Open Innovation Projects website	
open-innovation-projects.org ( $\emph{OIP}$ in the text following) lists mostly OSHW projects them. Out of the ~150 listed entries, the following 109 retained our attention in the	s and systematically categorizes context of OSHWL (table <b>??</b> ):

title	OSHWL path					
	1					
3G Stoves	en./thermal/stoves					
Absorber Roof	en./solar/thermal					
Abundant Water	water treatment					
Agua Clara	water treatment					
Akvo	water					
Always Innovating	electroit-monit.					
Touch Book						
Arduino	electroit-monit.					
Atari Coldfire	electroit-monit.					
Aurora OS Mixer	audio-visual					
AVR Butterfly	electroit-monit.					
Logger						
AVR Butterfly	audio-visual					
MP3						
AX84 Firefly	audio-visual					
Balloon	electroit-monit.					
Beagle Board	electroit-monit.					
Ben NanoNote	electroit-monit.					
Biobricks	health					
BitsFromBytes	roboman.					
Brewtopia	food/prepare					
Canuckle LEDlights	en./light					
Cfree OS Optics	audio-visual/optics					
Chumby	electroit-monit.					
Contraptor	struct./assemblies					
Craftster	oshw-mgmt					
Crypto Stick	electroit-monit.					
Cubespawn	roboman.					
Daisy MP3	audio-visual					
diy_efi	transp./propulsion					
Elphel	audio-visual					
Ethernut	electroit-monit.					
Etherrape	electroit-monit.					
Fab Camera	audio-visual					
Fab@Home	roboman.					
Flash-Plaice	electroit-monit.					
Fnordlicht	audio-visual					
Formica	roboman.					

title	OSHWL path			
Free Art Bureau				
	oshw-mgmt			
Free Beer	food/prepare			
Freeduino	electroit-monit.			
Gumstix	electroit-monit.			
HD Video Capture	audio-visual			
Hexayurt	struct./construction			
Im-FFeeder	food/grow			
IP04 4-Port	electroit-monit.			
IP-PBX	0.000.01.12.11.01.11.1			
IP08 8-Port IP-PBX	electroit-monit.			
iRobot	roboman.			
K People	oshw-mgmt			
LED Stripe	audio-visual			
Linux omap	electroit-monit.			
Local Motors	transp./road/cars			
MakerBot	roboman.			
Mikrokopter	transp./aeronautics			
Milkymist	audio-visual			
MISA	audio-visual			
MyOpenRouter	electroit-monit.			
Neuros Link	audio-visual			
Neuros OSD	audio-visual			
Niftymitter	electroit-monit.			
oBiCo	transp./road/bicycle			
OMFootCtrl	electroit-monit.			
OLPC	electroit-monit.			
O. Architecture Network	struct./construction			
O. Garments	r-m/man./textile			
O. Moto X	transp./road			
O. Pandora	audio-visual			
O. Prosthetics	1 1.1			
Project	health			
OS Cookbook	food/prepare			
OS Ecology	oshw-mgmt			
OS Washing  Machine	cleaning/laundry			

title	OSHWL path
O. Waterbike Project	transp./water
OS BHKW	en./thermal/cogen
OpenBeacon	electroit-monit.
OpenCola	food/prepare
OpenEEG	health
openenergymonitor	electroit-monit.
openEyes	electroit-monit.
OpenMini 650 Sailboat	transp./water
OpenMoko	electroit-monit.
OpenPCD	electroit-monit.
OpenRemote	electroit-monit.
OpenServo	roboman.
OpenSpace	oshw-mgmt
OpenSPARC	electroit-monit.
OpenWrt	electroit-monit.
OScar project	transp./road/cars
PC Engines	electroit-monit.
Rallylog	electroit-monit.
Ravelry	r-m/man./textile
RepRap	roboman.
RFID door opener	struct./ass./locks
RiverSimple	transport/road
RONJA	audio-visual/optics
Sanguino	electroit-monit.
Semitone Dimmers	audio-visual
Solar Cooking Archive	en./solar/thermal
solar tracking	en./solar/tracking
Spiffchorder	audio-visual
SquidBee	electroit-monit.
Stribe	audio-visual
Stroblt Triggr	audio-visual
Thingiverse	roboman.
Traxmod	audio-visual
zeroclock	electroit-monit.
Zoybar	audio-visual

(a) 1/3 (b) 2/3 (c) 3/3

Tab. 1: OIP entries treated by OSHWL

We will also apply the same "standardized" categorization effort to the following OSHW(L) projects, not listed by OIP (table  $\ref{eq:condition}$ ):

title	OSHWL path

Tab. 2: other OSHWL projects categorized according to OIP's method

The following is the categorization itself (in tables making overview and comparison easy, as opposed to individual project sheets as is the case on open-innovation-projects.org), copied from OIP for the projects they list and complemented (*italic*) with the projects from table ??.

