PARTNER CASE STUDY

Sponsored by: AWS

Accenture and AWS are partnering to provide public sector organizations access to the same sustainability solution powering the "greening" of Amazon facilities, enabling sustainable modernization, reducing consumption, improving operational efficiencies, and driving environmental impact in government.

AWS Platform Enabling Sustainability in Government with the Help of Accenture

September 2023

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PARTNER SNAPSHOT

PARTNER:

Accenture is a global professional services provider specializing in information technology (IT) services and consulting.

- **Head office:** Dublin, Ireland; U.S. headquarters: Chicago, Illinois
- **Employees:** 700,000+
- **Sustainability focus:** Sustainable technology, net-zero energy transition, responsible supply chain, and sustainability measurement, analytics, and performance
- **Sustainability awards:** CDP Climate Change Leadership Brand (8 years), Dow Jones Sustainability Index North America (since 2005), 3BL Media's 100 Best Corporate Citizens (12 years in a row), and Ethisphere World's Most Ethical Companies (15 years in a row)

AWS RELATIONSHIP:

- 30+ AWS-awarded competencies and service delivery designations
- Accenture AWS competencies: Data and analytics, DevOps, life sciences, mobile, SAP, migration, government, financial services, IoT, security, Microsoft workloads, machine learning, industrial software, public safety and disaster response, and retail
- 40,000 AWS-trained employees with over 30,000 AWS certifications
- Key AWS solution areas: Cloud transformation, customer engagement, data and analytics, security, Industry X.0, cloud managed services, artificial intelligence, modernization, and sustainability

WHY PARTNER WITH AWS:

- Demonstrated success in sustainably modernizing Amazon buildings globally
- Substantial experience with sustainability in the cloud, net-zero energy transition, responsible supply chain and sustainability metrics, analytics, and performance
- Achieving sustainability built in by design, rather than bolted on
- Highly differentiated joint and aligned partnership with AWS

Situation Overview

As countries across the globe signed the Paris Agreement, which is meant to drive the world's nations to achieve net-zero emissions, governments of all sizes have scrambled to formulate plans to meet the pact's objectives. The resulting efforts vary widely across countries and regions. While the EU passed its Corporate Sustainability Reporting Directive (CSRD) in support of the European Green Deal, other governments have made fewer strides.

In the United States, little has been done federally to mandate sustainable building practices, resulting in substantial fragmentation of regulation at the state level. As a result, state and local governments across the country have looked primarily to the private sector for guidance on reducing building emissions. There's still major public demand for sustainability in government and across industries. Today, 39% of state and local governments plan to move environmental monitoring, modeling, and management practices to the cloud within the next 12 months, according to IDC's worldwide 2023 *Industry CloudPath Survey*.

AWS made a name for itself early on with cutting-edge internal practices for sustainable modernization and building management and by helping develop The Climate Pledge in 2019, a commitment to reach net-zero carbon by 2040, a decade ahead of the Paris Agreement. The pledge has now been signed by more than 400 companies across 39 countries. AWS has also been developing, refining, and updating the Well-Architected Framework for sustainable building management since 2012. The framework emphasizes six pillars of sustainable building design: operational excellence, security, reliability, performance efficiency, cost optimization, and sustainability. The sustainability pillar focuses on minimizing the environmental impacts of running workloads in the cloud, ensuring a shared responsibility model for sustainability, understanding impact, and maximizing resource utilization to minimize downstream environmental effects.

