
PV systems & Renewable Energy Awareness Survey (KCL community) MATLAB Analysis

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% Q1: Renewable energy is unlimited
q1_labels = {'Strongly Agree', 'Agree', 'Not sure', 'Disagree'};
q1_data = [15 32 7 4];
figure;
pie(q1_data, q1_labels);
title('Q1: Renewable energy is unlimited');

% Q2: Human activity contribution to climate change
q2_labels = {'Significantly', 'Somewhat', 'Not at all', 'Not sure'};
q2_data = [35 19 2 2];
figure;
pie(q2_data, q2_labels);
title('Q2: Human activity contribution to climate change');

% Q3: Shift to renewable energy sources
q3_labels = {'Yes', 'No', 'Not sure'};
q3_data = [42 10 6];
figure;
pie(q3_data, q3_labels);
title('Q3: Shift to renewable energy sources');

% Q4: Familiarity with renewable energy
q4_labels = {'Very Familiar', 'Somewhat Familiar', 'Not Familiar'};
q4_data = [31 25 2];
figure;
pie(q4_data, q4_labels);
title('Q4: Familiarity with renewable energy');

% Q5: Awareness of KCL solar energy initiatives
q5_labels = {'Very Aware', 'Somewhat Aware', 'Completely Unaware'};
q5_data = [4 16 38];
figure;
pie(q5_data, q5_labels);
title('Q5: Awareness of KCL solar energy initiatives');

% Q6: Campus effort to reduce electricity consumption
q6_labels = {'Very Aware', 'Somewhat Aware', 'Completely Unaware'};
q6_data = [4 16 38];
figure;
pie(q6_data, q6_labels);
title('Q6: Campus effort to reduce electricity consumption');

% Q7: Most viable form of renewable energy
q7_labels = {'Wind Energy', 'Solar Energy', 'Hydroelectric Energy', 'Biomass energy', 'I don't know'};
q7_data = [4 23 13 5 13];
figure;
pie(q7_data, q7_labels);
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title('Q7: Most viable form of renewable energy');

% Q8: How solar energy can reduce greenhouse gas emissions
q8_labels = {'By reducing the need for fossil fuels', 'By producing
    electricity with no emissions', 'Both of the above', 'None of the
    above', 'Not sure'};
q8_data = [9 4 38 1 6];
figure;
pie(q8_data, q8_labels);
title('Q8: How solar energy can reduce greenhouse gas emissions');

% Q9: Personal experience with solar energy installation
q9_labels = {'Yes', 'No'};
q9_data = [48 10];
figure;
pie(q9_data, q9_labels);
title('Q9: Personal experience with solar energy installation');

% Q10: Average hours spent at Strand Campus
q10_labels = {'More than 40 hours', 'Between 40 and 20 hours', 'Between 20 and
    10 hours', '10 Hours or less'};
q10_data = [2 19 21 16];
figure;
pie(q10_data, q10_labels);
title('Q10: Average hours spent at Strand Campus');

% Q10: Notice lights or electronics left on when not in use
q11_labels = {'Significantly', 'Sometimes', 'Rarely to Never'};
q11_data = [25 27 6];
figure;
pie(q11_data, q11_labels);
title('How often do you notice lights or electronics left on when not in use
    at your school campus?');

% Question 11
question11 = ["Yes", "No", "I'm not sure"];
responses11 = [17, 18, 23];
figure;
pie(responses11, question11);
title('Have you noticed any energy-efficient practices or technologies being
    used at your school campus? ');

% Question 12
question12 = ["Yes", "No", "I'm not sure"];
responses12 = [41, 6, 11];
figure;
pie(responses12, question12);
title('Do you think the use of Solar Energy will actually REDUCE energy
    costs');

% Question 13
question13 = ["I haven't but would", "I haven't and would NOT", "I have them
    installed"];
responses13 = [46, 4, 8];

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figure;
pie(responses13, question13);
title('Have you or would you consider installing PV (photovoltaic) systems in
your household Please ');

% Question 14
question14 = ["Never", "Always", "On occasion"];
responses14 = [12, 22, 24];
figure;
pie(responses14, question14);
title('How often do you personally make an effort to turn off lights or
electronics when not in use at your school campus? ');

% Question 15
question15 = ["Never", "Always", "On occasion"];
responses15 = [11, 20, 27];
figure;
pie(responses15, question15);
title('Have you personally made any changes to your own habits or lifestyle
to reduce your electricity usage at school? For example, How often do you
personally make an effort to turn off lights or electronics when not in use
at your school campus? ');

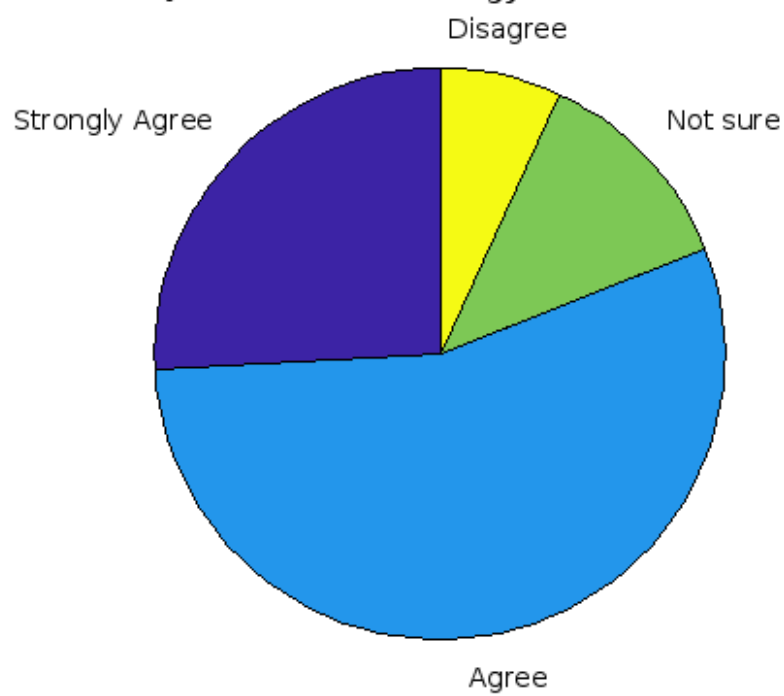
% Question 16
question16 = ["Yes", "No", "Not sure"];
responses16 = [18, 16, 24];
figure;
pie(responses16, question16);
title('Do you feel that your personal electricity usage at school is aligned
with the school goals');

