

The U.S.-Israel Energy Center

Webinar on - Proposal Preparation Guidelines^(*)

Sep. 4, 2019



*Complete information is provided in www.birdf.com/energycenter-procedure-submission-forms/

Energy Center	Date
Proposals submission**(UPDATED)	September 23, 2019
Selections/Awards	Dec. 2019/Jan. 2020

- All questions will be answered at the end of the presentation
- Please submit questions through the **Q&A tab** at the bottom of your screen
- For reference, please include the **slide number** (top right), if relevant
- If we are unable to respond directly to your question, we will be happy to connect directly offline

- A. Cover Page
- B. Table of Contents
- C. Executive Summary
- D. The Innovative Technology
- E. Proposed R&D Program
- F. Program Plan
- G. The Market and the Sales Plan
- H. Commercialization – Plans & Prospects
- I. Cooperation, Economic and Social Benefits
- J. Organization and Management Plan
- K. The CM's and Their Resources
- L. The Program Budget**
- M. Risk Analysis
- N. Sundry Information**

- The Proposal's **R&D Program** (Sections D & F) as well as the **Budget** (Section L) should be more detailed for the **first 2-3 years** of the Program and less detailed for **years 4-5**.
- The **contents and accents** in the Proposal should address and relate to the **Proposal Selection Criteria** (section 5 in Procedures Handbook), upon which the quality of the proposal will be rated.
- There is **no page limit** to the proposal's size.

Abbreviations:

- **CM** – Consortium Member
- **ILL** – Israel Lead CM
- **USL** - U.S. Lead CM

- **EC – Procedures Handbook (submission), section 7 – pdf**
- **File #1 – Executive Summary of EC Proposal Template – docx (optional)**
- **File #2 – EC Full Proposal Template – docx**
- **File #3 – EC Proposal Budget Template (25 tasks) - xlsx**
- **File #4 – EC Proposal Budget Summary for ILL / USL - xlsx**

- First page in Proposal
- Based on template in File #2
- Must be **signed** by ILL & USL
- Copy (in PDF) uploaded separately (item 5)

Proposal Cover Page

To: U.S. - Israel Center of Excellence in Energy, Engineering and Water Technology

From: Israel Lead Organization: _____

Office Address - _____ Mailing Address (if different from office address) - _____

 Telephone No. _____

From: U.S. Lead Organization: _____

Office Address - _____ Mailing Address - (if different from office address) - _____

 Telephone No. _____

Proposal Title: _____

Topic area of Research	<input type="checkbox"/> Fossil Energy	<input type="checkbox"/> Energy Storage
	<input type="checkbox"/> Energy Security	<input type="checkbox"/> Energy-Water Nexus

Program Duration: ____ years + ____ months **Program Budget:** \$ _____ ⁽¹⁾

	Israel Lead Organization Authorized Company Official	U.S. Lead Organization Authorized Organization Official
Submitted by:	_____	_____
Signature:	_____	_____
Printed Name:	_____	_____
Title:	_____	_____
E-mail:	_____	_____
Date Submitted:	_____	_____

Preferred date (month / year) for start of Proposal funding: ⁽²⁾ _____

⁽¹⁾ Program Budget – the total budget for all participants in the Consortium, for the entire duration of the Proposal program

⁽²⁾ Preferred date for start of Proposal funding – Can only be 1st day of the month. Funding cannot start before the month following the Proposal approval month

- Based on File #1 template (without signature page)
- Based on draft ES submitted (optional), but updated
- 100% consistent with info in Full Proposal
- Must include tables + 6 sub-sections:
 - Abstract
 - Lead Organization Background
 - The Innovation
 - Proposed Plan
 - Collaborative Relationship
 - Commercial Potential

Topic area of research	<input type="checkbox"/> Fossil Energy	<input type="checkbox"/> Energy Storage
	<input type="checkbox"/> Energy Security	<input type="checkbox"/> Energy-Water Nexus
Proposal title		
Proposal total budget	\$ _____	
Proposal duration	__ years and __ months	

Description	Israel Lead Organization (ILL)	U.S. Lead Organization (USL)
Full company / organization name (as appears on the Certificate of Incorporation)		
Registration # (ILL); Duns # (USL)		
Co. / org. location (state, country)		
Company / organization website		
Year established		
Revenues in 2018 fiscal / calendar year (as applicable)	\$ _____ million	\$ _____ million
Total number of employees		
Ownership (Public / Private)		
Relationship of the companies (ILL / USL)	<input type="checkbox"/> Parent / Subsidiary <input type="checkbox"/> No common relationship <input type="checkbox"/> Common Ownership <input type="checkbox"/> Other	

