Research Project Notes

Keep track of your information. When doing research, it's important to know which information came from which source. As you read/view your sources, use the organizer below to keep track of any information you find useful.

Make sure to adhere to the following tips as it will make things easier for you in the long run:

- Document your source.
 - o Is it a website? If yes, copy the URL and use it to create an APA style citation in EasyBib.
 - Is it a library database? If yes, copy the APA style citation from the article. For a direct link back to the article, copy the article Bookmark or Permalink.
 - Record the author's name and year of publication for quick reference and to be used with in-text citations. If no author is given, give the article title in quotation marks.
- Distinguish between quotes and paraphrases.
 - If you copy anything word for word from a resource, include quotation marks in your notes so you will know later that the words are not your own.
 - Information you summarize, condense or re-write in your own words should not include quotation marks.
- If your source credits another resource, make a note of it.
- Record your personal thoughts/reactions. If you come across something in your research that gives you an idea, makes you wonder something, or surprises you, make a note of it. Come up with a system to signify which ideas are your own (i.e. use italics, a different color font, an asterisk, etc.).

Source #1

Author: Poncavage Date: 2015

Source:

Poncavage, J. (2015) Is recycling worth it? *Mother Earth News*, (268), 65.

http://search.ebscohost.com/login.aspx?direct=true&db=f5h&AN=100374232&site=ehost-live

Notes:

US recycles 87 million tons of garbage each year, which would produce enough energy for 10 million homes.

"Even as we're recycling more, we're creating more garbage--4.38 pounds per person per day in 2012, up 63 percent from 2.68 pounds in 1960." p. 65

Experts recommend adopting a BYOC (bring your own containers) mentality

Some things are more worthwhile to recycle than others. It depends on the amount of energy needed ot extract the raw materials, as well as the size of the environmental footprint left behind.

Glass - recycled glass can replace 95% of the raw material needed to make new glass; recycled glass reduces carbon dioxide emissions compared to using new materials

Metal - most scrap aluminum cans are used to make new cans; creating new cans from recycled uses 90 percent less energy; steel can also be recycled without losing quality--one ton of recycled steel conserves 2500 pounds of iron ore and 1400 pounds of coal

Source #2

Author: Cho Date: 2011

Source:

Cho, R. (2011). Putting landfill gas to good use. E: The Environmental Magazine, 22(3), 12-14.

http://search.ebscohost.com/login.aspx?direct=true&db=f5h&AN=60375614&site=ehost-live

Notes:

On average, each individual American produces more than 1600 pounds of garbage each year; more than half of which ends up in landfills and creates methane gas, which is damaging to environment

Methane can be used to produce energy; In 1988, there were 8000 landfills in US. By 2009, only 1900; Landfill gas: almost 50% methane, 50% carbon dioxide, plus water vapor and air pollutants

Fresh Kills landfill on Staten Island used to emit 2 percent of the world's methane gas (15 billion cubic feet) per year; today it generates 10 million cubic feet of landfill gas per day, which is converted to a high BTU gas that heats 22,000 homes; NYC makes almost \$11 million per year selling this energy

According to the EPA, "for every one million tons of municipal solid waste, 432,000 cubic feet of landfill gas are produced daily. If not controlled and monitored, the gas can migrate under a landfill and cause fires and explosions. Landfills can release methane and carbon dioxide into the atmosphere, exacerbating global warming." p. 13

"Landfill gas can be used to produce electricity, steam or heat, and can also be used as an alternative fuel." p. 13

Energy conversion can capture 60 to 90 percent of methane emitted from the landfill, which reduces amount of methane released into the atmosphere

"The EPA projects that if we could capture 100% of the methane currently emitted at U.S. landfills for electricity generation, we could reduce our greenhouse gas emissions by 150 metric tons of [carbon dioxide] per year." p. 14

Source #3

Author: "Benefits of landfill gas energy projects"

Date: 2017

Source:

Benefits of landfill gas energy projects. (2017, May 09). Retrieved November 1, 2017, from https://www.epa.gov/lmop/benefits-landfill-gas-energy-projects

https://www.epa.gov/lmop/benefits-landfill-gas-energy-projects

Notes:

Municipal solid waste (MSW) landfills are 3rd largest human-generated source of methane gas emissions in US

"With a global warming potential more than 25 times greater than CO2 and a short (12-year) atmospheric life, methane is a potent greenhouse gas that is a key contributor to global climate change."

The landfill gas energy project estimated to capture 60 to 90 percent of methane emitted from landfills