% Question 17
question17 = ["Yes", "No"];
responses17 = [25, 33];
figure;
pie(responses17, question17);
title('Are you aware of the Kyoto agreement?');

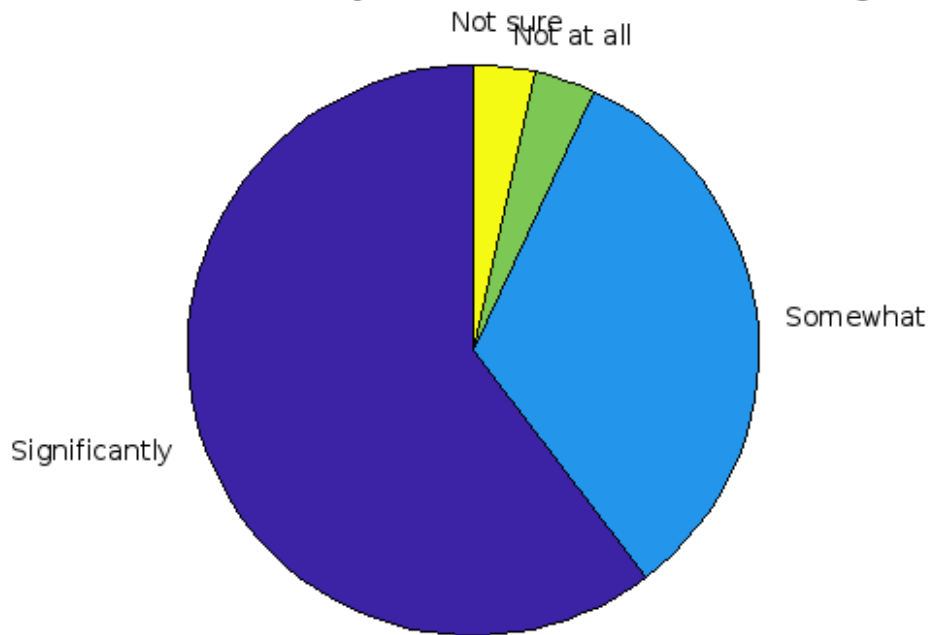
% Question 18
question18 = ["Solar energy", "Wind energy", "Hydro energy", "Tidal
energy", "Geothermal energy", "Biomass energy"];
responses18 = [35, 6, 8, 1, 4, 4];
figure;
pie(responses18, question18);
title('Which renewable energy do you think has the most extensive scope to be
successfully implemented across the globe by 2030? ');

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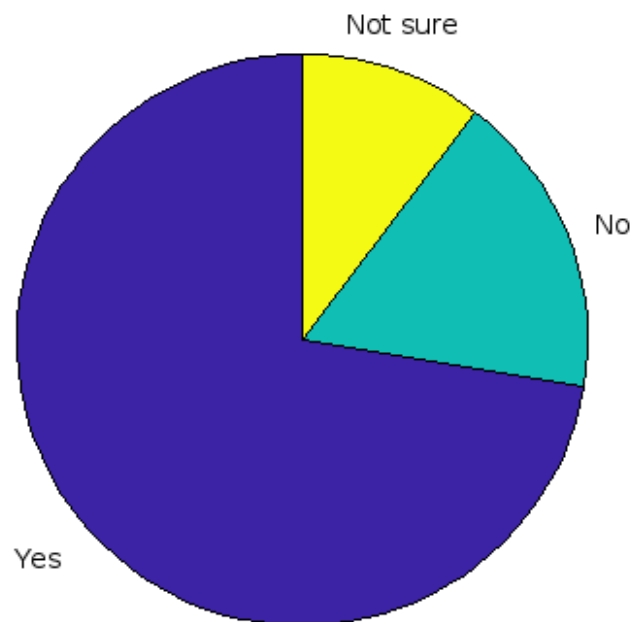
Q1: Renewable energy is unlimited