Description	Value
Reporting to / supervised by Lead Co. / Org. in:	<input type="checkbox"/> Israel <input type="checkbox"/> U.S.
Full company / organization name (as appears on the Certificate of Incorporation)	
Registration # (ILL); Duns # (USL)	
Co. / org. location (state, country)	
Company / organization website	
Year established	
Total number of employees	
Ownership (Public / Private)	

- **Definition** of Target Technology / Products to be developed in the Program
- **State-of-the-art** of Target Technology / Products and unmet needs / Limitations / Challenges facing the Consortium
- What relevant **existing** Technology / IP each CM **contributes** to the Consortium
- **Impact** of developed Technology / Products on pursued solutions

- Analysis of the **challenges** facing the Program and the main **goals and objectives** to be pursued;
- R&D strategy and roadmap, main **milestones** and **alternative** routes to achieve the Program's objectives;
- R&D roles / contribution of each **CM** to the Program, and the **synergy / collaboration** between CM's;
- Definition / detailed description of (up to 25) Program Tasks

- **Up to 25 tasks** throughout 5 yrs. Program
- **Same tasks** for all IL / US CM's
- Determine **beginning and ending date** (mm/yyyy) of each task
- Same tasks in **GANTT** chart (Section F)
- Same tasks have to be **budgeted** (Section L) for all CM's

Task #			
Task name			
Task duration (months)			
Start date (month/year)		End date (month/year)	
#	Consortium Member Name	Budget (K\$)	% of Task Budget
		=====	=====
		Total for Task:	100%
Objective of Task			
Task Description			
<i>(This field can be expanded or contracted, as needed)</i>			
Approach to Task Execution and Potential Difficulties			
<i>(This field can be expanded or contracted, as needed)</i>			
#	Description of Responsibilities within Task Among Consortium Members		
Milestones to be achieved	<i>(This field can be expanded or contracted, as needed)</i>		

- The **time axis** should have a **resolution of quarters** (not more detailed) and should extend over the **5 years period**
- **Distinguish** between tasks executed by IL/US or by CM's of both countries
- Prepared in MS Project or Excel (file is uploaded)

Task #	Task Name	Task Duration (monts)	2020				2021				2022				2023				2024			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Task A	9	■	■	■																	
2	Task B	2			■																	
3	Task C	5				■	■	■	■													
4	Task D	18				■	■	■	■	■	■	■	■	■								
5	Task E	17						■	■	■	■	■	■	■								
6	Task F	17											■	■	■	■	■	■	■			
7	Task G	12											■	■	■	■	■					
		15																■	■	■	■	■

IL consortium members only
 U.S. consortium members only
 Both IL and U. S. consortium members

- Explicit definition of the Applicable Target Markets (TAM) for the developed Technology / Products
- Estimated **TAM size and growth-rate** (10 yrs. forecast)
- **Competing technologies / companies** in the TAM, and their advantages / disadvantages
- Estimated current **unit cost / price in TAM** of similar typical product developed

- **Definition of representative (typical) product**
- **Estimated Forecast for first 5 years of commercialization**
- **Forecast of annual units sold, TAM share and unit price**

Description	Calendar Year				
	2025	2026	2027	2028	2029
First calendar year of commercial sales	2025	2026	2027	2028	2029
Year of commercialization	1	2	3	4	5
Definition of units:	MWH				
Market annual growth rate (%)	5.0%				
Market size (K Units)	5,000	5,300	5,600	5,900	6,200
Market share (%)	1.0%	1.1%	1.3%	1.4%	1.6%
Annual units sold (Units)	50,000	60,000	70,000	80,000	100,000
Cumulative units sold (Units)	50,000	110,000	180,000	260,000	360,000
Product price (\$/unit)	500.00	500.00	500.00	500.00	500.00
	=====	=====	=====	=====	=====
Annual product sales revenue (M\$)	25	30	35	40	50
Cumulative product sales revenue (M\$)	25	55	90	130	180

- **Timeline** and main additional (future) development **milestones** from Program completion to **initial commercialization**
- **Manufacturing** issues, costs and challenges; which CM's will be involved
- **Marketing** strategies and issues; which CM's will be involved
- Expected **Revenue / Profit distribution** model among CM's
- Other **external partners / collaborators / subcontractors** expected to contribute to manufacturing & marketing

Section I: Cooperation, Economic & Social Benefits

- Extent of cooperation / collaboration between CM's of same county and **between IL / US CM's** during Program
- **Ownership distribution** between CM's of IP developed in Program
- Economic risks and benefits to each CM from Program participation and outcome (commercialization)
- Economic and social benefits to the **US and IL** from Program participation and outcome (commercialization)

