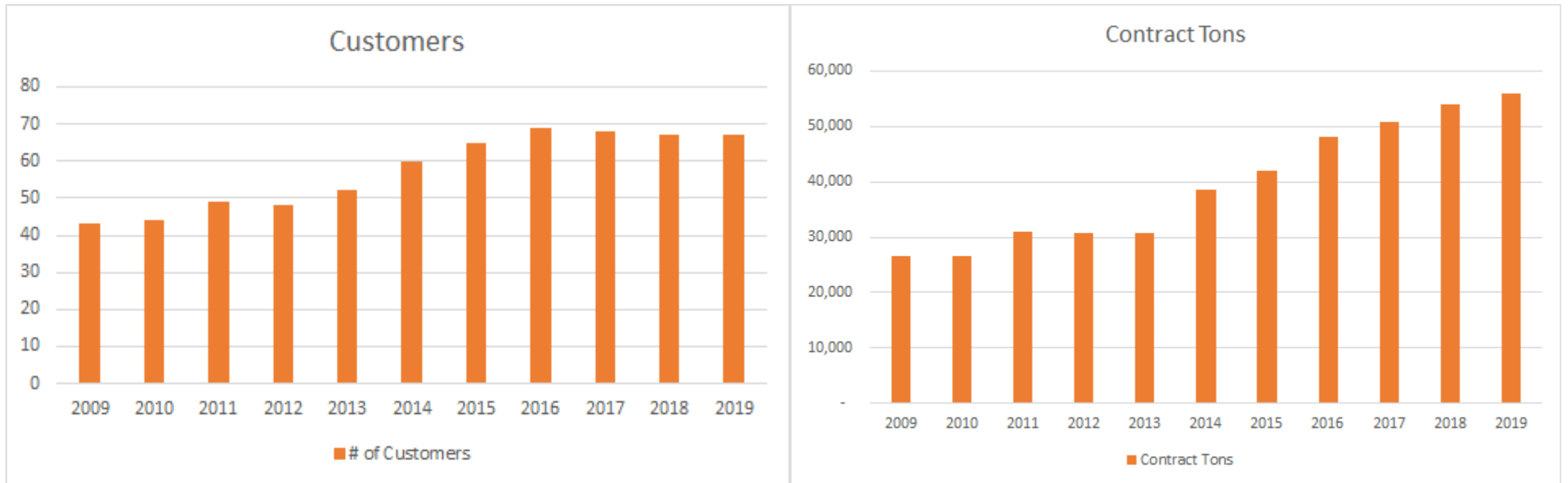
District Cooling Plant #4 (Downtown, Convention Ctr.)

Constructing a 3,000 ton chiller on roof of Convention Center

- **Targeted for Q2 2020 completion**



District Energy and Cooling Business Growth



We currently have 67 total customers (including City Hall and the new library) with over 20 million square feet of conditioned space (more than 7X the Empire State Building).



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Future State



Our Focus

Our Customers (improving reliability and connectivity)

- ↑ AMI Upgrades (Residential & Commercial Meters)
- ↑ Small Cell Deployment
- ↑ Customer Reliability Assessments

Our Community (ensuring the resiliency of the system)

- ↑ Repowering Downtown
- ↑ Bluff Springs Substation
- ↑ 69 to 138kV Conversion

Environmental (reducing our carbon footprint)

- ↓ Reducing our fossil fuel
- ↑ Expanding Renewable Portfolio

Grid Modernization (innovating to a smart future)

- ↑ SHINES Deployment
(Sustainable and Holistic Integration of Energy Storage and Solar PV)
- ↑ Advanced Metering Infrastructure
- ↑ Grid Automation
- ↑ Distributed Energy Resource Integration
- ↔ Asset Management