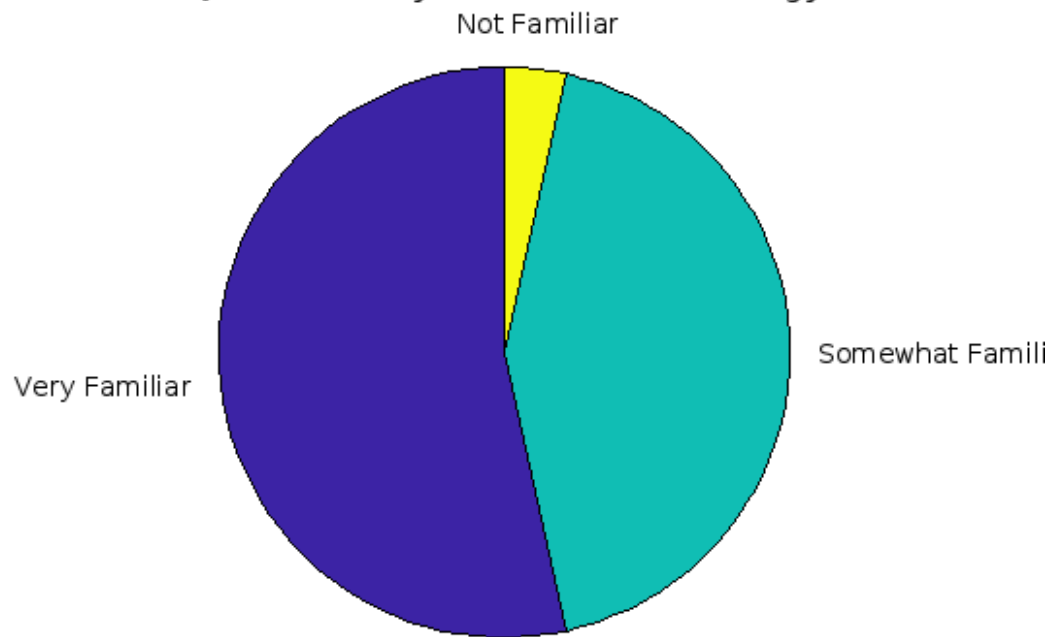
Q2: Human activity contribution to climate change



