

# Practicing Sustainability in Consumer Choices

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Embry-Riddle Aeronautical University

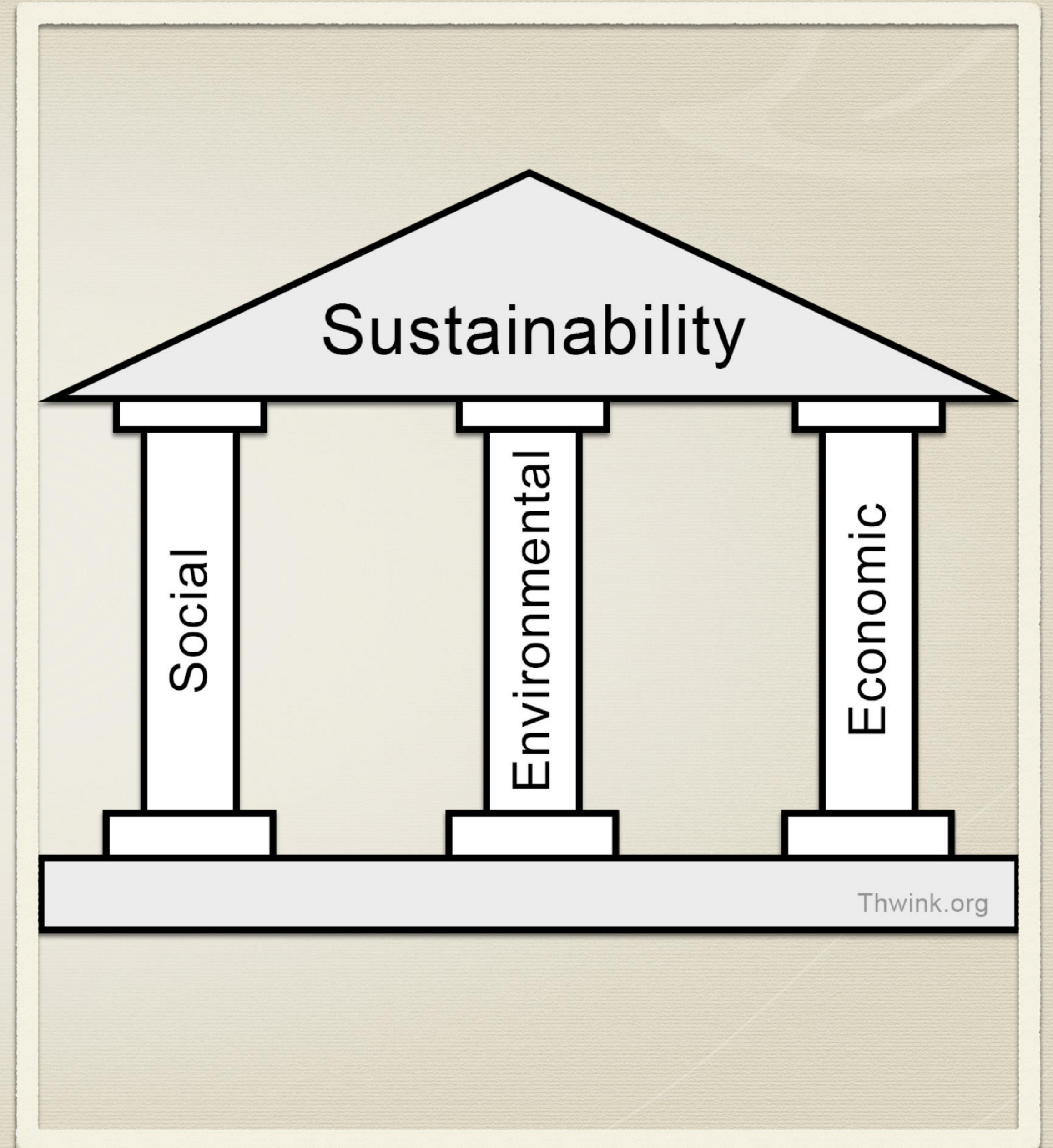
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# Sustainability

- \* Sustainability per the Cambridge English Dictionary is defined as the ability to continue over a period of time
- \* Sustainability is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1987).

# Three Pillars of Sustainability

Environmental  
Economic  
Social Equity



# Three Pillars of Sustainability

- \* Environmental - Human interaction with the earth's resources which does not deplete resources but allows for long term use
- \* Economics - Economic growth and opportunity in relation to positive (environmental and human) resources
- \* Social Equity - equal access for all people to resources (benefits and burdens)

# Sustainable Development Goals

- \* 2015 United Nations adopted a plan for the future “Agenda 2030”
- \* Included 17 Sustainable Development Goals (SDGs) to
- \* “Define the World We Want” and
- \* “Apply to All Nations ... No One Left Behind”

# SUSTAINABLE DEVELOPMENT GOALS



# Environmental Economic Social

- \* Environmental Justice (Not In My Backyard - NIMBY)
- \* Environmental Ethics
  - \* Water
  - \* Land/Trees (Green Spaces)
  - \* Air

