Building a More Sustainable Future

Presenter Name
Title
Oracle

February 2021
Contents

1. Helping Customers Make a Difference
2. Sample Customer Stories
3. Sustainability at Oracle
4. Corporate Citizenship
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Helping Customers Make a Difference
Oracle’s IT solutions can have a positive impact manifold its own

20% reduction of global CO₂-e by 2030 using smart logistics, circular supply chains, intelligent manufacturing, etc.

7.2x the CO₂-e abatement potential dramatically exceeds the information technology sector’s own footprint

$6.5 trillion potential increase in economic value as a result of an enormous increase of connected devices by 2030

25% to 40% Potential reduction in waste across the value chain using smart sensors

1.6 billion the number of people IT could deliver e-health services to by 2030 including underserved populations

one third the estimated amount of food wasted globally each year

Source: 2030vision.com, smarter2030.gesi.org
Oracle solutions enabling integrated management of sustainability

**Reporting**
- Sustainability analytics
- Sustainability reporting
- Environmental compliance
- Environmental planning
- Risk management

**Operations**
- Design for environment
- Sustainable sourcing
- Sustainable manufacturing
- Sustainable logistics
- Smart grids

**Emerging Tech**
- Data science
- Blockchain
- Big data
- IoT
- AI

More information available at oracle.com/green
Enterprise performance management and analytics

Leverage consolidation reporting infrastructure to do **non-financial reporting** (GRI, SASB)

Embed sustainability metrics in analytics platforms to **include environmental impacts in decision-making**

More information available [here](#)
Design, planning, and sourcing

Set **guidelines** for designers, **environmental impact review** as product phase gate, implement **resourcing best practices**.

Identify **constrained** environmental resources and environmental risks, develop an integrated and **unified** view of your supply chain.

Embed a strong **qualification** process, **asses** suppliers with questionnaires, score-carding, and audits, **encourage openness**.

More information available [here](#)
Manufacturing and logistics

Sustainable Manufacturing

Eliminate inefficiencies and maximize quality, 
**maximize resource utilization**, turn data gathered by IoT into **actionable insights**.

Sustainable Logistics

Optimize shipments to maximize asset utilization and 
route efficiency, select transportation modes with the **lowest environmental impact**.

Product Take-Back and Recycling

Reuse products and yield reusable parts, determine the residual value of returned materials, dispose materials in **compliance** with environmental regulations.

More information available [here](#).
Industry-specific solutions such as demand management for utilities

Managing demand to **reduce peak loads** and **minimize power generation** requirements.
Fit-for-purpose solutions such as smart cities

Cities use digital technologies to **transform and interconnect** urban ecosystems.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Coverage</th>
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<tbody>
<tr>
<td>Wi-Fi</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>IoT</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Cloud</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Mobile</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Biometrics</td>
<td>83%</td>
</tr>
<tr>
<td>AI</td>
<td>82%</td>
</tr>
<tr>
<td>Blockchain</td>
<td>66%</td>
</tr>
<tr>
<td>Telematics</td>
<td>52%</td>
</tr>
</tbody>
</table>

- **IT infrastructure and telecoms**
- **Governance and funding**
- **Mobility and transportation**
- **Energy and electricity**
- **Environment and sustainability**
- **Talent and education**

- **Payment and financial systems**
- **Physical and digital security**
- **Public safety, health, and well-being**
- **Buildings, schools, public spaces**
- **Water and waste management**
Removing the direct environmental impacts of on-premise data centers

By moving to the Cloud customers no longer need to account for data center scope 1 and 2 emissions in their own footprint. In addition, Oracle manages all reuse and recycling of retired IT assets. Emissions resulting from equipment and spare parts delivery are also reduced (already down by over 45% since 2015).

