

Republic of Peru

THE MEGA – PROJECT
"THE CREATION OF THE INDUSTRIAL AGRICULTURAL COMPLEX
ON THE TERRITORY OF THE REPUBLIC OF PERU»
"OLMOS-2040»

Mega-Project target parameters

Version 01/01

On 16 sheets

Content:

1.	Part 1. General information on Mega-project	2
2.	Part 2. Basic parameters of Mega-project	3
3.	Part 3. Made production	4
4.	Part 4. Production support infrastructure facilities	6
5.	Part 5. Production facilities based on biological resources	9
6.	Part 6. The composition of the main technological equipment	10
7.	Part 7. Capital investment plan	12
8.	Part 8. Efficiency of agro-zone of Mega-project	14
9.	Part 9. Bio-fuel (reference)	15
10.	Part 10. Organization of works	16

Chief Engineer



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Peru, Lima
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PART 1. INFORMATION ABOUT THE PROJECT**1. Project name:**

Full:	Project of creation of industrial agricultural complex within the state of Peru
Short:	"Olmos-2040»

2. Location Of The Project:

1.	Country:	Republic of Peru
2.	Province:	Lambiek
3.	Area:	Olmos.
4.	City:	Lambiek

3. The Initiator of the Mega-project:

1.	Enterprise:	Peasant Community Santo Domingo De Olmos
2.	Head:	Mr. Juan Baldarrago Vivanco

4. Sections Of The Project:

1.	Agricultural production of bio-resources
2.	Processing production of biological resources
3.	Auxiliary production: nano-products, waste products from the
4.	Servicing the production of the Project facilities: water, energy, fertilizers
5.	Ensuring the production of the Project: machinery and technological equipment
6.	Construction production of the Project: construction products, roads, buildings and structures

5. Project scale:

1.	The area under the Project:	
1.1.	The territory of the "Pilot" project	100 000 ha
1.2.	The Territory Of The Mega - Project	1 000 000 ha
2.	Number of population covered	Up to 800,000 people
3.	Duration of Project creation	22 years
4.	project budget	€ 00 000 000 000

6. Design basis:

1.	Basic standard unit of the Project	Agro-zone
2.	The territory of a typical agro-zone	100 000 ha
3.	Manufactured products on the land	Bioresources
4.	The duration of the creation of the agro - area	3 years
5.	The budget for the establishment of model agro - zones	€ 0 000 000 000

7. System-forming enterprises of the Project:

1.	Station of desalination sea water
2.	Water irrigation system for agricultural areas
3.	Manufacturing plants for construction products and structures
4.	Station of production of electrical energy
5.	Stations of production of organo-mineral fertilizers
6.	Stations of machines and mechanisms, technological equipment

PART 2. THE BASIC PARAMETERS FOR THE MEGA-PROJECT

1. Basic natural resources:

1.	Soil:	<ul style="list-style-type: none"> • nutrient medium agricultural Biosystems
2.	Subsoil:	<ul style="list-style-type: none"> • mineral deposits: clay, sand, limestone
3.	Water:	<ul style="list-style-type: none"> • drinking water, sea salts and trace elements

2. Basic systems support:

1.	Agriculture:	<ul style="list-style-type: none"> • system for the production of plant raw materials
2.	Roads and driveways:	<ul style="list-style-type: none"> • system of delivery and movement of goods: raw materials and products
3.	Energy:	<ul style="list-style-type: none"> • power supply system for machinery and equipment

3. Basic production:

1.	Agricultural raw materials:	
1.1.	Traditional:	<ul style="list-style-type: none"> • sweet sorghum, sugar cane, grapes, vegetables and fruits
1.2.	New:	<ul style="list-style-type: none"> • technical hemp, Jerusalem artichoke, amaranth, rapeseed
2.	Commercial commodity bioproducts:	
2.1.	Nutritional:	<ul style="list-style-type: none"> • food, dietary supplements
2.2.	Pharmaceutical:	<ul style="list-style-type: none"> • extracts, preparations, medicines
2.3.	Fuel:	<ul style="list-style-type: none"> • bio-ethanol, bio-butanol, bio-gasoline, bio-diesel
2.4.	Chemical:	<ul style="list-style-type: none"> • hydrocarbon and mineral compounds and elements
3.	Commodity market additional products:	
3.1.	Nano-products:	<ul style="list-style-type: none"> • nano-crystalline cellulose, nano-bio-activators
3.2.	Building:	<ul style="list-style-type: none"> • bricks, blocks and slabs of geo-polymer concrete