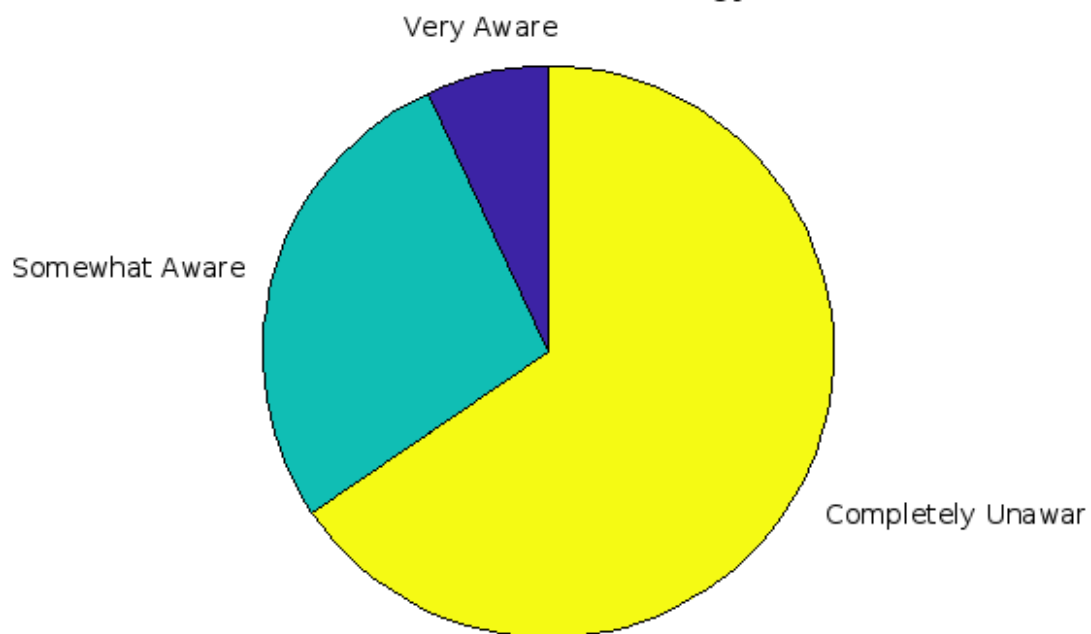
Q3: Shift to renewable energy sources



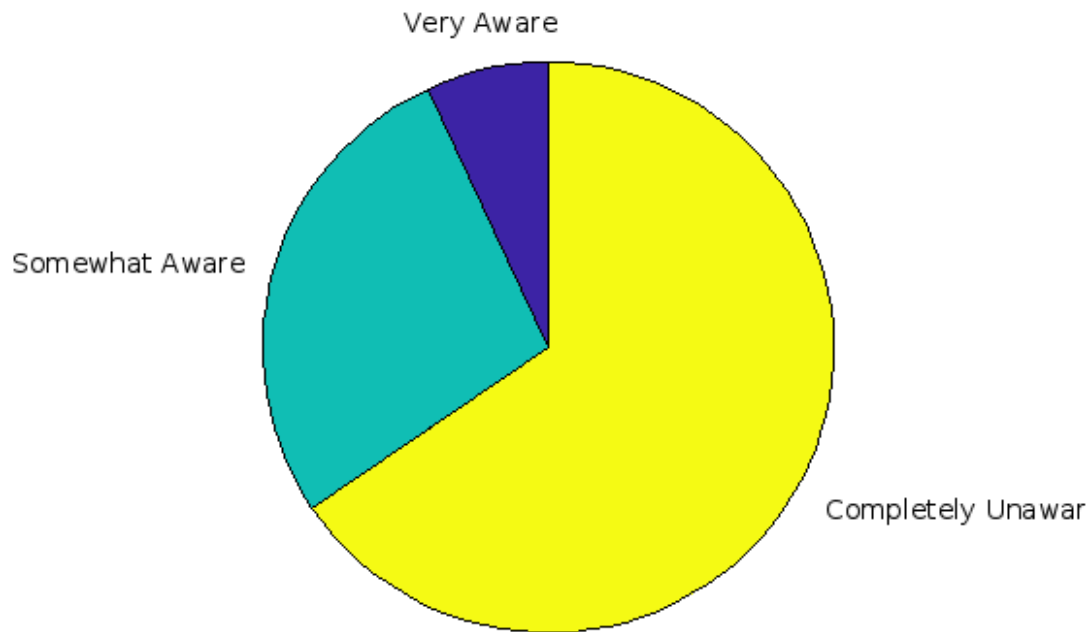
Q4: Familiarity with renewable energy



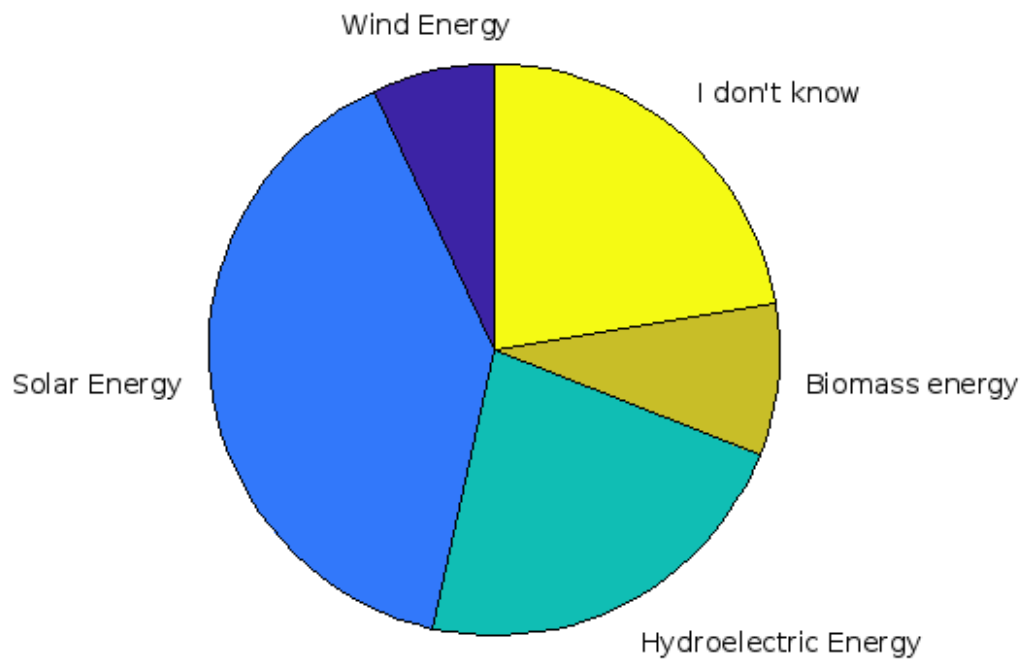
Q5: Awareness of KCL solar energy initiatives



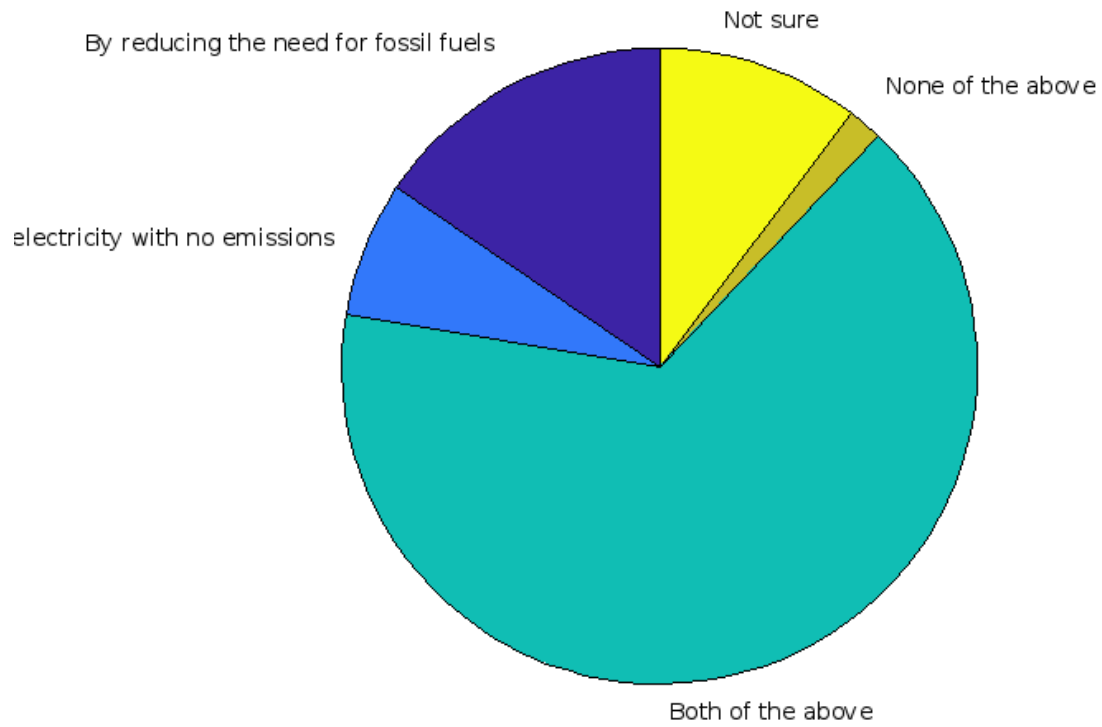
Q6: Campus effort to reduce electricity consumption