Before | proliferation of customer data centers

After | consolidated global data centers
Customer Success | examples of analytics & operations

**Fueling Biofuel Growth**
ARGENT FUELS
Supply Chain

**Enabling Sustainable Cities**
CITY OF SAN JOSE
Service

**Advocating e-Vehicle Adoption**
ZERO CARBON WORLD
NetSuite

**Driving Behavioral Change**
SOCALGAS
Opower

**Cutting Transport Emissions**
UNILEVER
Logistics

**Serving Sustainable Coffee**
ILLY
Human Resources

**Reducing Power Demand**
EXELON
Opower

**Delivering Solar-Powered Light**
D.LIGHT
Analytics
Customer Success | examples of emerging technologies

- **Tracing Conflict Minerals**
  - CIRCULOR
  - Blockchain

- **Providing e-Car Sharing**
  - GREENG0
  - Cloud Infrastructure

- **Providing Cargo Transparency**
  - CARGOSMART
  - Blockchain

- **Delivering a Network for e-Bikes**
  - SoftBank
  - IoT Platform

- **Understanding Bee Populations**
  - WORLD BEE PROJECT
  - AI Platform

- **Fighting Climate Change in Cities**
  - BLOCPOWER
  - IoT Platform

- **Exploring the Universe**
  - CERN
  - Big Data

- **Transforming Mobility**
  - TOYOTA
  - Data Visualization
Customer Success | examples of Oracle for Startups

- **Removing Trash with ML**
  - KINETICA
  - AI Platform

- **Building a Platform for Plastics**
  - OCEANWORKS
  - Cloud Infrastructure

- **Drone-Based Disease Detection**
  - AGROSCOUT
  - IoT Platform

- **Sourcing Ethically in Fashion**
  - RETRACED
  - Blockchain
Sustainability Innovation Oracle Excellence Awards

Recognizing customers using Oracle solutions to drive both business and environmental performance.
Sample Customer Stories
LiDestri Foods eliminates food waste with better planning

Premier private label and contract manufacturer of food, beverages, and spirits

Value

Business benefits realized

$2M reduction in food waste
10% inventory reduction
Simplified new product planning
Significantly decreased costs
Improved customer collaboration

“With Oracle's demand management cloud, we've been able to realize millions of dollars in savings through inventory reductions and more than $2 Million through reduced food disposals.”

John Matrachisia
CIO

Read the full story here
Unilever drives transportation efficiency

Leading global provider of food, home and personal care products

<table>
<thead>
<tr>
<th>Reduced</th>
<th>29M fewer vehicle Kms driven</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>9% reduced CO2 emissions</td>
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<table>
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<tr>
<th>Improved</th>
<th>10% inbound container utilization</th>
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<tr>
<td></td>
<td>Visibility into vehicle utilization</td>
</tr>
<tr>
<td></td>
<td>3% load optimization improvement</td>
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</tbody>
</table>

“Unilever is committed to growing our businesses sustainably. Working with Oracle Transportation Management, we are contributing to a more sustainable supply chain through streamlining shipping, improving communications with providers and helping reduce CO2 emissions.”

Wendy Herrick
Vice President Supply Chain - US

Read the full story here
Exelon creates value for every customer with dynamic pricing

- BGE and ComEd (Exelon companies) both chose to deploy peak-time rebate programs capable of reaching all of their customers
- They use Opower’s Behavioral Demand Response solution to deliver personalized, AMI-enabled communications before and after peak event days to increase customer awareness and participation
- Results beat expectations and continue to improve over time

“BGE is committed to engaging customers in energy efficiency, behavioral, and demand response programs like BGE Smart Energy Rewards® that help customers save energy and money.”

America Lesh
Baltimore Gas & Electric
d.light empowers lives

- Global leader provides affordable solar power to 100M in 70 countries
- With its inexpensive, highly durable, solar-powered lamps, d.light provides renewable energy to the world’s most disadvantaged people
- Use of d.light’s products during more than a decade has offset 23 million tons of CO2, or what 5 million passenger vehicles put out in a year
- d.light uses Oracle Autonomous Database and Oracle Analytics to consolidate customer and other data previously locked up in spreadsheets

“Our goal is for people across the globe, regardless of their income level, to be able and happy to transition to renewable energy.”

Sam Goldman
President and Cofounder
AgroScout offers sustainable AI agronomy on Oracle Cloud

- Agriculture tech startup using AI & drone imaging to proactively detect crop disease
- AgroScout’s machine-learning algorithms use Oracle Cloud to analyze drone-captured images of farm fields
- By knowing which pests and diseases to treat, growers can save money, improve yields, and feed more people
- 30X performance improvement compared to the previous vendor

“We’re on a journey that’s about food security.”

