

# NEED YOUTH AWARDS PROGRAM FOR ENERGY ACHIEVEMENT

## REQUIRED APPLICATION INFORMATION PLANNER

State: LA School Name: Saint Margaret Catholic School

Students should fill out this form with the help of a teacher and use this information when completing online submission of the application and project. Projects must be submitted online by April 15, 2019. Contact NEED at 1-800-875-5029 with any questions.

### PROJECT LEVEL:

- Primary (K-2)
- Elementary (3-5)
- Junior (6-8)
- Senior (9-12)
- Independent and Special Category
- First Time Entry/Rookie

### PROJECT TYPE

- Signature  
(15 slide maximum)
- Foundations  
(4 slide maximum)

### CHECKLIST:

- Application: information compiled and entered online
- Digital project is submitted and contains
- project summary
  - school name and leader names
  - reporting of goals
  - documentation (photos, etc.)
  - fits within the slide requirements
- Digital project file name includes school or team name
- Video link has been provided (optional)

Project Title <u>Energizing the Environment</u>			
Full School Name <u>Saint Margaret Catholic School</u>		Club Name (if applicable) <u>Pro Para Nova Science Club</u>	
School Street Address <u>2510 Enterprise Blvd.</u>		School District <u>Diocese of Lake Charles</u>	
City/Town <u>Lake Charles</u>	County <u>Calcasieu</u>	State <u>Louisiana</u>	Zip Code <u>70601</u>
School Phone Number (Area Code) <u>(337) 436-7959</u>	Last Day of School <u>May 22, 2019</u>	U.S. Congressional Representative	
School Fax Number (Area Code) <u>337-436-9932</u>	Email Address <u>jreeves@stmcs.com</u>	School Website <u>www.stmcs.com</u>	
Project Advisor <u>Mrs. Judy Reeves</u>	Student Director(s) <u>Julia Walker / Dylan Freeman</u>	Number of Students Reached <u>280</u>	
School Principal <u>Mrs. Wendy Wicke</u>	Number of Students Coordinating Project <u>14</u>	Number of Community Members Reached (media coverage, etc.) <u>65000</u>	
Home Phone Number of Advisor (Area Code) <u>(337) 302-3880</u>	Hours Spent on Project Collectively <u>470</u>		
<u>(337) 302-4630</u>			

### THE FINE PRINT

As the project advisor and student director(s), we declare that the project submission has been assembled with the participation of students and that all information and data in this report are true. We have double-checked to ensure that all materials are included and that documentation has been limited to 4 or 15 slides, as applicable. Participants acknowledge that submission, materials, and other documentation provided may be displayed at www.NEED.org.

Judy Reeves  
Project Advisor Signature

Judy Reeves  
Project Advisor Printed Name

4-10-2019  
Date

Julia Walker / Dylan Freeman  
Student Director(s) Signature(s)

Julia Walker / Dylan Freeman  
Student Director(s) Printed Name(s)

4-10-19  
Date

Student Leader: Dylan Freeman

Student Leader: Julia Walker

Video Link: <https://youtu.be/ox6kWtyAWRQ>



Lexie Chauvin, Haily Arabie, Serina Arabie  
Colin Smith, Miles Guillory, Milo Perzo, Jacques Metoyer  
Nicholas Harris, Olivia Derouen, Colton Wood, Lauren  
McGuire, Annalina David

## Energizing Our Environment

### Pro Terra Nova

### St. Margaret Catholic School

### Judy Reeves

### 2510 Enterprise Blvd

### Lake Charles, La 70601 337-479-0065

Our club has been energizing the environment through Science of Energy, Energy Works, Oil Energy, and Energy Expo activities. Our group presented Energy Expo to 127 students, published energy chant videos on YouTube, and entered contests through the Parish winning 1st and 2nd Place, clocking 270 hours of work.

We joined the Pepsi-Challenge Recycling Competition, collecting 3709 pounds of plastic and aluminum. Also, we participated in Funding Factory, collecting 1478 pounds of ink cartridges. Joining the community in many service projects for environmental and energy awareness like Beach Sweep, Calca Chew, and adopt a road, we clocked 200 hours of service. We are truly energizing our environment.

Goal 1: Identify energy and environmental awareness in Louisiana.