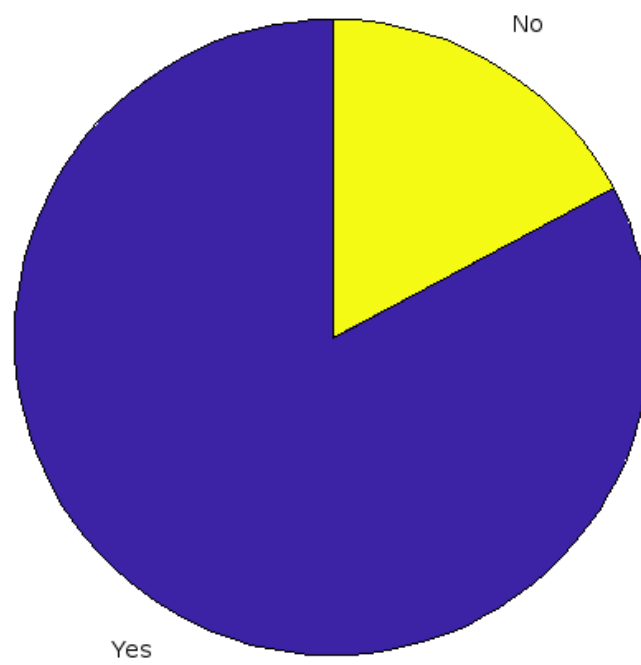
Q7: Most viable form of renewable energy



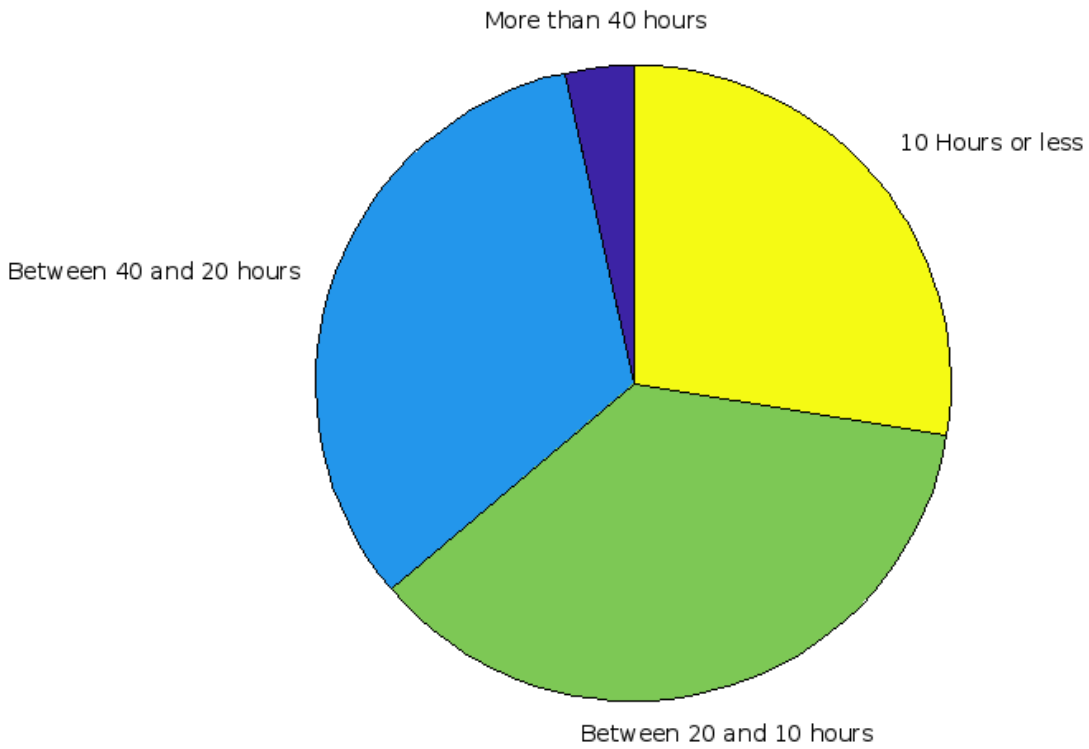
Q8: How solar energy can reduce greenhouse gas emissions



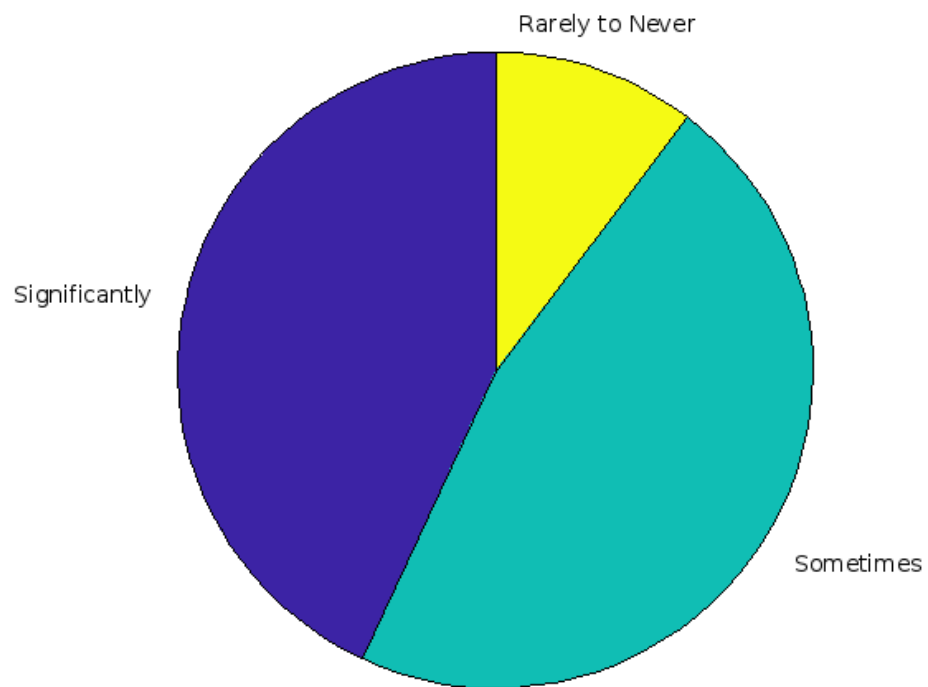
Q9: Personal experience with solar energy installation