Simcha Shore
CEO
GreenGo revs up operations with Oracle Cloud

- Car-sharing service turned to Oracle Cloud Infrastructure for the flexible, scalable IT capacity it needed to grow
- Experience 6X in growth in only a few years
- After GreenGo implemented Oracle Cloud Infrastructure services, it was able to process 60,000 vehicle-status updates in only 10 seconds, a major turnaround from the network outages and system timeouts it had experienced using its on-premise, shared-server setup

“We want to create a community where people feel responsible for their environment and are willing to change their behavior for the sake of their future and others.”

Bálint Michaletzky
Managing Partner
Supporting the renewable energy transition with HPC

- National Grid ESO needed machine-learning models to handle the complexity of accurately predicting the renewable energy available at any given moment.
- Instead of estimating the power from just a few hundred big power plants, there are now millions of generation sources, with each solar panel and wind turbine exhibiting its own distinct behavior.
- Using Oracle High Performance Computing (HPC), National Grid’s machine learning can analyze renewable energy sources 40% more accurately compared to prior solutions with query times reduced from hours to minutes.

“The solution allows us to see patterns in data that we couldn’t see before and that aren’t obvious to humans.”

James Kelloway
Energy Intelligence Manager
Startup gives new life to plastic waste in the ocean

• 8 million metric tons of plastic trash flows into our oceans each year
• There is also an estimated $73 billion market for recycled plastics
• Part of the Oracle for Startups program, Oceanworks runs its track-and-trace app on Oracle Cloud Infrastructure to match recyclers with brands looking for verification that the material they use is recovered ocean plastic
• Launched in 2018 Oceanworks has more than 100 customers and supply capacity of more than 190,000 tons of ocean plastic a year, from collection sites across six continents

“Without an offering like Oceanworks, brands are forced to do a lot of legwork to find and validate these materials.”

Vanessa Coleman
CEO
Retraced ensures ethical fashion

- German startup for sustainable sourcing of apparel, footwear, and jewelry fashion brands
- Blockchain ensures data collected at every step of each customer’s supply chain is reliable
- Analytics provide quick insights to supply chain key performance indicators
- From startup to launch on Oracle Cloud Infrastructure suite of services within 12 months
- ADW and ATP auto-scales capacity for data and Kubernetes engine with no database admin

“Our customers want to understand where their products come from. We have to make sure the data we collect is correct and not tampered by anyone.”

Lukas Puender
Co-Founder
Videos

Toyota Transforms Community Transportation with Oracle Cloud
1:58
See how Toyota is transforming the future of community transportation with Oracle Cloud.

BlocPower: Fighting Climate Change with IoT & Data
1:26
BlocPower is at the forefront of battling climate change. BlocPower is helping cities keep their commitments to emissions ...

Argent reduces Earth’s carbon footprint with Oracle Cloud
1:31
Using Oracle Cloud, Argent Energy has been able to reduce their time to close and move from a supply-led to a more ...

Kinetica Analyzes Months of Images in Hours on Oracle Cloud
1:38
Partnering with Oracle Cloud Infrastructure, Kinetica helped the largest estuary on the West Coast detect trash ...
Broader Tech for Good Story | Oracle Customers Making a Difference

Oracle Customers Making a Difference

Using Business as a Force for Good

Whether they're protecting the environment, advancing healthcare, or building stronger communities, our customers make a difference every day. Explore their stories.

See what success looks like

Search customer successes

With Oracle Cloud, Axon turns the tide on criminal behavior.

Apex Health Innovations enhances patient care.

MCB uses Oracle to optimize service to their customers.

Memphis strengthens its digital presence.
Sustainability at Oracle
Oracle itself is also committed to sustainability | policies & standards

Engaging stakeholders.

Inspiring change.

Taking action.

