Personnel Plan

Global Solutions and Outreach Programs (GSOP)

GSOP Operations Personnel

GSOP Personnel Plan is based on the GSOP Problem Diagrams and associated Solution Work Units. Personnel for each work unit is shown along with the team structure. Personnel hiring priorities are indicated as follows:

Priority 1: hire within 3 months. Priority 2: hire within 6 months. Priority 3: hire within 12 months for full-time + ½ part-time personnel. Hire remainder of part-time personnel as needed.

To staff the GSOP at this rapid rate, Priority 1 hires will assist in selecting Priority 2 personnel. Likewise, Priority 2 full-time hires will assist to select the Priority 3 personnel.

The three types of personnel positions are abbreviated as follows:

Problem Facilitators are designated "PF." These are full-time personnel. Full-time personnel are designated "FT." These include the Problem Facilitators. Part-time (4 hr./week) are designated "PT."

The numbers of full-time personnel that should be co-located are also indicated.

The ratio of part-time staff to full-time staff is high at 7 to 1 for the entire GSOP. The ratio is 10 to 1 in the Outreach portion of the GSOP. Flexibility is required in hiring part-time staff as they are needed. Part-time staffing levels are based on working 4 hours per week, or 1 tenth time. When it makes sense, 10 part-time positions could be converted 1 full-time position.

The number of hours that part-time employees can devote to GSOP will depend on their other employment obligations and personal situations. Thus, flexibility is required in the number of hours worked per week based on individual availability and program needs.

People's Project 1

1. Organization Work Units – National

1 Team, 3 PF (Project 1 Core Team), 3 FT/0 PT (Co-locate 3 FT). Total Personnel: 3 FT/0 PT (Co-locate 3 FT) Priority 1 3FT/0 PT, Priority 2: 0 FT/0 PT, Priority 3: 0 FT/ 0 PT.

2. Standardization & Information Technology Work Units – National Teams & International

2 Teams, 4 PF, 6 FT/20 PT (Co-locate 4 FT).

Total Personnel: 6 FT/ 20 PT (Co-locate 4 FT) Priority 1: 3 FT/2 PT, Priority 2: 2 FT/6 PT, Priority 3: 1 FT/ 12 PT.

3. Halt the net release of atmospheric CO₂ by 2050, 2075 and 2100 Work Units – National

Based on 62 options under 6 categories.

a. 1 Overall Team, 3 PF, 3 FT/0 PT (Co-locate 3 FT).

Personnel: Priority 1: 1 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/ 0 PT.

b. 3 Sub-teams for three largest categories, 2 PF over each of 3 sub-teams, = 6 FT/0 PT (Co-locate 6 FT).

Personnel: Priority 1: 0 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 5 FT/ 0 PT.

c. 31 Sub-sub-teams for 62 options, 2/20 each sub-sub team = 62 FT/620 (Co-locate 0). Personnel: Priority 1: 0 FT/5 PT, Priority 2: 0 FT/0 PT, Priority 3: 62 FT/ 615 PT. Total personnel: 71 FT/620 PT (Co-locate 9 FT), Priority 1: 1 FT/5 PT, Priority 2: 3 FT/0 PT, Priority 3: 67 FT/ 615 PT.

4. Adapt to unavoidable climate change impacts by 2050, 2075 and 2100 Work Units. - National

Based on an assumed total of 15 options TBD.

a. 1 Overall Team, 3 PF, 3 FT/0 PT (Co-locate 3 FT).

Personnel: Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 1 FT/0 PT.

b. 8 Sub-sub-teams for 15 options, 2 FT/20PT each sub-sub team = 16 FT/160 PT (Co-Locate 2 FT).

Personnel: Priority 1: 0 FT/5 PT, Priority 2: 0 FT/0 PT, Priority 3: 16 FT/ 155 PT. Total personnel: 19 FT/160 PT (Co-locate 5 FT) Priority 1: 1 FT/5 PT, Priority 2: 1 FT/0 PT, Priority 3: 17 FT/ 155 PT.

5. Integration & Reporting Work Units – National

1 Team, 2 PF, 10 FT/20 PT (Co-locate 10 FT). Total personnel: 10 FT/ 20 PT (Co-locate 10 FT) Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 8 FT/20 PT.

6. Economics Work Units - National

1 Team, 2 PF, 5 FT/10 PT (Co-locate 5 FT). Total personnel: 5 FT/ 10 PT (Co-locate 5 FT), Priority 1: 0 FT/1 PT, Priority 2: 2 FT/0 PT, Priority 3: 3 FT/ 9 PT.