- Appointed ILL and USL Program Managers and Program Manager of each other CM (names & positions)
- Separate and combined Organizational Charts of CM's under ILL and CM's under USL
- Description, roles and qualifications of **major sub-contractors and consultants**
- Up to 3 Professional Profiles of major participants in Program **from each CM** (max. 1 page for each profile)

for each CM:

- **Ownership** and formal **relationship** to other CM's
- **Expertise** and ability to execute the specific contribution / responsibility in the Program and during Commercialization
- **Record of performance** in similar / related undertakings
- **Available resources** (including **financial**) to execute Program
- Relationship to other **relevant** projects that **receive / have received financial support** from any **Government** agency (such as BIRD, IIA, MOE, NIH, NIST, DOE, DHS, MOPS, etc.)

- Define up to **5 major Program Risks** (Technical, Management / resources or External (market))
- Estimate **Probability of Occurrence** (ranking)
- Estimate **impact** on:
 - Program duration
 - Program cost
 - Commercialization potential

TABLE A

Risk #	Name/Description	Ranking	Impact		
			Duration ¹	Budget ²	Commercialization Potential ³
1					
2					
3					
4					
5					

TABLE B

Risk #	Name/Description	Type*
1		
2		
3		
4		
5		

*Type: Technical (T), Project Management/Resources (M), External to the Project (E)

Ranking	Probability of Risk Occurring
High	Above 50%
Medium	30 – 49%
Low	10 – 29%
Very Low	1 – 10%

Impact	Duration ¹
High	Above 2 years
Medium	Up to 1 year
Low	Up to 6 months

Impact	Budget ²
High	Above 20% increase
Medium	10% to 20% increase
Low	Below 10% increase

Impact	Commercialization Potential ³
High	Above 50%
Medium	30% to 50%
Low	1% to 29%

- The budget should present all expenses directly associated with the Proposal Program
- The **Grant** will comprise up to 50% of the Total Budget (not more than \$10M for a Consortium, for a period of 5 years). The other portion of the Total Budget is the **Cost Share**.
- The Program funding begins on the **Effective Date** (start date). The **Effective Date** should be no earlier than February 1, 2020
- Each CM prepares a separate Budget.
- The Total Budget of each CM is the cumulative budget of all Tasks' Budgets
- The Total Budget should be detailed for the first 2 years of the program.
- Annually the Consortium can request a budget revision.

➤ Budget Categories:

Labor
Equipment
Expendable Materials and Supplies
Travel
Subcontracts
Consultants
Other Expenses

➤ Before starting the budget preparation, the Consortium should have available the definitions of up to 25 major tasks (activities). Each task should have:

Task number

Task name

Start and finish dates (MM/YY)

- Each CM prepares a budget file called File #3 (found under Procedures and Submission Forms)
- Total Budget worksheet contains yellow cells, to be filled out. Those cells include:
 - Employees names and professions
 - Equipment details
 - Materials by groups etc.
- After filling out Total Budget, proceed to fill out the various Tasks' worksheets

Description / Details							Cost (\$)	Total (\$)
I. Direct Labor								
Employee's Name (TBD if yet unknown)	Employee's Profession	Employee's Location	Gross Annual Salary* (\$)	% on Task	No. of Days in Task	Cost to Project (\$)		
Empl. 1:			0		0	0		
Empl. 2:			0		0	0		
Empl. 3:			0		0	0		
Empl. 4:			0		0	0		
Empl. 5:			0		0	0		
Empl. 6:			0		0	0		

II. Equipment						
Purchased Equipment Description	Purchased Cost (\$/unit)	No. of Units	% On Task	% Annual Depreciation	Depreciation (\$)	
Item 1	-	0		33.3%	0	
Item 2	-	0		33.3%	0	
Item 3	-	0		33.3%	0	
Item 4	-	0		33.3%	0	
Item 5	-	0		33.3%	0	
Item 6	-	0		33.3%	0	

III. Expendable Materials & Supplies	
Description	Cost (\$)
Item 1	
Item 2	
Item 3	
Item 4	
Item 5	
Item 6	

Description / Details							Cost (\$)	Total (\$)
IV. Travel								
Foreign Travel								
Destination	Purpose	Cost Per Person Per Trip (\$)	No. of Trips	No. of People Per Trip	Duration Per Trip (days)	Cost (\$)		
Dest. 1		-		-	-	0		
Dest. 2		-		-	-	0		
Dest. 3		-		-	-	0		
Dest. 4		-		-	-	0		
Dest. 5		-		-	-	0		
Dest. 6		-		-	-	0		