View Oracle's Policies and Standards here
Putting Oracle’s environmental policy into practice | governance structure

Adrian Johnston  SVP, Apps JAPAC
Amy Aves       Sr. Director, RE&F
Christina Cavanna VP, Marketing
Cliff Hilton   Director, EMEA EH&S
Colleen Cassity Exec. Director, Citizenship
Don Watson     SVP, RE&F
Elizabeth Snyder VP, HR & Philanthropy

Esther Fan     Asst. General Counsel, SC Legal
Evelyn Neumayr Sr. Director, Sustainability
Jason Feldman  VP, Global Procurement
Jason Mahler   VP, Government Affairs
Jim Cates      SVP, Hardware Development
Jon Chorley    GVP SCM Apps & CSO (chair)
Ken Bond       SVP, Investor Relations

Matt Mayerson  SVP, M&D
Rich Kroes     Sr. Director, Sustainability
Rich Petley    Country Leader UKI&I
Samantha Hardaway VP, Cloud Legal
Tony Devito    VP, Supply Chain Ops
Tony Grayson   VP, OCI
Troy Tazbaz    SVP, Industry Solutions

View Oracle’s Environmental Policy here
## Setting the bar for progress | 2025 goals (set in 2020)

<table>
<thead>
<tr>
<th>Emissions and energy</th>
<th>Supplier engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>55% reduction in emissions per unit of energy consumed</td>
<td>100% of key suppliers have an environmental program in place</td>
</tr>
<tr>
<td>26% reduction in absolute emissions</td>
<td>80% of key suppliers have emissions reductions targets in place</td>
</tr>
<tr>
<td>25% reduction in employee air travel emissions</td>
<td></td>
</tr>
<tr>
<td>100% renewable energy use for Oracle Cloud</td>
<td></td>
</tr>
<tr>
<td>50% renewable energy use for Oracle Real Estate and Facilities</td>
<td></td>
</tr>
</tbody>
</table>

### Water and waste

- **33%** reduction in potable water use per square foot
- **33%** reduction in waste to landfill per square foot

All goals are measured against a 2015 baseline, except the goal for employee air travel emissions, which is measured against a 2019 baseline. Energy, emissions, and renewable goals apply to Scope 1 and Scope 2. Renewable energy is measured against total electricity consumption. Water and waste goals are measured for Oracle-owned facilities and data centers.
Performance | emissions

Consistent reduction on an absolute and intensity basis, on track to meet our science-based target.
Performance | water & waste

Reductions in waste generation and potable water usage on an absolute and relative basis.
Performance | additional sample data points

100% renewable energy used for Oracle Cloud data centers in Europe

2.5 million pounds of retired hardware assets were collected for recycling or reuse in FY20 (99.6% reused or recycled)

55 Oracle offices around the world with 100% renewable energy

88% of Oracle’s key direct manufacturing suppliers (80%+ of spend) have energy or carbon reduction goals in place

15x increase in the use of reground plastics for server parts (100% for Exadata)

50% reduction in emissions by doubling the amount of units that can be shipped on a pallet, in addition to cost savings
Building a more circular economy | using Oracle Cloud

- **High utilization** dense computing environments attaining much higher utilization rates than on-premise

- **Elasticity** elastic computing platform that can grow dynamically with an organization, eliminating excess capacity builds to meet future demand

- **Energy efficiency** state-of-the-art intelligent energy management and cooling technologies based on industry-leading expertise and best practices

- **Design for Environment (DfE)** incorporates energy efficiency, dematerialization, serviceability, and recyclability into design

- **Resource efficiency** minimizes packaging and simplifies the logistics for new hardware delivery, spare parts, and retiring hardware for reuse or recycling

- **Renewable energy** goal to be 100% renewable by 2025

By customers moving to the Oracle Cloud all material put on market (7,750 metric tons in FY20) will become directly controlled by Oracle for reuse or recycling (in FY20 only 0.4% went to landfill).
Employee engagement | green teams and sustainability champions

Oracle encourages employees who share a passion for the environment to get engaged by forming Green Teams. There are more than 40 Green Teams that drive sustainability efforts in offices globally. They host educational sessions, engage with local real estate and facilities teams to promote recycling and eliminate waste, encourage more sustainable modes of transportation, volunteer with environmental organizations, and more. Throughout the year, Green Teams around the world interact to share ideas and best practices that protect our planet, at work and outside of it.