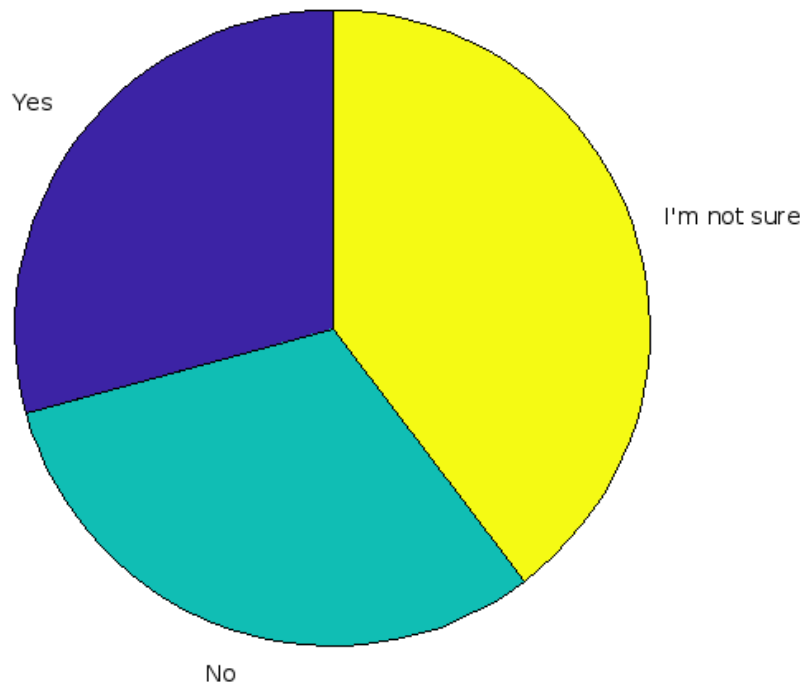
Q10: Average hours spent at Strand Campus



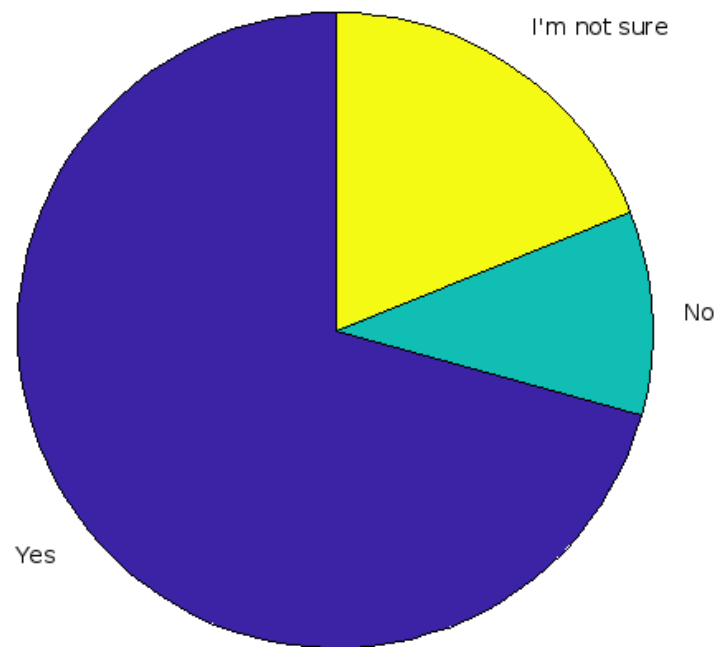
How often do you notice lights or electronics left on when not in use at your school camp



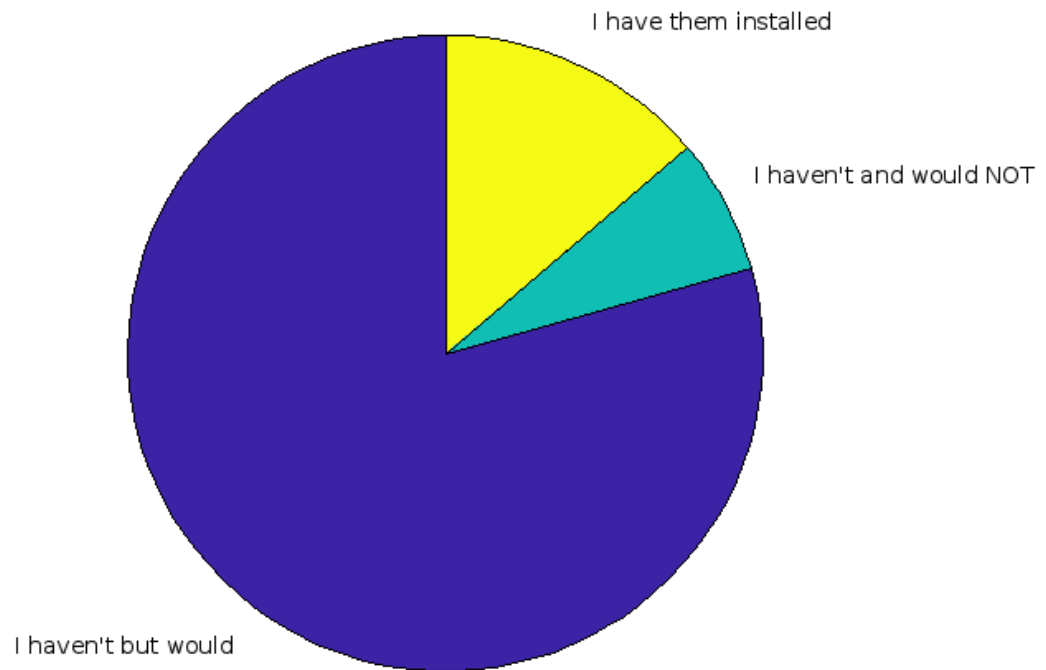
Have you noticed any energy-efficient practices or technologies being used at your school campus?