### **ENERGY CONTENT ACTIVITIES**

1. Complete Science of Energy (7<sup>th</sup> grade & 8<sup>th</sup> grade), Exploring Oil and Natural Gas, Games and Icebreakers, Science of Energy, Energy Expo, and Energy works (6<sup>th</sup> grade)
2. Obtained permission from the principal to conduct the activities at school on April 12 (Energy Expo)
3. Played Guess the Energy source activity by creating 10 Groups
4. Students researched energy topics on National and State levels
5. Created invitations and schedules to present Energy Expo to 2-6 grade (127 students)
6. Followed-up with event evaluations, thank you notes, and prizes to participating teachers.
7. Hosted a summer energy camp for 5 days 3 hours a day “Let the Games Begin”.

### **STUDENT LEADERSHIP:**

Dylan Freeman  
Julia Walker  
Nicholas Harris  
Olivia Derouen  
Colton Wood  
Lauren McGuire  
Annalina David  
Lexie Chauvin  
Hailey Arabie  
Serina Arabie  
Colin Smith  
Miles Guillory  
Milo Perzo  
Jacques Metoyer

### **RESOURCES**

1. NEED's *Energy Expo, Energy Infobooks, Games and Icebreakers, Science of Energy, Energy Works, Map activity*, [www.need.org](http://www.need.org) links and online curriculum.
2. Pamphlets from our local and state energy companies.
3. Ms. Reeves Resources of websites and contacts.
4. NEED staff [www.need.org](http://www.need.org)

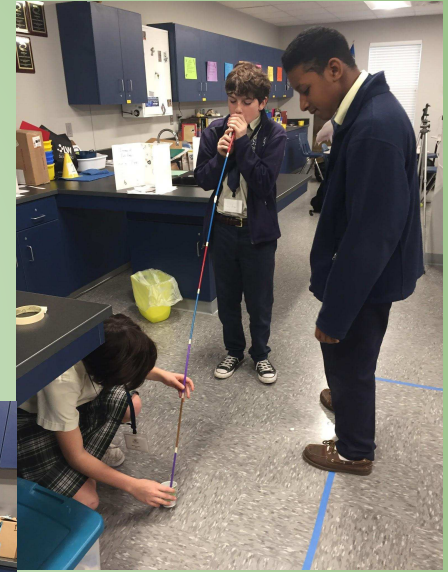
### **EVALUATION :**

- Number of activities completed by the classes (See Slides)
- 127 students attending school Energy Expo Evaluations from the students
- We sent out classroom evaluations and received great reviews
- Facebook post of events



# Get the oil out and extract core samples (Louisiana)

Our state is one of the top 10 oil and gas production states. Great fun extracting core samples and oil..

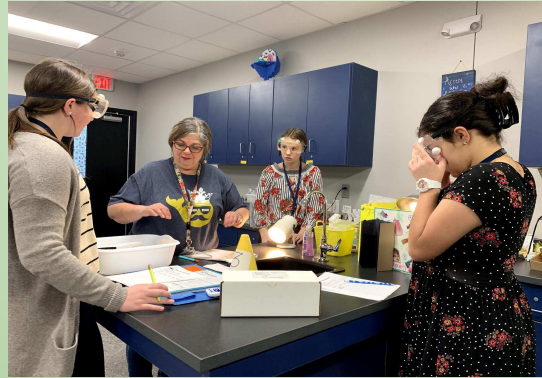
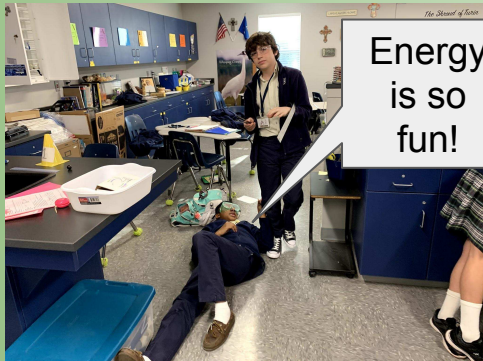
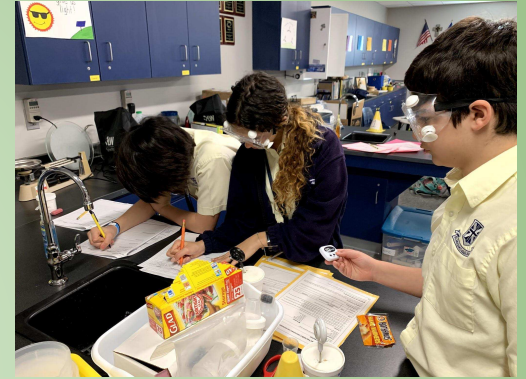