4. Basic structure of production:

1.	Main production:	
1.1.	Agriculture:	<ul style="list-style-type: none"> • geobotanical and vegetable-fruit raw material, grapes
2.	Перерабатывающее производство:	
1.2.	Storage:	<ul style="list-style-type: none"> • semi-finished plants, vegetable and fruit weight, grapes
1.2.	<ul style="list-style-type: none"> • Issuing: 	<ul style="list-style-type: none"> • commercial commercial bio-products
3.	Additional production:	
3.1.	<ul style="list-style-type: none"> • Nano-components: 	<ul style="list-style-type: none"> • nano-activators, nano-additives, nano-bio-stimulants
3.2.	Building:	<ul style="list-style-type: none"> • blocks, brick, slabs, materials and composites
3.3.	Fertilizers:	<ul style="list-style-type: none"> • organic, mineral and organo - mineral mixtures
4.	Supplying production:	
4.1.	Water supply:	<ul style="list-style-type: none"> • drinking and industrial water, water for irrigation of plantations
4.2.	Energy supply:	<ul style="list-style-type: none"> • electrical and thermal energy, cold
4.3.	Gas supply:	<ul style="list-style-type: none"> • gases for heating, motors and engines
5.	Supports the production:	
5.1.	Repair:	<ul style="list-style-type: none"> • machines and mechanisms, technological equipment
5.2.	Road:	<ul style="list-style-type: none"> • plantation roads and driveways, roads and sidewalks
5.3.	Transport:	<ul style="list-style-type: none"> • transportation and movement of goods
5.4.	Warehouse:	<ul style="list-style-type: none"> • raw materials and commercial products

PART 3. MADE PRODUCTION

1. Resource-raw materials:

1.1. Agricultural bio-resources:

1.	Crops, plants
2.	Industrial crop
3.	Fruits, vegetables

1.2. Water and Mineral resources:

1.	Drinking water quality
2.	Sea salt, NaCl
3.	Chemical elements concentrate

1.3. Commercial-raw resources of natural and man-made deposits:

1.	Clay, sand, limestone from natural deposits
2.	Organic biomass: waste of man-made deposits
3.	Mining and metallurgical industry waste

2. Commodity products of the processing sector:

2.1. Food products:

1.	Vegetables and fruits, fresh and long-term storage
2.	Dietary supplements
3.	Granular extracts of vegetables, fruits and juices

2.2. Pharmaceutical product:

1.	Extracts, preparations and balms with medicinal properties
2.	Medicines of natural nature in a special form
3.	Organic remedies and vitamins

2.3. Chemical products:

1.	Products from natural raw materials:
1.1.	From plant material
1.2.	From mineral raw materials
2.	Products synthesized from certain types of raw materials

2.4. Fuel and energy products:

1.	Fuel gases: bio-ethanol, bio-butanol, propane-butane gases
2.	Motor fuels: bio-diesel and bio-gasoline
3.	Alcohols and other compositions

2.5. Organic-mineral fertilizers:

1.	Mineral fertilizers based on sea salts and mining waste
2.	Organic fertilizers based on raw materials and agricultural waste
3.	Organo-mineral additives and fertilizers

3. Additional production:

1.	Nano-stabilizers and activators for food and pharmaceutical products
2.	Nano-stabilizers and activators for chemical and fuel products
3.	Nano-stabilizers and activators for construction products

4. Production supplying production:

4.1. Water treatment and production:

1.	Fresh water for drinking purposes and for irrigation from sea water
2.	Process water from water recycling system
3.	Water treatment and special purpose