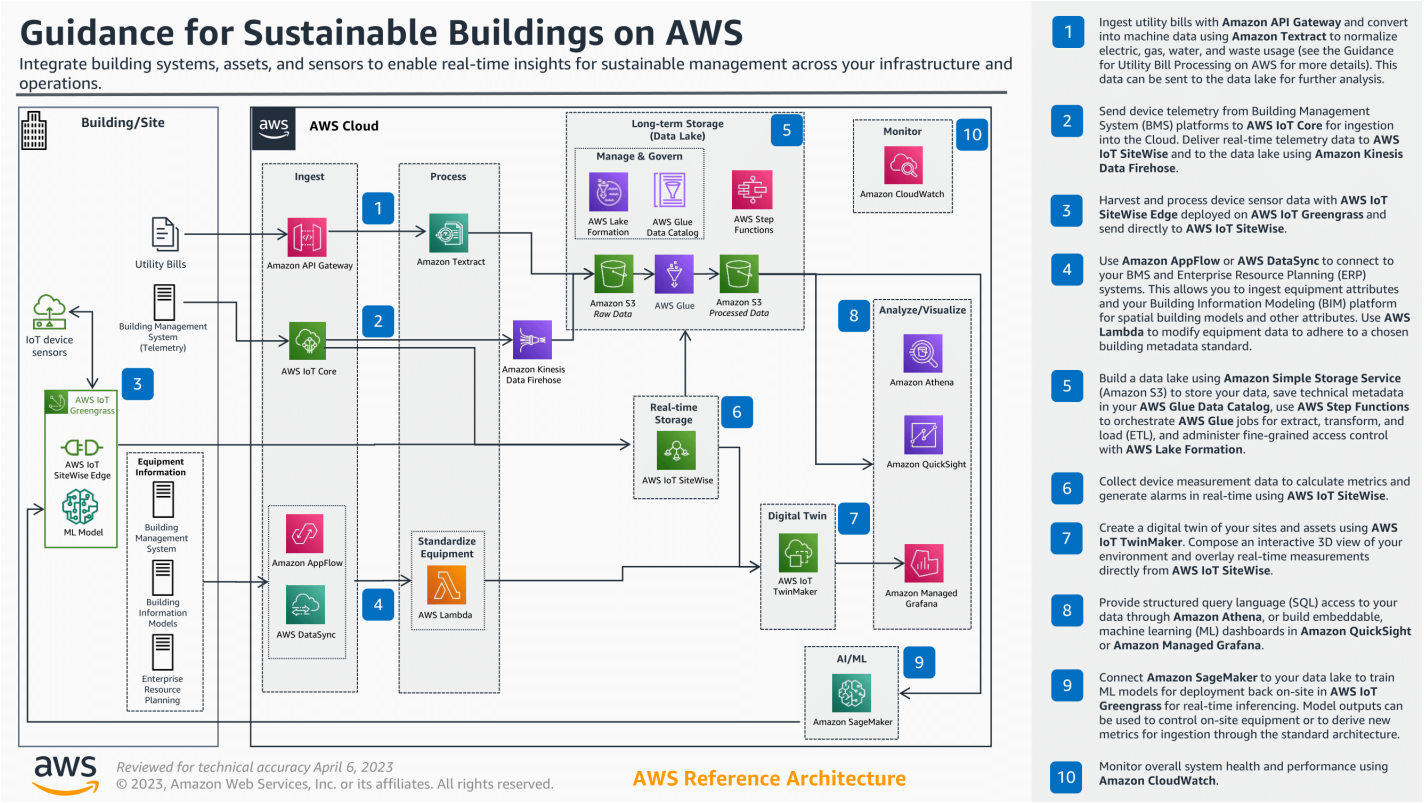
The following tools can be used to aid in designing according to the AWS Well-Architected Framework:

- **Operational Excellence:** CloudWatch, Lambda, and Kinesis Data Firehose
- **Security:** AWS Identity and Access Management, AWS CloudFormation, and AWS Key Management Service
- **Reliability:** AWS IoT Core, AWS IoT SiteWise, Kinesis Data Firehose, and Amazon S3
- **Performance Efficiency:** Amazon S3, AWS IoT SiteWise, and AWS IoT TwinMaker
- **Cost Optimization:** AWS IoT TwinMaker, AWS Glue, Lambda, Athena, and Kinesis Data Firehose
- **Sustainability:** Amazon S3, AWS Glue, Lambda, Athena, and Step Functions

In 2022, Amazon — the parent company of AWS — announced its renewable energy portfolio is now more than 20GW and can generate enough clean energy to power 5.3 million homes in the United States. Continued investments such as this will help add new wind and solar energy sources to the grid powering Amazon operations, physical stores, and fulfillment centers. The investments are expected to help meet the company's 100% renewable energy goal in 2025, five years sooner than its original target of 2030.

Today, Amazon relies on AWS cloud technology and guidance in its efforts to modernize thousands of its facilities across the globe.

FIGURE 1: ***AWS Smart and Sustainable Buildings Diagram***



Source: AWS, 2023

Accenture AWS Business Group Sustainability Solution

After witnessing significant strides toward sustainability being made by Amazon internally, Accenture's sustainability leaders wanted to bring these tools and capabilities to other organizations, especially government institutions. Together, the two companies formed the Accenture AWS Business Group (AABG) sustainability solution, which is meant to help organizations design and maintain sustainable building practices on top of AWS technology.