7. Social/Political Work Units – National

1 Team, 2 PF, 5 FT/10 PT (Co-locate 5 FT). Total personnel: 5 FT/ 10 PT (Co-locate 5 FT), Priority 1: 0 FT/1 PT, Priority 2: 2 FT/0 PT, Priority 3: 3 FT/ 9 PT.

8. International Outreach Work Units – International

1 Team, 2 PF, 10 FT/20 (Co-locate 10 FT). Total personnel: 10 FT/ 20 PT (Co-locate 10 FT), Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 8 FT/ 20 PT.

<u>9. Integration Work Units – Regional & Global</u> 1 Team, 2 PF, 2 FT/10 PT (Co-locate 2 FT). Total personnel: 2 FT/ 10 PT (Co-locate 2 FT) Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/ 10 PT.

<u> 10. Economics Work Units – Regional & Global</u>

1 Team, 2 PF, 2 FT/10 PT (Co-locate 2 FT). Total personnel: 2 FT/ 10 PT (Co-locate 2 FT) Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/ 10 PT.

<u> 11. Social/Political Work Units – Regional & Global</u>

1 Team, 2 PF, 2 FT/10 PT (Co-locate 2 FT). Total personnel: 2 FT/ 10 PT (Co-locate 2 FT) Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/ 10 PT.

Total Project 1 personnel: 135 FT/890 PT. Total Project 1 hiring priorities: Priority 1 hires: 10 FT/14 PT, Priority 2 hires: 18 FT/6 PT, Priority 3 hires: 107 FT/870 PT. Total Project 1 Co-locate: 57.

People's Project 2

1. Organization Work Units – National & International

1 Team, 3 PF (Project 2 Core Team), 3 FT/0 PT (Co-locate 3). Total personnel: 3 FT/0 PT (Co-locate 3 FT), Priority 1: 3 FT/2 PT, Priority 2: 2 FT/6 PT, Priority 3: 1 FT/12 PT.

2. Standardization Work Unit – International

Addressed through People's Project 1.

3. Stabilize the Earth's energy balance to halt global warming, adjust the Earth's energy balance to return to prior conditions by 2050, 2075 and 2100 – International

Based on 43 options under 7 categories.

a. 1 Overall Team, 3 PF, 3 FT/0 PT (Co-locate 3).

Personnel: Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 1 FT/0 PT.

b. 2 Sub-teams for two largest categories, 2 PF over each of 2 sub-teams = 4 FT/0 PT (Co-locate 2). Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 2 FT/ 0 PT.

c. 22 Sub-sub-teams for 43 options, 2 FT/20 PT each sub-sub team = 44 FT/440 PT (Co-locate 0). Personnel: Priority 1: 0 FT/5 PT, Priority 2: 0 FT/0 PT, Priority 3: 44 FT/ 435 PT.

Total personnel: 51 FT/440 PT (Co-locate 5), Priority 1: 1 FT/5 PT, Priority 2: 3 FT/0 PT, Priority 3: 47 FT/ 435 PT.

<u>4. Address ocean acidification & other problems – International</u>

Based on an assumed total of 15 options TBD.
a. 1 Overall Team, 3 PF overall, 3 FT/0 PT (Co-locate 3).
Personnel: Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 1 FT/ 0 PT.
b. 8 Sub-teams for 15 options, 2/20 each sub-sub team = 16/160 (C-locate 0).
Personnel: Priority 1: 0 FT/5 PT, Priority 2: 0 FT/0 PT, Priority 3: 16 FT/ 155 PT.
Total personnel: 19/160 (Co-locate 3) Priority 1: 1 FT/5 PT, Priority 2: 1 FT/0 PT, Priority 3: 17 FT/155 PT.

5. Integration & Reporting Work Units – International

1 Team, 2 PF, 2/10 (Co-locate 3). Total personnel: 2/10 (Co-locate 3) Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 0 FT/10 PT.

6. Economics Work Units – Determined Nationally in People's Project 1

7. Social/Political Work Units – Determined Nationally in People's Project 1

Total personnel Project 2: 75/610. Total Project 2 Priorities: Priority 1 hires: 6 FT/ 10 PT, Priority 2 hires: 5 FT, 0 PT, Priority 3 hires: 64 FT/600 PT. Total Project 2 Co-locate: 14.

People's Project 3

1. Organization Work Units – National & International

1 Team, 3 PF (Project 3 Core Team), 3 FT/0 PT (Co-locate 3). Total personnel: 3/0 (Co-locate 3) Priority 1: 3 FT/0 PT, Priority 2: 0 FT/0 PT, Priority 3: 0 FT/0 PT.