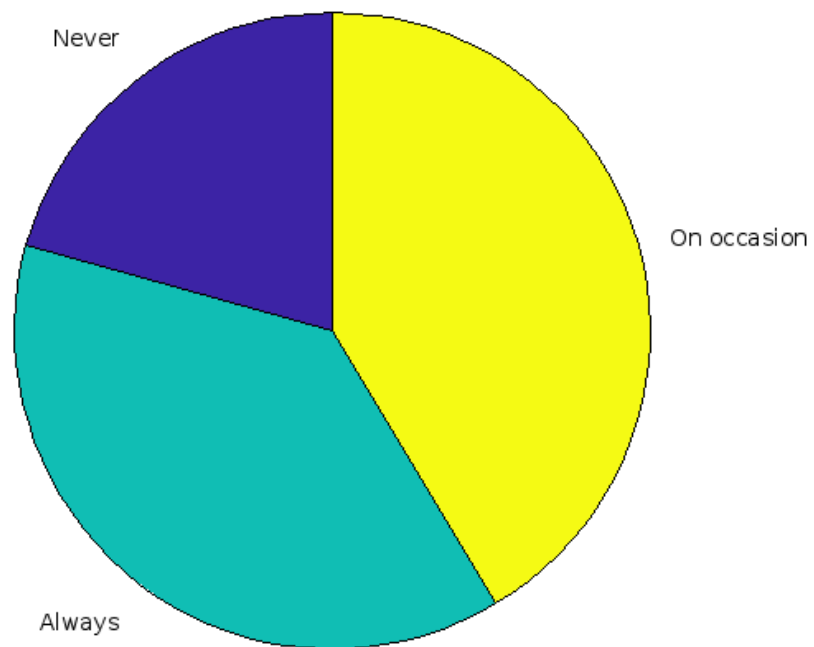
Do you think the use of Solar Energy will actually REDUCE energy costs



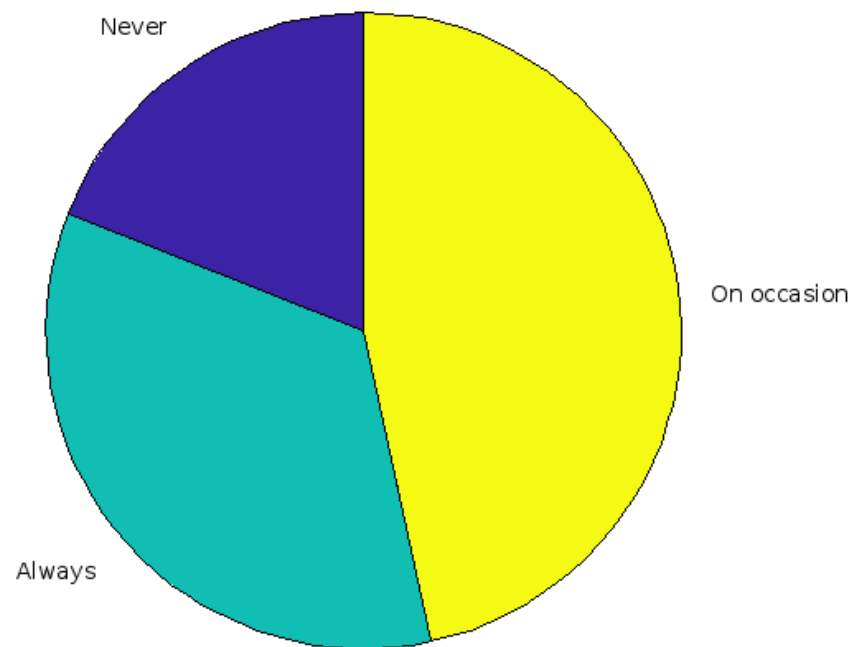
ave you or would you consider installing PV (photovoltaic) systems in your household Pl