# Environmental Economic Social

- \* Large Manufacturing Plants (Fortune 500 Companies)
- \* Electric Power Plants
- \* Food Production



# Environmental Economic Social

- \* Access to Clean
  - \* Water
  - \* Land/Trees (Green Spaces)
  - \* Air

# Sustainability by Design akin to Prevention through design

- \* Upcycle (McDonough & Braungart, 2013)
- \* Designing at all levels
  - \* Designing with (good) intention
  - \* Designing for abundance

# Sustainability Where I am

- \* **Choose an Item to Improve or Initiate Sustainability**

- \* Headphones : AirPods, Beats, AoA

- \* Backpacks: Venture Pal, Northface, AoA

- \* Computers: Apple, Dell, AoA

- \* Skateboards: Element, Plan B, AoA

- \* Smartphones: Apple, Android, AoA

- \* Smartwatches: Apple, Fitbit, AoA

- \* Tennis Shoes: Nike, Adidas, AoA

- \* AoA = Anything on Amazon

# Research The Issue

- \* **Consider the Environmental Pillar**
- \* What sustainability practices are or are not currently in place?
  - \* Global Reporting Initiative (GRI)?
  - \* Corporate Social Responsibility (CSR)?
  - \* Environmental Social Governance Reporting (ESG)?
- \* Is it a multinational company with different sustainability systems depending on the manufacturing nation?

# Revamp the Process

- \* **Consider the Economical Pillar**
- \* How would you improve the item consider manufacturing costs and how changes would impact consumers.
- \* Last Longer
- \* Recycle
- \* Use different materials

# Re-educate the Population

- \* **Social Equity**

- \* New or different messaging to people
- \* Consumers of the product
- \* Employees making the product
- \* Community members who may live near the manufacturing facility

# Research the Issue

## Fender Bass Guitars

- \* **Consider the Environmental Pillar**
- \* What sustainability practices are or are not currently in place?
- \* <https://www.fender.com/pages/supply-chain-transparency>
- \* “...Fender recognizes and supports the California Transparency in Supply Chains Act... requires retailers to make efforts to detect and eradicate human slavery from their global supply chains...”



# Research the Issue

## Fender Bass Guitars

- \* **Consider the Environmental Pillar**
- \* Is it a multinational company with different sustainability systems depending on the manufacturing nation?
- \* Yes Fender manufactures bass guitars in California, Mexico, Japan, Korea, Indonesia and China .





# Revamp the Process

- \* **Consider the Economical Pillar**

- \* How would you improve the item consider manufacturing costs and how changes would impact consumers.

- \* Reduce Energy

- \* [https://www.warwick.de/en/Warwick---Company--Environmental-protection--Environmental-protection--Our-commitment-to-environmental-protection.html#current\\_site\\_id](https://www.warwick.de/en/Warwick---Company--Environmental-protection--Environmental-protection--Our-commitment-to-environmental-protection.html#current_site_id)

- \* Recycle (Currently Great Britain makes the process universal)

- \* <https://www.fender.com/en-GB/weee>

- \* Unwanted electrical equipment is the UK's fastest growing type of waste. If you've purchased a new electrical item from us, we will recycle your one for free.

- \* WEEE Mandate in the UK for retailers

# Revamp the Process

- \* **Consider the Economical Pillar**

- \* How would you improve the item consider manufacturing costs and how changes would impact consumers.

- \* Use different materials

- \* Gibson was the first guitar brand to use wood certified as sustainably harvested by the Forest Stewardship Council.

- \* Taylor Guitars - Ebony Project tree planting sustainability initiative

- \* <https://www.scientificamerican.com/article/guitar-makers-making-music-greener/>

- \* <https://news.mongabay.com/2021/04/some-guitar-makers-in-pursuit-of-sustainable-manufacturing/>

# Re-educate the Population

- \* **Consider the Social Equity Pillar**

- \* New or different messaging to people

- \* Gibson, Fender, Taylor and Martin Guitars use sustainable woods in some of their products.

- \* <https://usgreentechnology.com/7-most-sustainable-guitar-woods-the-brands-using-them/>

- \* Consumers of the product - clear, direct statements on sustainability.

- \* Universal WEEE Recycling at all facilities.

# Re-educate the Population

- \* **Consider the Social Equity Pillar**

- \* Employees making the product

- \* <https://www.fender.com/pages/modern-slavery-act>

- \* UK Modern Slavery Act of 2019

- \* “...Fender expects our suppliers and subcontractors to do business in a manner that aligns with our values, treating their employees with dignity and respect, and providing safe workplace and dormitory conditions...”