4.2. Energy production:

1.	Electric energy
2.	Thermal energy
3.	Low-temperature thermal energy (cold)

4.3. Production of products and materials from geopolymer concrete:

1.	Building bricks, blocks and tiles
2.	Reinforced concrete construction
3.	Buildings of monolithic concrete and building-printer 3D
4.	Building mixes and materials

PART 4. OBJECTS of INFRASTRUCTURE PRODUCTION SUPPORT

SYSTEM I:	<ul style="list-style-type: none"> • objects of water desalination and water supply of agro - zone territories
SYSTEM II:	<ul style="list-style-type: none"> • electric and heat power production facilities
SYSTEM III:	<ul style="list-style-type: none"> • objects of construction industry: mining and production of construction products
SYSTEM IV:	<ul style="list-style-type: none"> • objects of production of organo-mineral fertilizers
SYSTEM V:	<ul style="list-style-type: none"> • transport and logistics facilities

SYSTEM I:

Objects of water desalination and water supply of agro - zone territories

1.	The subsystem of water resources formation includes:
1.1.	Water sources (marine, surface, underground, man-made, etc.)
1.2.	Anthropogenic landscapes in the zone of water flow formation
2.	The subsystem of water resources formation includes:
2.1.	The intake station and lifting of water from the source
2.2.	Station of desalination, purification and treatment of water of a given quality
2.3.	Irrigation network (transporting water)
2.4.	Water supply stations for water supply
2.5.	Control object:
	<ul style="list-style-type: none"> • Reservoir, as drives and controllers
	<ul style="list-style-type: none"> • Distributors (dividers)
	<ul style="list-style-type: none"> • Water-supply (water intakes, water-discharge)
3.	The subsystem of water resources use includes:
3.1.	Hydropower: status, development, electricity generation, efficiency
3.2.	Recreation: in relation to water bodies, in the form of requirements for their recovery regime
4.	Water consumption subsystem, including:
4.1.	Water consumer:
	<ul style="list-style-type: none"> • Municipal services of cities and large settlements
	<ul style="list-style-type: none"> • Industry
	<ul style="list-style-type: none"> • Heat power engineering
	<ul style="list-style-type: none"> • Irrigation
	<ul style="list-style-type: none"> • Other water consumers-pastures, water supply to rural population and farms
4.2.	Agricultural production:
	<ul style="list-style-type: none"> • Agricultural products on irrigated land and rainfed in irrigated and non-irrigated areas,
	<ul style="list-style-type: none"> • Livestock and poultry
	<ul style="list-style-type: none"> • Fish farming (pond farming)
	<ul style="list-style-type: none"> • Products of agricultural products processing
4.3.	System of formation of return flow, its reuse and water disposal, including:
	<ul style="list-style-type: none"> • Collector-drainage water
	<ul style="list-style-type: none"> • Industrial effluents
	<ul style="list-style-type: none"> • Municipal wastewater-wastewater from large settlements
	<ul style="list-style-type: none"> • Agricultural (agricultural) wastewater-wastewater from farms, domestic services to the rural population

SYSTEM II:

Electric and heat power production facilities:

1. Parametric range of equipment:

No	Name	kW
1.	Power plants, Autonomous	5 -100
2.	Mobile power stations on the go	100 – 1 000
3.	Stationary energy complexes	1 000 – 5 000

2. Energy source:

1.	High-potential conservative energy carriers
2.	Low-potential environment
3.	Water sources using the potential of water mass movement

2.1. High-potential conservative energy carriers, including:

1.	Synthesized on the basis of:
1.1.	Organic part of municipal waste and biomass
1.2.	Part of the organic impurities of sewage treatment
2.	On the basis of composite mixtures:
2.1.	Water-fuel, in the ratio of 50: 50
2.2.	Water – hydrogen – mono-oxide, hydrogen

2.2. Low-potential environment:

An energy source of implosion type, when the energy is transferred not from the engine to the environment (explosion), but from the environment to the engine. Advantages of implosion:

- lower energy costs for the physical process;
- reducing the loss of extracted energy in the conversion to the work of the consumer;
- simpler design.