Every year, Oracle recognizes a group of Sustainability Champions, employees around the world who are setting an example by directly contributing to a more sustainable future.
Corporate Citizenship
Oracle Volunteering | FY20

36,109
Oracle Volunteers

801
organizations in
46
countries

1,684
projects completed

132,880
hours donated

More information is available here
Oracle Giving | FY20

$22M donated

6,000+ nonprofits and NGOs supported

$4M matched employee donations

50 countries

More information is available here.
Oracle Education Foundation

Helps young people develop the technical acumen, creative confidence, empathy, and grit to become outstanding designers of solutions to people’s needs and the world’s problems.
Oracle Academy

Advances computing education globally to drive knowledge, innovation, skills development, and diversity in technology fields with free curricula, learning resources, software, cloud environments, training, support, and certification resources.
Diversity & Inclusion

Be yourself here
At Oracle, we don’t just respect differences—we celebrate them. We believe that innovation starts with inclusion and we’re committed to creating a workplace where all kinds of people can do their best work. It’s when everyone’s voice is heard and valued that we’re inspired to go beyond what’s been done before.

Our communities connect us
Be part of something bigger and help everyone feel like they belong. Our employee resource groups represent some of the diverse communities that make up who we are as a company. They connect us, empower us, and help us make change.

Diversity data 2019
Transparency is the key to progress
Achieving true diversity is a continuous journey, not a one-off destination. We’re constantly working on more inclusive hiring strategies, tracking our progress, and holding leaders accountable. Every day we’re making these numbers more representative of the world around us. For additional demographic information, view our EEO-1 Statement (PDF).

**Our workforce – gender**

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>69.8%</td>
<td>68.8%</td>
</tr>
<tr>
<td>Women</td>
<td>30.2%</td>
<td>31.2%</td>
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**Women in management**

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<table>
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<tbody>
<tr>
<td>Globally</td>
<td>24.9%</td>
</tr>
<tr>
<td>U.S.</td>
<td>26.3%</td>
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**U.S. ethnic hires**

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<table>
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<tbody>
<tr>
<td>White</td>
<td>52.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>31.8%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.1%</td>
</tr>
<tr>
<td>Black</td>
<td>4.8%</td>
</tr>
<tr>
<td>2 or more races</td>
<td>3.7%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.4%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.1%</td>
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**Of our total hires in FY20, women accounted for**

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<tbody>
<tr>
<td>Globally</td>
<td>31.6%</td>
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<tr>
<td>U.S.</td>
<td>32.7%</td>
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**U.S. ethnic workforce**

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<tbody>
<tr>
<td>White</td>
<td>59.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>26.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.5%</td>
</tr>
<tr>
<td>Black</td>
<td>3.7%</td>
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<tr>
<td>2 or more races</td>
<td>2.5%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.4%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.2%</td>
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**Ethnicity in U.S. management**

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<tbody>
<tr>
<td>White</td>
<td>62.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>28.2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.8%</td>
</tr>
<tr>
<td>Black</td>
<td>2.0%</td>
</tr>
<tr>
<td>2 or more races</td>
<td>1.8%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.3%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.2%</td>
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</tbody>
</table>
Key Resources
Helping customers make a difference

Oracle customers making a difference
Oracle Cloud data sheet [coming soon]
Oracle solutions enabling sustainability
Sustainability innovation awards
Corporate Citizenship Report

Oracle for Startups
NetSuite Social Impact
Oracle initiatives on Health
Oracle’s hardware take back program
Position on use of harmful substances

Stay Current

blogs.oracle.com/sustainability
twitter.com/OracleSustainab
Sustainability at Oracle

Corporate Citizenship Report Data Sheet
CDP climate change survey response
2025 sustainability goals
Corporate Citizenship Report [GRI Index]
Oracle policies and standards
Oracle environmental policy
Oracle materiality assessment
Oracle internal resources

- Internal employee page
- Green Teams
- Slack channel
- Sustainability Champions
- Design for environment guidelines | access limited to Hardware Engineering teams
- Oracle Volunteering | up to 40 working hours per fiscal year with management approval
- Oracle Giving | Oracle matches up to $1,000 per fiscal year
- Citizenship Communities
- Oracle Education Foundation
- Oracle Academy

SalesCentral sustainability page
RFP support alias
Alignment with the UN SDGs

Many of Oracle’s sustainability and corporate citizenship initiatives are aligned with the United Nations Sustainable Development Goals, in particular the ones highlighted here.