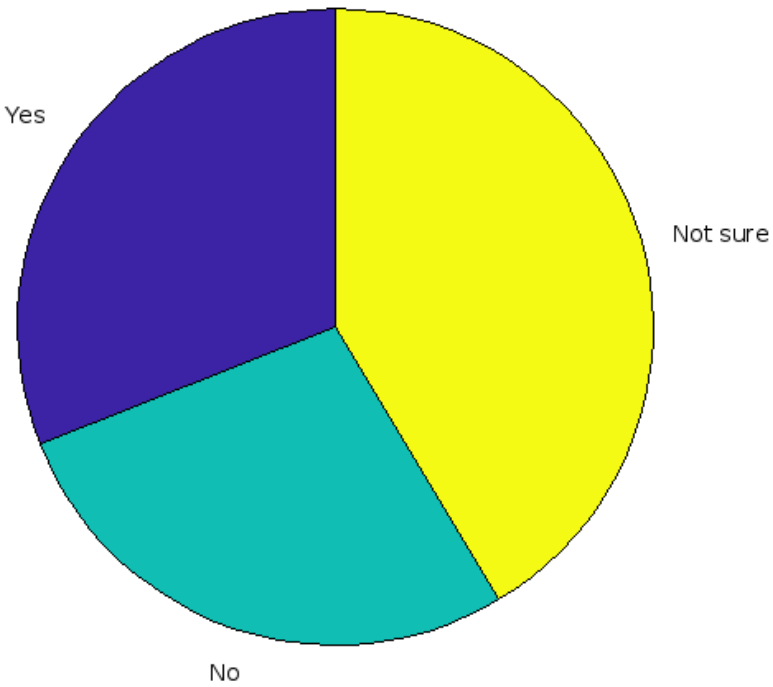
o you personally make an effort to turn off lights or electronics when not in use at your s



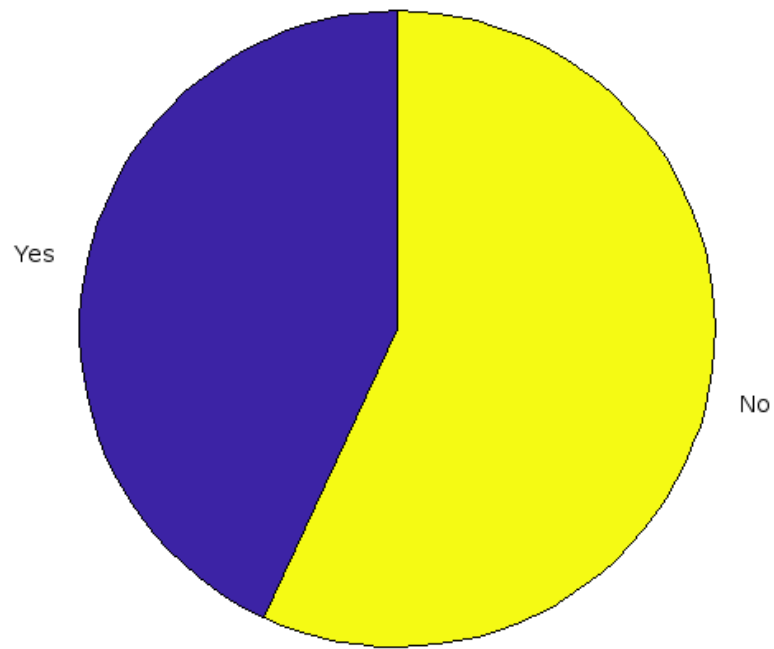
How often do you personally make an effort to reduce your electricity usage at school? For example, How often do you personally make an effort to reduce your electricity usage at school? For example, How often do you personally make an effort to reduce your electricity usage at school? For example,



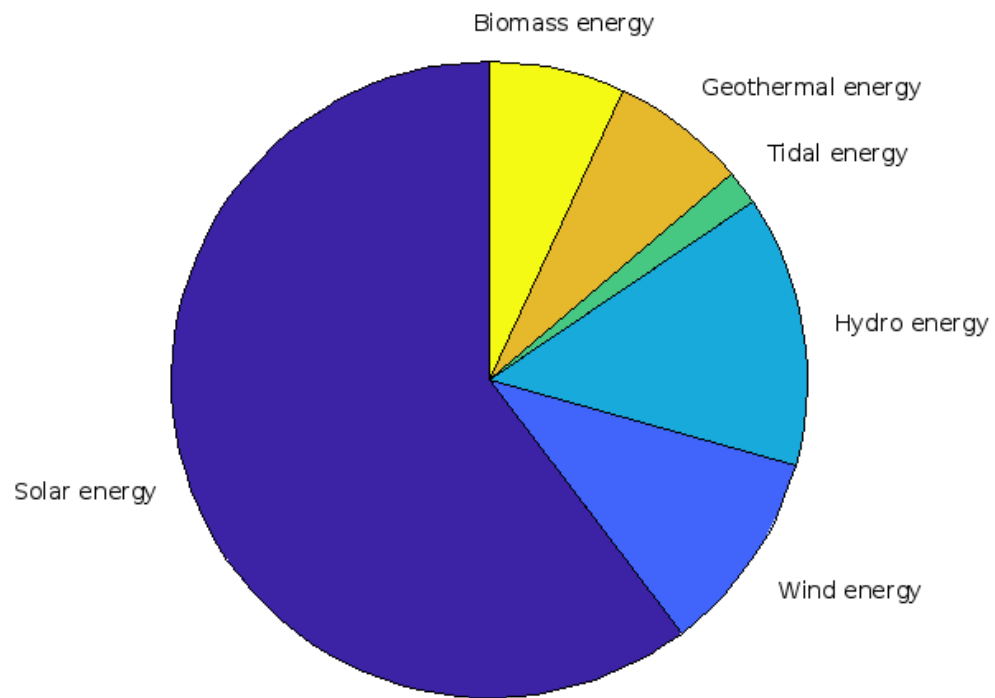
Do you feel that your personal electricity usage at school is aligned with the school goals?



Are you aware of the Kyoto agreement?



energy do you think has the most extensive scope to be successfully implemented across:



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