2.3. Water sources for placement of mini-hydro plants:

1.	Small natural rivers, streams, channels
2.	Natural and technological differences of heights:
	<ul style="list-style-type: none"> • on spillways of reservoirs • on irrigation canals of irrigation systems • for drinking and other pipelines for the transport of liquid products
	Technological watercourses:
3.	<ul style="list-style-type: none"> • wastewater discharges of industrial enterprises • discharges of sewage

SYSTEM III:

Object of the construction industry-construction products:

3.1. The structure of the construction industry:

1.	Stations of extraction and preparation of natural non-metallic minerals
2.	Stations for production of building materials and mixtures
3.	Manufacturing plants for construction products and structures

3.2. The composition of the construction industry:

1.	Stations of extraction and preparation of natural non-metallic minerals:
1.1.	Natural sand of any quality from local quarries
1.2.	Natural clay of any quality from local quarries
1.3.	Limestone, dolomite, any quality from local quarries
1.4.	Sodium and potassium from sea salt
2.	Stations for production of building materials and mixtures:
2.1.	Construction concretes for monolithic house-building in a timbering
2.2.	Building mixes for monolithic housing construction on the 3D printer
3.	Manufacturing plants for construction products and structures
3.1.	Super durable and super light finishing plates and road tiles
3.2.	Main building blocks, bricks, panels
3.3.	Basic building structures and houses

SYSTEM IV:

Objects of production of organo-mineral fertilizers

1. Structure of fertilizer production facilities:

1.	Organic mass preparation stations
2.	Station weight training minerals
3.	Plants for production of organic and mineral fertilizers

2. The composition of the fertilizer:

1.	Organic mass preparation stations:
1.1.	Organic matter from agricultural waste and bio-resources
1.2.	Organic mass from technogenic deposits-municipal waste
2.	Mineral preparation stations:
2.1.	Minerals from ore waste and non-metallic minerals
2.2.	Minerals from sea salt desalination stations
3.	Plants for production of organic and mineral fertilizers
3.1.	Production of organic fertilizers and components
3.2.	Production of mineral fertilizers and component
3.3.	Production of organo - mineral fertilizers and components

SYSTEM V:

Transport and logistics facilities:

1. The structure of the Transport and logistics sector:

1.	Terminals of agro-zone of crop storage and primary processing products
2.	Terminals of the processing complex: semi-finished and finished products
3.	Customs terminals

2. The composition of objects of a Transport – logistics complex

1.	Terminals agro - zones of storage of crops and products of primary processing, including:
1.1.	Storage of fresh produce from the new harvest with sorting and processing
1.2.	The long-term storage of agricultural products
1.3.	Storage of products and materials for crop reproduction
2.	Terminals of the processing complex: semi-finished and finished products
2.1.	Food storage
2.2.	Storage of pharmaceutical products
2.3.	Storage of chemical products
3.	Customs terminals:
3.1.	Port, sea transportation
3.2.	Aviatransportations'

PART 5. MANUFACTURING PRODUCTS BASED ON BIO – RESOURCES

LEVEL I:	<ul style="list-style-type: none"> • facilities for preparation, production and primary processing of bio-resources
LEVEL II:	<ul style="list-style-type: none"> • manufacturing of materials and products
LEVEL III:	<ul style="list-style-type: none"> • facilities for deep processing of raw materials and production of finished products

LEVEL I:

Facilities for preparation, production and primary processing of bio-resources:

1.	Station of soil agriculture and agronomy of agricultural crops
2.	Station of seed production and adaptation of crops to geo-climatic conditions of agro-zones
3.	Stations of cultivation and production of agricultural crops, including:
3.1.	For food products
3.2.	For pharmaceutical products
3.3.	For chemical products
3.4.	For fuel and energy products
4.	Stations of primary processing of the made raw materials, including:
4.1.	Production of juices and extracts
4.2.	Freeze-dried food production
4.3.	Production of raw material mass of industrial crops

LEVEL II:

Objects of commodity production:

1.	Production of food products from vegetables and fruits
2.	Production of pharmaceutical raw materials and preparations
3.	Production of chemical raw materials
4.	Production of basic fractions of motor fuels and gas