2. Standardization Work Unit – International

Addressed through People's Project 1.

3. Climate monitoring, models and future conditions – International

1 Team, 2 PF, 6 FT/20 PT (Co-locate 6). Total personnel: 6/20 (Co-locate 6) Priority 1: 1 FT/5 PT, Priority 2: 1 FT/5 PT, Priority 3: 4 FT/10 PT.

4. Halt the net release of atmospheric CO₂ - International

Based on a total of 11 options.
a. 1 Overall Team, 2 PF, 2 FT/0 PT (Co-locate 2).
Personnel: Priority 1: 1 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 0 FT/ 0 PT.
b. 6 Sub-teams for 11 options, 2 FT/20 PT each sub-sub team = 12 FT/120 PT (Co-locate 0).
Personnel: Priority 1: 0 FT/5 PT, Priority 2: 2 FT/10 PT, Priority 3: 10 FT/ 105 PT.
Total personnel: 14 FT/120 P (Co-locate 2) Priority 1: 1 FT/5 PT, Priority 2: 3 FT/10 PT, Priority 3: 10 FT/105 PT.

5. Adapt to unavoidable climate change impacts - International

Based on an assumed total of 10 options TBD.
a. 1 Overall Team, 2 PF, 2 FT/0 PT (Co-locate 2).
Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/ 0 PT.
b. 5 Sub-teams for 10 options, 2/20 each sub-sub team = 10 FT/100 PT (Co-locate 0).
Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/10 PT, Priority 3: 8 FT/ 90 PT.

Total personnel: 12 FT/100 PT (Co-locate 2) Priority 1: 0 FT/0 PT, Priority 2: 4 FT/10 PT, Priority 3: 8 FT/90 PT.

6. Stabilize and adjust the Earth's energy balance to halt global warming and return to prior conditions -International

Based on a total of 12 options.
a. 1 Overall Team, 2 PF, 2 FT/0 PT (Co-locate 2).
Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/0 PT.
b. 6 Sub-teams for 12 options, 2/20 each sub-sub team = 12 FT/120 PT.
Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/10 PT, Priority 3: 10 FT/110 PT.
Total personnel: 14 FT/120 PT (Co-locate 2) Priority 1: 0 FT/0 PT, Priority 2: 4 FT/10 PT, Priority 3: 10 FT/110 PT.

7. Address ocean acidification & other problems - International

Based on an assumed total of 10 options TBD.
a. 1 Overall Team, 2 PF, 2 FT/0 PT (Co-locate 2).
Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/0 PT, Priority 3: 0 FT/ 0 PT.
b. 5 Sub-teams for 10 options, 2 FT/20 PT each sub-sub team = 10 FT/100 PT.
Personnel: Priority 1: 0 FT/0 PT, Priority 2: 2 FT/10 PT, Priority 3: 8 FT/90 PT.
Total personnel: 12 FT/100 PT (Co-locate 2) Priority 1: 0 FT/0 PT, Priority 2: 4 FT/10 PT, Priority 3: 8 FT/90 PT.

8. Integration & Reporting Work Units – International

1 Team, 2 PF, 2 FT/10 PT (Co-locate 2). Total personnel: 2 FT/10 PT (Co-locate 2) Priority 1: 0 FT/0 PT, Priority 2: 1 FT/0 PT, Priority 3: 1 FT/10 PT.

9. Economics Work Units – Determined Nationally in People's Project 1

10. Social/Political Work Units – Determined Nationally in People's Project 1

Total personnel Project 3: 63 FT/470 PT. Total Project 3 Priorities: Priority 1 hires: 5 FT/ 10 PT, Priority 2 hires: 17 FT, 45 PT, Priority 3 hires: 41 FT/415 PT. Total Project 3 Co-locate: 19.

Outreach Program

1. Organization Work Units – National

1 Team, 3 PF (Outreach Program Core Team), 10 FT/0 PT (Full-Time/Part Time) (Co-locate 10). Total Personnel: 10 FT/0 PT (Co-locate 10) Priority: 1: 10 FT/0 PT, Priority 2: 0 FT/0 PT, Priority 3: 0 FT/ 0 PT.

<u>2. Integration & Reporting Work Units – National</u> Included in 1. 3. Outreach Work Units – State and Local

50 Teams, 2 PF per team and 20 part-time per team, 100/1,000. Total Personnel: 100 FT/1,000 PT (Co-locate 0) Priority: 1: 2 FT/10 PT, Priority 2: 98 FT/0 PT, Priority 3: 0 FT/ 990 PT.