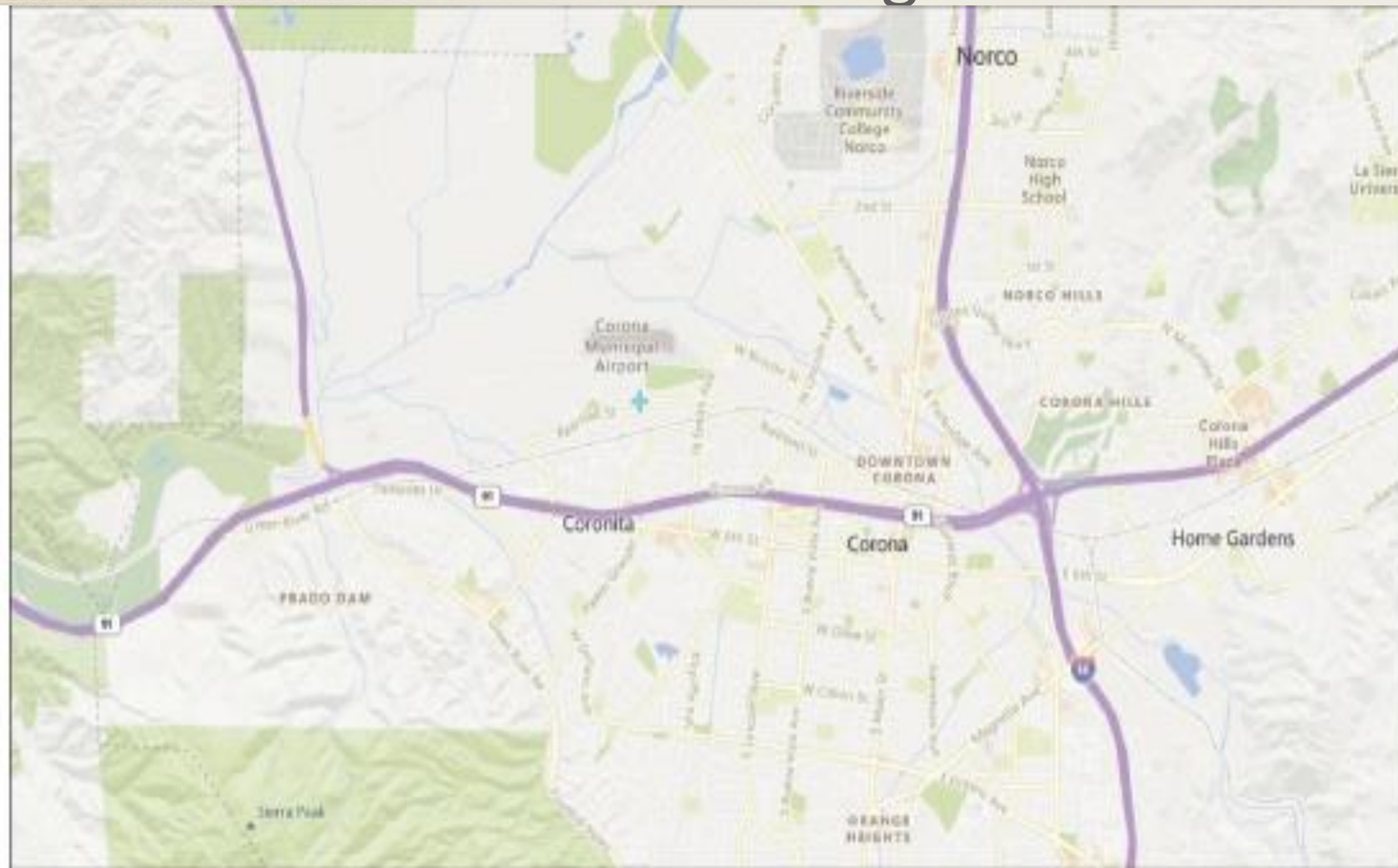
# Re-educate the Population

## \* Consider Social Equity Pillar

- \* Community members who may live near the manufacturing facilities.

NEPA Assist Report: Fender Musical Instruments 311 Cessna Cir,  
Corona CA 92880

<https://www.epa.gov/nepa/nepassist>



Project Location	33.890951,-117.601077
Within 0.5 miles of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	yes
Within 0.5 miles of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	yes
Within 0.5 miles of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 0.5 miles of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 0.5 miles of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	yes
Within 0.5 miles of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	yes
Within 0.5 miles of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	yes
Within 0.5 miles of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	yes
Within 0.5 miles of a Federal Land?	no
Within 0.5 miles of an impaired stream?	no
Within 0.5 miles of an impaired waterbody?	yes
Within 0.5 miles of a waterbody?	no
Within 0.5 miles of a stream?	no
Within 0.5 miles of an NWI wetland?	Available Online
Within 0.5 miles of a Brownfields site?	no
Within 0.5 miles of a Superfund site?	no
Within 0.5 miles of a Toxic Release Inventory (TRI) site?	yes
Within 0.5 miles of a water discharger (NPDES)?	yes
Within 0.5 miles of a hazardous waste (RCRA) facility?	yes
Within 0.5 miles of an air emission facility?	yes
Within 0.5 miles of a school?	no

# Will you choose to pick an item?

- \* Research the Issue – Environmental Pillar
- \* Revamp the Process – Economical Pillar
- \* Re-Educate the Population – Social Equity Pillar

Questions?

# References

Brundtland, G.H. (1987). Our Common Future Report of the World Commission on Environment and Development.

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