LEVEL III:

Objects of deep processing of raw materials and production of finished products

1.	Production of biologically active food additives
2.	Production of pharmaceutical drugs and medicines
3.	Production of synthesized nano-chemical compounds
4.	Production of synthesized nano-carbon compounds

PART 6. THE COMPOSITION OF THE MAIN TECHNOLOGICAL EQUIPMENT**1. The equipment of the enterprises and industries of the standard agro – zones:**

№	Equipment name
1.	Desalination plant and irrigation system:
1.1.	Line of sea water desalination
1.2.	Pumps for water lifting and water supply to irrigation system
1.3.	Subsystem of accounting, control and regulation of water flows
2.	Electric power supply station:
2.1.	The mobile station and the stationary energy complexes
2.2.	Apparatus-converters, heat exchange
2.3.	Industrial cold apparatus
3.	Terminal of primary preparation and processing:
3.1.	Apparatus for grinding of biomass
3.2.	Apparatus of fermentation and fermentation of bio-mass
3.3.	Apparatus for drying biomass
3.4.	Devices for extraction of specified substances from bio-mass
3.5.	Apparatus cleaning and preparation of the special water

2. Equipment for enterprises and industries of the Industrial Center:

1.	Combine food products, including devices:
1.1.	Control and regulation of water content in the mass of raw materials
1.2.	Grinding the mass of raw materials to the specified values
1.3.	Homogenization of raw materials
1.4.	Molecular synthesis of food concentrates
2.	Plant of pharmaceutical products, including devices:
2.1.	Control and regulation of water content in the mass of raw materials
2.2.	Grinding the mass of raw materials to the specified values
2.3.	Homogenization of raw materials
2.4.	Molecular synthesis of drugs
3.	Plant of chemical products, including devices:
3.1.	Extraction of substances from raw materials
3.2.	The dissociation of compounds into individual elements
3.3.	The disintegration of the substances on the individual elements
3.4.	Homogenization of raw materials
3.5.	Molecular synthesis of given chemical compounds
4.	Fuel production plant, including:
4.1.	Reactors of gasification of organic mass of raw materials
4.2.	Reactors, molecular synthesis, fuel fractions
4.3.	The reactors kompaundirovannyh derived fuels
4.4.	Reactors liquefaction gas fuel fractions
5.	Combine of construction products, including devices:
5.1.	Destruction of solid ore substances of raw materials
5.2.	Disintegration of matter into separate elements
5.3.	Homogenization and activation of the raw material mass
5.4.	Molecular synthesis of specified materials and mixtures
5.5.	Ultra-molding into preset shapes
5.6.	Ultra – compacting mixes in the set forms

6.	Plant of organo-mineral fertilizers, including devices:
6.1.	Extraction of organic compounds from raw materials
6.2.	Disintegration and grinding of mineral substances
6.3.	Homogenization and activation of the obtained compounds
6.4.	Granulation of fertilizers in a special form
7.	Plant of special types of products
7.1.	with the use of nano – processes and technologies
	The technological production line of nano – particles:
	* activators for food products
	* activators for pharmaceutical products
	* activators for chemical products
	* activators for fuel products
	* activators for construction products

PART 7. THE CAPITAL INVESTMENT PLAN**1. Capital investment. Total:**

No	Project structure	Million. €
1.	Industrial processing center	11 000
2.	Agro-zone of production of bio-resources	50 000
	Total:	61 000

2. Capital investment schedule:

No	Composition	Time constraints	Million. €
1.	Industrial processing center	2019 - 2022	00
2.	Agro-zones of production of bio-resources, including:	2019 - 2040	00
	* Agro-zone No. 1	2019 – 2023	00
	* Agro-zone No. 2	2020 – 2024	00
	* Agro-zone No. 3	2021 – 2025	00
	* Agro-zone No. 4	2022 – 2026	00
	* Agro-zone No. 5	2023 – 2027	00
	* Agro-zone No. 6	2024 – 2028	00
	* Agro-zone No. 7	2025 – 2029	00
	* Agro-zone No. 8	2026 – 2030	00
	* Agro-zone No. 9	2027 – 2031	00
	* Agro-zone No. 10	2028 - 2032	00
	Total:		00