There are three groups of criteria:

- project details
- product details
- institutional design and production

### Project details

## Legend

#### Project Type

S One or more specific product(s) is/are shown and/or developed

C Overview over several different projects or product, e.g. OIP itself

Development Status Current stage of development according to the following:

1 Planning/Virtual development - Ideas and digital dev. evolving

2 Prototyping started - First physical proto. assembled, testing phase

3 First working proto. - Working proto. av., release to community, further dev. needed

4 Production stable - Fully functional product permanently av. on market, further dev. possible

5 Mature - Final dev. stage reached, no further dev. necessary

Inactive Dev. stopped, no final product av.

In case several products are being developed, the stage of the most advanced product is indicated.

Community Approximate community size or number of users involved.

**Developers** Approximate number of active developers.

#### License

- whether the project is using an open license and of which type
- whether they have a registered trademark

 ${\bf Country} \quad {\sf Main \ location, \ i.e. \ home \ country \ of \ the \ project \ leader, \ the \ core \ team \ or \ the \ office \ location.}$ 

 $\mathbf{Start}\ \mathbf{year}\ \ \mathsf{Year}$  in which the project was initiated.

Intended Audience Target group of the project according to the following criteria:

EU Everybody from school kids to your grandmother.

AEU Product will target end users, but usage may require specific knowledge.

Developer No intention to reach end users, high specific knowledge necessary.

Other All other groups, for example educational purposes

Project contact Project contact person and/or address

Keywords Comma separated list of keywords. The title of another project can be used.

# **Tables**

	þe	sn	ze	SLS			lice	ence	and T	М			<u>&gt;</u>	ar	S e
title	, t	stat	is ×	lope	a	se							country	start year	lien
	entry type	development status	community size	developers	GPL, LGPL or similar copyleft license	BSD, MIT or similar permissive license	Creative Commons license	Creative Commons license	Other open license	Commercial license	No license	Registered trademark	υ	star	intended audience
3G Stoves	C	3	>5000	1						×		×	India	2008	Developer
Absorber Roof															
Abundant Water															
Agua Clara															
Akvo															
Always Innovating															
Touch Book															
Arduino															
Atari Coldfire															
Aurora OS Mixer															
AVR Butterfly															
Logger															
AVR Butterfly															
MP3															
AX84 Firefly															
Balloon															
Beagle Board															
Ben NanoNote															
Biobricks															
BitsFromBytes															
Brewtopia															
Canuckle															
Cfree OS Optics															
Chumby															
Contraptor															
Craftster															
Crypto Stick															
Cubespawn															
Daisy MP3															
diy efi															
Elphel															
Ethernut															
Etherrape															
Fab Camera															
Fab@Home															
Flash-Plaice															
Fnordlicht			1												
Formica			1												

Tab. 3: project details (1/2) of OIP entries treated by OSHWL (1/3)

title	contact	keywords
3G Stoves	Dr. N. Sai Bhaskar Reddy	stove, 3g, woodgas, tlud, biomass
Absorber Roof		
Abundant Water		
Agua Clara		
Akvo		
Always Innovating		
Touch Book		
Arduino		
Atari Coldfire		
Aurora OS Mixer		
AVR Butterfly		
Logger		
AVR Butterfly		
MP3		
AX84 Firefly		
Balloon		
Beagle Board		
Ben NanoNote		
Biobricks		
BitsFromBytes		
Brewtopia		
Canuckle		
Cfree OS Optics		
Chumby		
Contraptor		
Craftster		
Crypto Stick		
Cubespawn		
Daisy MP3		
diy_efi		
Elphel		
Ethernut		
Etherrape		
Fab Camera		
Fab@Home		
Flash-Plaice		
Fnordlicht		
Formica		

Tab. 4: project details (2/2) of OIP entries treated by OSHWL (1/3)

	o e	Sn	ze	. Z			lice	ance :	and T	·N/I			2	ar	e u
title	ty	tatı	y Siz	obe	4)	se		 	anu i 				country	; ye	ie.
	entry type	development status	community size	developers	GPL, LGPL or similar copyleft license	BSD, MIT or similar permissive license	Creative Commons license	Creative Commons license	Other open license	Commercial license	No license	Registered trademark	00	start year	intended audience
Free Art Bureau															
Free Beer															
Freeduino															
Gumstix															
HD Video Capture															
Hexayurt															
Im-FFeeder															
IP04 4-Port															
IP-PBX															
IP08 8-Port															
IP-PBX															
iRobot															<u> </u>
K People															<u> </u>
LED Stripe															
Linux omap															
Local Motors															
MakerBot															
Mikrokopter															
Milkymist															
MISA															
MyOpenRouter															
Neuros Link															
Neuros OSD															
Niftymitter oBiCo															
OMFootCtrl															
OLPC															
O. Architecture															
Network															
O. Garments															
O. Moto X															
O. Pandora															
O. Prosthetics															
Project															
OS Cookbook															
OS Ecology															
OS Washing															
Machine															
				L											