This is harder than you think



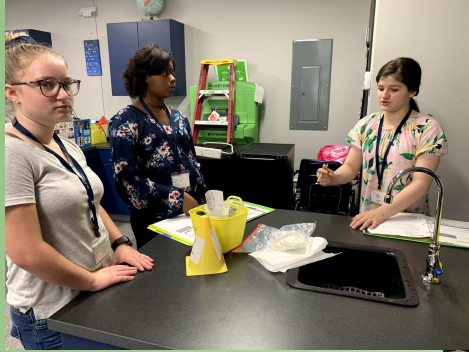


# Science of Energy (8th grade)

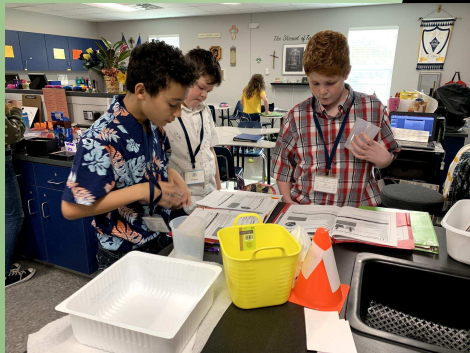
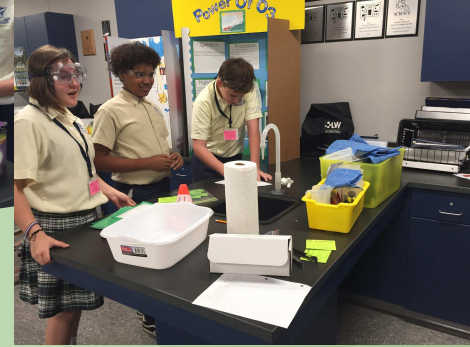
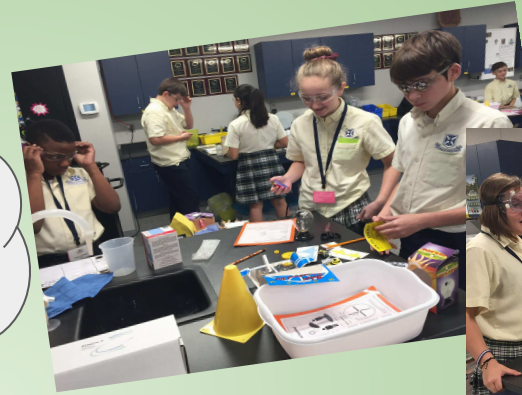


Wow! I get the Flow... of energy! Amazing transfers of energy!

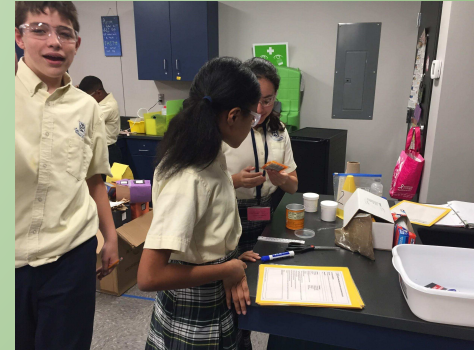
# Energy Works (6th grade) / Science of Energy (7th Grade)



This is interesting...  
heat transfer!



Solar Panels  
Hot! Hot! Hot!  
Exothermic and  
endothermic  
reactions.  
Energy is Hot!!!





# Energy Chants and Group selection



Chant video and poster  
10 sources of renewable energy:  
Coal:

<https://youtu.be/uBEVIH5XW5w>

Uranium:

<https://youtu.be/dwHrGfJJ4I8>

Petroleum:

[https://youtu.be/4lhfZiF\\_AZc](https://youtu.be/4lhfZiF_AZc)

Propane:

<https://youtu.be/pXQedUFtlmU>

Natural Gas:

<https://youtu.be/HJMuEzkDG-Q>

Hydropower:

<https://youtu.be/0JhI2PzJCvo>

Geothermal:

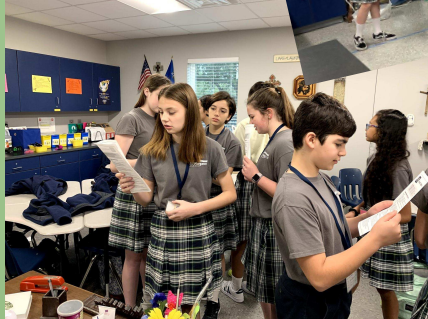
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Biomass:

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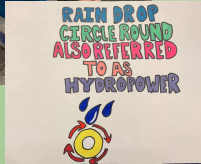
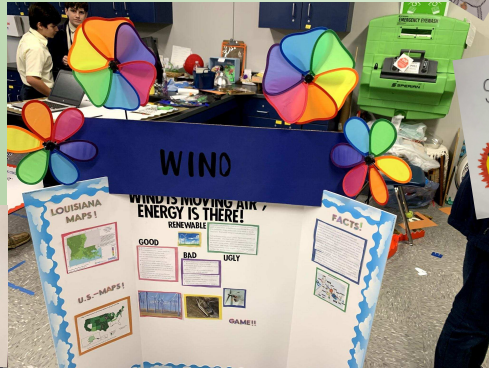
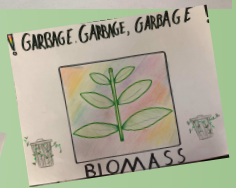
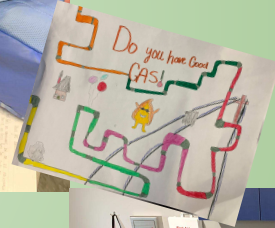
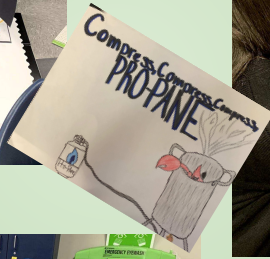
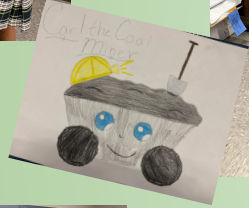
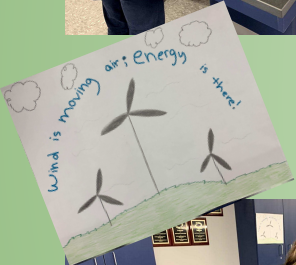
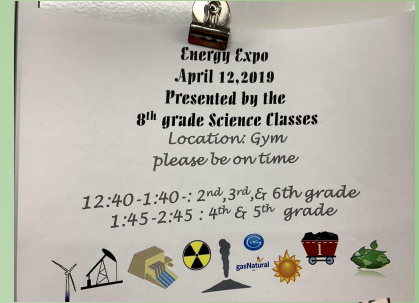
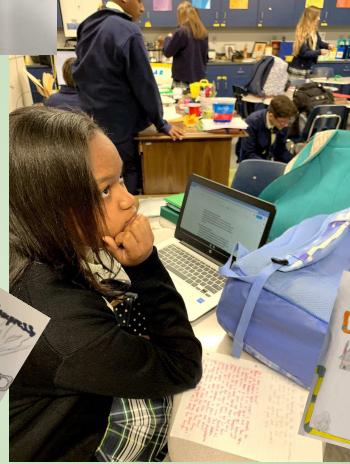
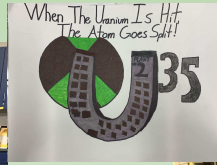
Wind;

<https://youtu.be/Vvb3iVG2xno>





# Energy Expo: Preparing and Planning (8th grade)



# Summer Camp June 2018

Summer Camp solar racers.



High School Helpers: 12 students led the Summer camp. Hi, I'm Maggie Reeves, a past Need student!!!



We also participated in Pepsico Summer Challenge and won \$200 for recording our recycling during the Summer Camp.