3. Plan build parts of the Project:**3.1. Plan to create an industrial processing Center:****3.1.1. Structure of the enterprises of the processing Center:**

1.	Food production plant
2.	Pharmaceutical production plant
3.	Chemical production plant
4.	Fuel production plant
5.	Plant of construction products and structures
6.	Plant of organo - mineral fertilizers
7.	Plant of special types of products using nano-processes and technologies
8.	Center of technological equipment from Russia. Service and warranty
9.	Centre for vocational and technical training of Peru
10.	Trading House Project

3.1.2. Capital investment plan for the creation of the Center project:

No	Name of work stages	The stage cost	
		%	Million. €
	total :	100	00
1.	Land management for the objects of the Center	0.5	00
2.	Engineering survey of the land plot	0.5.	00
3.	Development of pre-project documentation	2.0	00
3.1.	Development of terms of reference (TOR)	1.0	00

3.2.	Feasibility study, BP (business plan)	0.5	00
3.3.	EIA development-project ecology	0.5	00
4.	Technical project development	7.0	00
5.	Construction and installation works	15.0	00
6.	Supply of technological equipment:	72.5	00
7.	Pilot operation of the Center's facilities	2.0	00
8.	Commissioning of the Center	0.5	00

3.2. Plan of creation of separate agro – zone objects:

3.2.1. The composition of objects - the enterprises of agro – zones:

1.	Seawater desalination station and irrigation system
2.	Station of preparation and production of agricultural products:
2.1.	Station of soil agriculture and agro-technologies
2.2.	Seed plant
3.	Station of agricultural machinery and equipment
4.	Electric power station
5.	Terminal for storage and primary processing of agricultural products
6.	Micro-residential area

3.2.2. Capital investment plan for the creation of a separate agro – zone project:

№	Name of work stages	The stage cost	
		%	Million. €
	Total:	100	00
1.	The land under the objects of the agro - area	0.5	00
2.	Engineering survey of the land plot	0.5	00
3.	Development of pre-project documentation	2.0	00
3.1.	Development of terms of reference (TOR)	1.0	00
3.2.	Feasibility study, BP (business plan)	0.5	00
3.3.	EIA development-project ecology	0.5	00
4.	Technical project development	7.0	00
5.	Construction and installation works	15.0	00
6.	Supply of technological equipment:	72.5	00
7.	Pilot operation of agro-zone facilities	2.0	00
8.	Commissioning of agro-zone	0.5	00

PART 8 THE EFFECTIVENESS OF THE MEGA – PROJECT**Forecast of future income****1. Capital investment:**

№	The cost of the Mega - project	Million. €
1.	Capital investments in Mega-project:	00
1.1.	Industrial processing Center	00
1.2.	Agro-zones of production of bio-resources	00
2.	Capital investment in a typical project of a separate agro-zone:	00
2.1.	Creation of a typical agro-zone	00
2.2.	Share in the creation of an industrial processing Center	00

2. Income from sales of typical agro-zone products per year:

№	Product name	Income from the sale	
		%	Million. €
	Total:	100	00
1.	Commodity-raw materials:	50	00
1.1.	Food products from fruits and vegetables	5	00
1.2.	Pharmaceutical raw materials and preparations	10	00
1.3.	Chemical raw materials	10	00
1.4.	Motor bio-fuel and bio-gases	25	00
2.	Products and products:	30	00
2.1.	Dietary supplements	5	00
2.2.	Pharmaceutical drugs and medicines	5	00
2.3.	Nano-chemical synthesis compounds and materials	7	00
2.4.	Nano-carbon synthesis compounds and materials	13	00
3.	Supplementary products:	20	00
3.1.	Building products: bricks, blocks and tiles	7	00
3.2.	Organo-mineral fertilizers	7	00
3.3.	Nano-crystalline cellulose	6	00