- Each Task Budget should be filled out with task specific information.
- That information includes:
 - % work on task
 - % utilization
 - Cost of materials
 - No. of planned trips

Description / Details						Cost (\$)	Total (\$)
I. Direct Labor							
Employee's Name (TBD if yet unknown)	Employee's Profession	Employee Location	Gross Annual Salary* (\$)	% on Project	Cost to Project (\$)		
Empl. 1:				0%	0		
Empl. 2:				0%	0		
Empl. 3:				0%	0		
Empl. 4:				0%	0		
Empl. 5:				0%	0		
Empl. 6:				0%	0		
Empl. 7:				0%	0		
Empl. 8:				0%	0		
Empl. 9:				0%	0		
Empl. 10:				0%	0		
Empl. 11:				0%	0		
Empl. 12:				0%	0		
Empl. 13:				0%	0		
Empl. 14:				0%	0		
Empl. 15:				0%	0		
Empl. 16:				0%	0		
Empl. 17:				0%	0		
Empl. 18:				0%	0		
Empl. 19:				0%	0		
Empl. 20:				0%	0		
Total, Direct Labor							
Overhead @ 25%							
Subtotal, Direct Labor + Overhead							0

* Including social benefits

- Gross Annual Salary – maximum salary (including fringe) for a full time employee is \$150,000 in USA, \$100,000 in IL
- Personnel NOT to include executives, secretarial staff, legal, admin. staff
- **O/H of 25% allowed on Total Direct Labor**
- US organizations with Mandatory Approved Government Rates may be allowed different O/H

II. Equipment						
	Purchased Equipment Description	Purchased Cost (\$/unit)	No. of Units	% On Project	% Annual Depreciation	Depreciation (\$)
Item 1	Equipment A	500,000	1	8%	33.3%	68,493
Item 2	Equipment B	200,000	2	9%	33.3%	60,274
Item 3				0%	33.3%	0
Item 4				0%	33.3%	0
Item 5				0%	33.3%	0
Item 6				0%	33.3%	0
Subtotal, Purchased Equipment						128,767

- Equipment - allowed to be purchased prior to Effective Date
- Allow budgeting up to 36 months of depreciation, but no more than economic life

III. Expendable Materials & Supplies	
	Cost (\$)
Item 1	0
Item 2	0
Item 3	0
Item 4	0
Item 5	0
Item 6	0
Item 7	0
Item 8	0
Item 9	0
Item 10	0
Subtotal, Expendable Materials & Supplies	
	0

- List major items or groups of related items
- Items over \$50,000 – provide breakdown

IV. Travel							
Foreign Travel							
Destination	Purpose	Cost Per Person Per Trip (\$)	No. of Trips	No. of People Per Trip	Duration Per Trip (days)	Cost (\$)	
Dest. 1			0			0	
Dest. 2			0			0	
Dest. 3			0			0	
Dest. 4			0			0	
Dest. 5			0			0	
Dest. 6			0			0	
Subtotal, Foreign Travel			0			0	
Domestic Travel							
Destination	Purpose	Cost Per Person Per Trip (\$)	No. of Trips	No. of People Per Trip	Duration Per Trip (days)	Cost (\$)	
Dest. 1			0			0	
Dest. 2			0			0	
Dest. 3			0			0	
Subtotal, Domestic Travel			0			0	
Subtotal, Travel							0

- Destinations in US or Israel
- Itemize by destination and purpose

V. Subcontractors					0
Service to be Performed	Name of Subcontractor	Country of Service	Cost (\$)		
Subcont. 1			0		
Subcont. 2			0		
Subcont. 3			0		
Subcont. 4			0		
Subcont. 5			0		
Subcont. 6			0		
Subtotal, Subcontracts					0
VI. Consultants					
Service to be Performed	Name of Consultant	Hourly Rate (\$/Hr.)	No. of Hours	Country of Service	Cost (\$)
Consult. 1			0		0
Consult. 2			0		0
Consult. 3			0		0
Consult. 4			0		0
Consult. 5			0		0
Consult. 6			0		0
Subtotal, Consultants					0

- Provide details of services to be performed
- Indicate country service given
- For items over \$50,000 provide more details

VII. Other Expenses			0
Item	Description	Cost (\$)	
Item 1		0	
Item 2		0	
Item 3		0	
Item 4		0	
Item 5		0	
Item 6		0	
Subtotal, Other Expenses			0
Subtotal budget, before G&A Expenses			0
General & Administrative Expenses (G&A) @5%			0
Total Project Budget for Organization			0