# Goal #2 : Three “R” Reuse, Reduce, Recycle Community Awareness

## Activities

- Go to each classroom with recycling and Pepsico information and why we reduce solid waste (Talking Trash) Science 8<sup>th</sup> grade. Team Leader: Nick Harris, Assistants: Evan Mathis and JT Kihlken. All science club members participate in Tuesday Recycle Day (each assigned a class or area to pick up recycling bins)
- Made Recycling Flyers with recycling information and had them posted in newsletter and handed out at community events, open house, and PTC.
- Recorded weekly recycling collection, sorted recyclables, and weighed solid waste material
- Created and Decorated collection site, monitored sites for Pepsico and funding factory items, and packaged and shipped items monthly or as needed.
- Kept detailed records on plastic and aluminum and uploaded to Pepsico and received for free 5 new 50-gallon plastic recycle bins and 12 30-gallon recycle cans for classroom teachers.
- Community involvement:
- At the Calca-Chew Community Food Festival, we handed out school recycling and collection flyers, Team green flyers, posted table tent about recycling and collected recycling at the event
- Adopt A Road City wide event: 17th street 5 mile area
- Beach Sweep: Keep America Beautiful Event, Lakeshore drive waterway

## STUDENT LEADERSHIP:

Dylan Freeman , Julia Walker, Nicholas Harris, Olivia Derouen, Colton Wood, Lauren McGuire, Annalina David, Lexie Chauvin , Hailey Arabie, Serina Arabie, Colin Smith, Miles Guillory, Milo Perzo, Jacques Metoyer

## RESOURCES

- NEED's *Talking Trash and Mentoring and monitoring*
- Mayor's office, Jr. Team Green Mrs. Vincent, Blake Trahan , Lake Charles Waste Management
- Mr. Mike School custodian
- Citgo: Pat Melancon
- Ms. Reeves Resources of websites and contacts.
- Funding Factory , Pepsico

## EVALUATION

Recycling Flyers posted in Viking Vine (280 families), Church Bulletin (3000 families), Call reach (275) Cal-Ca Chew(250), PTC (150), and Open House(150)  
Amount recycled

Funding factory	Calca-chew	Pepsico / School recycle
<p>TONER CARTRIDGES 541 UNITS COLLECTED 1,473 POUNDS COLLECTED</p>	<p>8/ 50 gallon trash bags Of PETE 75; 30 gallon bags of PETE and 10; 50 gallon bags of aluminum</p>	<p>3079 lbs of plastic &amp; aluminum</p>
<p>INKJET PRINTER CARTRIDGES 159 UNITS COLLECTED 14 POUNDS COLLECTED</p>		<p>Cardboard and paper collected averaged to 700 pounds per week 19,000 pounds kept out of landfills</p>



# Recycling Tuesday






Tuesday is Recycling Day!

The recycling center is always full!



**Environmental Impact Equivalents**

Recycling saves nonrenewable natural resources and offsets harmful CO<sub>2</sub> emissions. Your environmental impact is equivalent to:

-  Offsetting the annual greenhouse gas emissions from 3 passenger vehicle(s).
-  Offsetting CO<sub>2</sub> emissions from the consumption of 1,570 gallon(s) of gasoline.
-  Counterbalancing CO<sub>2</sub> emissions from the consumption of 33 barrel(s) of oil.
-  Staving off global warming via the intake and storage of carbon of 39 tree seedling(s) grown for 10 years.
-  Counterbalancing CO<sub>2</sub> emissions from 54 propane cylinder(s) used for home barbecue.

We've recycled a total of 3079 pounds. That's over the weight of a bison!

# School Recycling: includes Parents, Teachers, & Students!

Nicholas Harris, Evan Mathis, JT, and Mrs Reeves worked together to get a great team of recyclers.



That's a lot of Aluminum! Thank you, Mr Walker, for bringing all to the recycler!





# Calca-Chew October 2018

Awareness. The team handed out City Recycling Information and School Recycling Information to over 200 participants!



We also collected all of the recycling for the festival, filling 8 50-gallon trash bags!





# Calca-Chew October 2018

Recycle  
Krewe  
taking care  
of Plastic  
and  
Aluminum.



These are the two  
winners of our  
first Annual  
Gumbo Contest.



WOW! We  
collected  
75 30-gallon  
bags of  
PETE and  
10 50-gallon  
bags of  
aluminum  
in one  
event!.

# Beach Sweep September 2018



**GO TEAM!  
LOOK at all that  
Garbage!!!  
A Cleaner Lakefront!**

**What a team! We cleaned 5 miles of  
Lake Charles Beach, collecting 30 bags  
of garbage and a trailer full of debris!**





# Adopt A Road October 2018

The Pro Terra Nova  
Gang is all here!



Divide and conquer to  
get the 8 blocks cleaned!



Before



After



17th Street is an 8 block area. We divided and conquered  
cleaning this area collecting 6 30-gallon trash bags of garbage!