3. Profitability of 1 (one) hectare of agricultural area mln US \$

1.	Capital investments in a typical agro-zone	00
2.	Gross profit from product sales of the model agro-zones	00
3.	Crop area,	00
4.	Planned yield of 1 hectare of typical agro-zone: p. 2: p. 3.	€ 0 000

4. Commercial efficiency of the project typical agro-zone:

1.	The cost of creating a typical agro-zone	million €	00
1.1.	Amount of investments	million €	00
1.2.	Annual interest rate	%	00
2.	Amount of income from sales	million € / year	00
3.	Operating costs, 3% of claim 1.1.	million € / year	00
4.	Taxable profit, p. 2-p. 3	million € / year	00
5.	Income tax, 12% of claim 4	million € / year	00
6.	Net profit, p. 4-p. 5	million € / year	00
7.	Payback	years	00

PART 8. BIOFUELS (data)**1. Biomass sources for bioethanol production**

	Cultures	Processing method	Biofuel
1.	Sugar crops:	Fermentation and distillation	Ethanol
1.1.	Sugar cane		
1.2.	Sugar beet		
1.3.	Sweet sorghum		
2.	Starch-containing crops:	Sugar formation, fermentation and distillation	
2.1.	Corn		
2.2.	Barley		
2.3.	Wheat		
2.4.	Rye		
2.5.	Potato		
3.	Cellulose-containing culture:		
3.1.	Millet		
3.2.	Willow		
3.3.	Poplar		
3.4.	Straw of agricultural crops		
4.	Oil crop:	Extraction and esterification	Biodiesel
4.1.	Rape		
4.2.	Oil palm		
4.3.	Sunflower		
4.4.	Peanut		

2. Production of biofuels from various raw materials

Culture	Yield, t / ha	Substance content, %	L/t output	L/ha output
Sugar cane	65	Sugar 15%	70	4550
Sorghum grain	1,3	Starch 60%	380	494
Sweet sorghum	50	Sugar 18%	85	4250
Sugar beet	46	Sugar 24%	110	5060
Corn grain	4,9	Starch 65%	400	1960
Rice grain	4,2	Starch 70%	430	1806
Wheat grain	2,8	Starch 55%	340	952
Cassava	12	Starch 24%	180	2070
Soy	2,7	Oil 22%	205	552
Sunflower	2,2	Oil 52%	441	970
Oil palm	17,8	Oil 25%	230	4092
Rape	3,5	Oil 45%	435	1520
Topinambur	60	Sugar 14%	67	4020
Jerusalem artichoke tubers	40	Sugar 22%	101	4040
Potato tubers	20	Starch 20%	115	2400
Plants of the genus Heracleum	50-200	Sugars 10-31%	47-145	2500-29000

PART 9. ORGANIZATION OF WORK ON THE PROJECT

1. The interaction of the Project participants:

It is proposed to organize in the form of a consortium consisting of:

THE INITIATOR OF THE MEGA-PROJECT:	- The company of the Republic of Peru, carrying out the reception of the Project objects in operation and performing work in the created territories and objects
INVESTOR:	- The company carrying out capital investments in the Project
GENERAL CONTRACTOR:	- The company of Russia which is carrying out creation and commissioning of objects
EQUIPMENT SUPPLIER:	- The company of Russia which is carrying out production and delivery of the equipment

2. Distribution of works and actions of participants:

Determined by legal forms:

1.	Agreement between the participants on the creation of a Consortium and implementation of the project launch activities
2.	International contract between the Project participants on the performance of certain types of work on a long-term basis
3.	International contracts between the participants and the involved companies on separate works of the Project objects creation

3. Establishment of Executive institutions of the Project on the territory of the Republic of Peru:

1.	Management company-the main Company for the creation of Project objects
2.	Company SPV or SPE (Special purpose vehicle/entity) - created a special purpose company, the primary objectives of which are the implementation and financial maintenance of the project
3.	The management of construction projects Project

4. Composition of Companies, participants of the Project:

The Initiator Of The Mega-Project:	Peasant Community Santo Domingo De Olmos, Пepy
Investor:	separately
General Contractor:	JSC "Baltic Mining Company»
Equipment Supplier:	"NPP "VTORENERGOSISTEMY»