<u>4. Integration Work Units – State and Local</u> Included in 3.

<u>5. Social/Political Work Units – State and Local</u> Included in 3.

Total for Outreach Program: 110 FT/1,000 PT. Total Outreach Program priorities: Priority 1 hires: 12 FT/10 PT, Priority 2 hires: 98 FT/0 PT, Priority 3 hires: 0 FT/990 PT. Total Outreach Program Co-locate 10.

Summary of GSOP Hiring Plans and Priorities:

Total People's Project 1: Priority 1 hires: 10 FT/14 PT, Priority 2 hires: 18 FT/ 6 PT, Priority 3 hires: 107 FT/870 PT, Project 1 total personnel: 135 FT/890 PT, Co-locate 57.

Total People's Project 2: Priority 1 hires: 6 FT/10 PT, Priority 2 hires: 5 FT, 0 PT, Priority 3 hires: 64 FT/600 PT, Project 2 total personnel: 75 FT/610 PT, Co-locate 14.

Total People's Project 3: Priority 1 hires: 5 FT/10 PT, Priority 2 hires: 17 FT/45 PT, Priority 3 hires: 41 FT/415 PT, Project 3 total personnel: 63 FT/470 PT, Co-locate 19.

Totals for GSP: Priority 1 hires: 21 FT/34 PT, Priority 2 hires: 40 FT/51 PT, Priority 3 hires: 212 FT/1,885 PT, GSP total personnel: 273 FT/1,970 PT, Co-locate 90.

Total Outreach: Priority 1 hires: 12 FT/10 PT, Priority 2 hires: 98 FT/0 PT, Priority 3 hires: 0 FT/990 PT, OP total personnel: 110 FT/1,000 PT, Co-locate 10.

Totals for GSOP: Priority 1 hires: 33 FT/44 PT, Priority 2 hires: 138 FT/51 PT, Priority 3 hires: 212 FT/2,875 PT, GSOP total personnel: 383 FT/2970 PT, Co-locate 100.

Note: GSOP FT equivalents by counting 10 PT as 1 FT = 383 + 297 = 680 FT equivalents

GSOP Administration Personnel (Tasks and Personnel)

1. Establish or acquire a legal entity (non-profit organization, private or government) to accept and administer program money and other necessary functions. (Will need a consultant expert.)

2. Form a Board of Directors if a private organization is established.

- 3. Hire full-time participants for Administration Team.
 - Administrator to oversee Administration Team. (1 Administrator)
 - Administrators for payroll and fringe benefits (health care, disability insurance, employee owned retirement account, sick and annual leave). (3 Bachelor degrees)
 - Comptroller to oversee budget and money in and out. (2 Analysists)
 - Accountant to track finances. (2 Accounts)
 - Secretaries, receptionists for Administration Team and Technical Team. (1 Secretary for Administration Team, 4 Secretaries for project teams.)
 - Bachelor degree to acquire office space for collocated participants and administrate office space rental, travel expenses, moving/relocation expenses, temporary duty station expenses. (2 Bachelor degrees)
 - Bachelor degrees to hire candidates after selection by Technical Start-up Team. (2 Bachelor degrees)
 - On-call contractor legal support. Hire law firm to provide as needed legal support.

4. Select & acquire office space for collocated participants.

5. Recruit, select and hire five full-time engineers or equivalent plus two social/political experts for the following six ongoing administrative tasks (#6-11).

6. Recruit young engineers, economists, social experts and other needed specialists (20's and 30's) for the Operations Teams to execute GSOP in accordance with the GSOP Personnel Plan. Interface with the Professional Societies of engineers, economists and social/political experts to inform them of the GSOP and to ask them to inform their members of the GSOP employment opportunities.

7. Establish & maintain a "Technical Advisory Committee" (TAC) of senior technical experts for independent GSOP peer review, guidance and assistance.

8. Establish & maintain a Visibility Team to keep public officials, corporate leaders, donors and the public informed of the GSOP and its results. Interface with international organizations such as the UN to provide GSOP descriptions and to share results to gain international visibility.

9. Maintain and update the GSOP Web site.

10. Prepare external GSOP progress reports to provide periodic GSOP progress to the public, government officials and GSOP sponsors.

11. Conduct international outreach to encourage and recruit all nations to participate in the GSOP. Work with existing international organizations (AIChE, International Energy Association...) to gain international visibility and GSOP participants. Gain support in the UN through the Federal Administration if possible. Identify regional coordinators who may help recruit the nations in their region.