AWS provides hands-on training and purpose-built software solutions for designing and maintaining sustainable buildings. It also provides domain-specific lenses with extensive guidance for regulated industries, like government and healthcare, and technologies, such as IoT or machine learning (ML). Accenture provides access to more than 3,000 employees dedicated to working on sustainability projects. Accenture also provides much of the service component organizations require when designing sustainability strategies, developing a sustainable value chain, and ensuring that sustainability factors into leadership decisions, branding efforts, and technology selection.

Accenture's Approach

While the AWS technology portfolio serves as the backbone for AABG sustainability projects, Accenture handles everything from strategy development to initiative execution, with sustainable principles applied throughout the process. A key focus of Accenture's sustainability strategy revolves around viewing all organizational operations through a lens of sustainability. The firm can help government leaders demonstrate sustainability as a leadership priority and work with them to identify and strategically remedy inefficiencies.

Currently, many government building managers are only able to track energy usage and resource consumption manually through spreadsheets and bills. Accenture will evaluate and baseline carbon emissions using whatever information is available. This data will be stored and analyzed using AWS technology to allow Accenture to develop a holistic sustainability plan for each customer based on their specific values and ambitions.

"Built in, not bolted on," is Accenture's sustainability mantra. That notion is held throughout the partnership from assessment to continued operation. Accenture is focused on identifying the most sustainable technologies available capable of scaling efficiently, to reduce the client's technology carbon footprint. AWS analytics are implemented and integrated into building systems to continuously assess operations and identify opportunities for improvement.

Once an organization has successfully implemented a modern and sustainable building management system or achieves net-zero emissions internally, Accenture is prepared to help guide an upstream assessment of the sustainability of the company's supply and value chains.

Challenges

- **Finding the right people:** Building operations are not managed by the same IT staff that handles the bulk of modernization efforts. Instead, facilities managers are operating with different priorities. A disconnect may arise if one party is concerned with reducing emissions or modernizing management systems, demonstrating the necessity of sustainability as a priority from the top down.
- **Ensuring sustainable design:** Often, when organizations hope to transition to a more sustainable model of building management, they would prefer to augment existing resources, rather than start from scratch and build a strategy centered around sustainability. Accenture is well positioned to assess existing operations, bringing to light a range of factors that leadership may not have considered initially.
- **Developing sustainability culture:** There is high demand for organizations to be and be seen as sustainable, eco-friendly entities. This requires top-down sustainability prioritization, sustainable customer experience, and sustainability branding. Accenture can help ingrain sustainability across client organizations to improve leadership, messaging, and constituent experience.

Partnership Benefits

AWS and Accenture have long been leaders in their respective areas, which are inherently complementary. AWS is a leading cloud service provider with a vast portfolio of software and solution offerings. Accenture has continuously demonstrated expertise in IT and modernization through services and consulting. In terms of sustainability, AWS is strongly positioned to demonstrate value because of the experience presented by its dealings with Amazon.

Amazon's thousands of offices, retail stores, fulfillment centers, and datacenters provide a powerful example for addressing sustainability at scale. Accenture took notice and the resulting partnership is designed to help government organizations assess existing practices, develop sustainable solutions, and enable sustainable transformation. Highlights of the joint solution include:

- **Technology portfolio:** The AWS Well-Architected Framework and its adjacent tools provide the foundational resources to utilize key concepts and best practices for designing sustainable solutions.
- **Sustainability expertise:** Accenture has consistently demonstrated a commitment to developing solutions and providing services that holistically address sustainability.
- **Consumption reduction:** AWS technology provides the tools needed to evaluate resource usage, centralize management, and address inefficiencies. Accenture can help customize solutions and develop long-term, sustainable solutions.
- **Cost reduction:** When reducing consumption, organizations will see reduced costs for energy and other resources. Increasing solution sustainability can inherently reduce costs by eliminating waste.
- **Sustainable supply chain:** Accenture has substantial experience in evaluating and improving sustainability practices across supply chains. This helps drive sustainable impact in every stage of operations by identifying sustainable resources, distributors, and technologies.

Methodology

The project and company information contained in this document was obtained from multiple sources, including information supplied by Amazon Web Services, questions posed by IDC directly to Accenture employees, and Accenture corporate documents.

About the Analyst

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Aaron's research focuses on innovations in security, privacy, and resiliency impacting U.S. federal government agencies. His primary focus is analyzing how innovative security and resiliency solutions can help to modernize infrastructure and protect data, with the goal of building trust in government institutions by preserving privacy.

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