- Patents' registration fees allowed (legal costs excluded) subject to certain guidelines
- Regulatory costs
- Field trials, marketing costs, various
- **General Overhead 5%**

- For purpose of monitoring, reporting and payments, the program is divided into 10 reporting segments, 6 month each
- Each segment should present an estimate of % of total budget expended in that segment
- The table below presents the budget according to 6 month segments

Note: Reporting segments are different from Tasks segments

Projected Expenditure, by Segment			
Segment #	Segment Duration (months)	% of Total Budget	Projected Expenditure (\$)
1	6		0
2	6		0
3	6		0
4	6		0
5	6		0
6	6		0
7	6		0
8	6		0
9	6		0
10	6		0
Total:	60	0%	0

- The combined budgets of all U.S. CMs and of all IL CMs should be included in the Full Proposal
- The following combined tables (3 tables) are generated automatically
- To the combined country budget a USL / ILL overhead rate of 2.5% is added
- Details on creating file #4 – see page 46 of the EC Procedures Handbook

Country:		IS		Cost Components of Tasks (\$)										Total Task Cost Incl. ILL/USL Overhead
Task #	Task Name	Task Duration (days)	Direct Labor	Labor Overhead (25%)	Equipment	Expendable Materials & Supplies	Travel	Sub-contracts	Consultants	Other Expenses	G&A Overhead (5%)	Total Task Cost		
1	Task 1	12	192,607	48,152	51,288	1,880,000	25,000	2,110,000	25,000	159,449	223,575	4,695,071	4,812,448	
2	Task 2	12	150,000	37,500	54,575	95,000	60,000	200,000	60,000	100,000	37,854	794,929	814,802	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total for Country			342,607	85,652	105,863	1,955,000	85,000	2,310,000	85,000	259,449	261,429	5,490,000	5,627,250	
ILL/USL overhead allowance:			2.5%	8,585	2,141	2,647	48,875	2,125	57,750	2,125	6,488	6,538	137,250	
Total for Country Incl. ILL/USL Overhead:			351,172	87,793	108,510	2,003,875	87,125	2,367,750	87,125	265,936	267,964	5,627,250		

Summary of the Combined Budgets of all CMs in IL / U.S. classified by CMs

Country:		IS										
Org.	Organization Name	Cost Components of Tasks (\$)										
		Direct Labor	Labor Overhead (25%)	Equipment	Expendable Materials & Supplies	Travel	Sub-contracts	Consultants	Other Expenses	G&A Overhead (5%)	Total Task Cost	
A	Company A	142,607	35,652	52,932	25,000	15,000	60,000	15,000	130,000	23,810	500,000	
B	University A	200,000	50,000	52,932	130,000	70,000	250,000	70,000	129,449	47,619	1,000,000	
C	Contract Research Co. A	0	0	0	0	0	2,000,000	0	0	100,000	2,100,000	
D	College A	0	0	0	1,800,000	0	0	0	0	90,000	1,890,000	
E	E	0	0	0	0	0	0	0	0	0	0	
Total for Country		342,607	85,652	105,863	1,955,000	85,000	2,310,000	85,000	259,449	261,429	5,490,000	
ILL / USL overhead allowance:		2.5%	8,565	2,141	2,647	48,875	2,125	57,750	2,125	6,486	137,250	
Total for Country Incl. ILL/USL Overhead:		351,172	87,793	108,510	2,003,875	87,125	2,367,750	87,125	265,936	267,964	5,627,250	

Summary of the Combined Budgets of all CMs in IL / U.S. classified by Segments

Country:															
Segment #	Segment Duration (months) ^(*)	% of Total ILL/U SL Budget	Total ILL/U SL Budget (\$)		Name of Organization		Name of Organization		Name of Organization		Name of Organization		Name of Organization		
			Without Overhead Allowance	With Overhead Allowance	Percent of Total Budget (%)	Projected Expenditure (\$)	Percent of Total Budget (%)	Projected Expenditure (\$)	Percent of Total Budget (%)	Projected Expenditure (\$)	Percent of Total Budget (%)	Projected Expenditure (\$)	Percent of Total Budget (%)	Projected Expenditure (\$)	
1	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
2	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
3	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
4	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
5	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
6	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
7	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
8	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
9	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
10	6	-	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	
Total:	60	0%	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	

- 1. Full Proposal – docx, pdf** (based on File #2 template)
- 2. CM Budget - xlsx (one for each CM)** (based on File #3 template)
- 3. Consolidated IL+US Budgets – xlsx** (based on File #4 template)
- 4. GANTT – mpp or xlsx**
- 5. Cover (Signature) Page - pdf**