Tab. 5: project details (1/2) of OIP entries treated by OSHWL (2/3)

title	contact	keywords
Free Art Bureau		
Free Beer		
Freeduino		
Gumstix		
HD Video Capture		
Hexayurt		
Im-FFeeder		
IP04 4-Port		
IP-PBX		
IP08 8-Port		
IP-PBX		
iRobot		
K People		
LED Stripe		
Linux omap		
Local Motors		
MakerBot		
Mikrokopter		
Milkymist		
MISA		
MyOpenRouter		
Neuros Link		
Neuros OSD		
Niftymitter		
oBiCo		
OMFootCtrl		
OLPC		
O. Architecture		
Network		
O. Garments		
O. Moto X		
O. Pandora		
O. Prosthetics		
Project		
OS Cookbook		
OS Ecology		
OS Washing		
Machine		
L		

Tab. 6: project details (2/2) of OIP entries treated by OSHWL (2/3)

	l e	S	l e	rs			lice	2000	and T				2	a	9
title	ty	tatı	/ Siz	obe		e e		 	anu i 			1	country	ye	ien
	entry type	development status	community size	developers	GPL, LGPL or similar copyleft license	BSD, MIT or similar permissive license							8	start year	intended audience
	ο σ	pme	E	7	<u>i</u>	ve /									qeq
		elop	00		ylefi	issi									tenc
		dev			l g	erm	nse	nse							⊇.
					ar o	r p	lice	<u>  :</u>				논			
					<u>.</u> E	mila	suc	suc	JSe	nse		ma			
					or s	r si	Ĕ	Ĕ	<u>  ie</u>	<u>:</u>		rade			
					占	b	Ö	Ö	en	ia.	e e	8			
					<sup>2</sup>	Σ	. <u>×</u>	. <u>≤</u> .	9	ner	cens	tere			
					Ъ,	SD	Creative Commons license	Creative Commons license	Other open license	Commercial license	No license	Registered trademark			
					9	Δ	0	0	0	0	Z	~			
O. Waterbike															
Project															
OS BHKW															
OpenBeacon															
OpenCola															
OpenEEG															
openenergymonitor															
openEyes															
OpenMini															
650 Sailboat															
OpenMoko															
OpenPCD															
OpenRemote															
OpenServo															
OpenSpace															
OpenSPARC															
OpenWrt															
OScar project															
PC Engines															
Rallylog															
Ravelry															
RepRap															
RFID door opener															
RiverSimple															
RONJA															
Sanguino															
Semitone Dimmers															
Solar Cooking															
Archive															
solar tracking															
Spiffchorder															
SquidBee															
Stribe															
Stroblt Triggr															
Thingiverse															
Traxmod															
zeroclock															
Zoybar															

Tab. 7: project details (1/2) of OIP entries treated by OSHWL (3/3)

title	contact	keywords
O. Waterbike		
Project		
OS BHKW		
OpenBeacon		
OpenCola		
OpenEEG		
openenergymonitor		
openEyes		
OpenMini		
650 Sailboat		
OpenMoko		
OpenPCD		
OpenRemote		
OpenServo		
OpenSpace		
OpenSPARC		
OpenWrt		
OScar project		
PC Engines		
Rallylog		
Ravelry		
RepRap		
RFID door opener		
RiverSimple		
RONJA		
Sanguino		
Semitone Dimmers		
Solar Cooking		
Archive		
solar tracking		
Spiffchorder		
SquidBee		
Stribe		
Stroblt Triggr		
Thingiverse		
Traxmod		
zeroclock		
Zoybar		

Tab. 8: project details (2/2) of OIP entries treated by OSHWL (3/3)

title
entry type
development status
community size
developers
GPL, LGPL or similar copyleft license
BSD, MIT or similar permissive license
Creative Commons license
Creative Commons license
Other open license D
Commercial license
No license
Registered trademark
country
start year
intended audience

Tab. 9: project details (1/2) of OSHWL projects not listed by OIP

title	contact	keywords

Tab. 10: project details (2/2) of OSHWL projects not listed by OIP

### Product details

#### Legend

**Product innovativeness** Degree of innovativeness according to the following criteria:

- Radical innovation a new technology that results in a new market infrastructure, e.g. an innovation which does not address a recognized demand but instead creates a demand previously unrecognized by the consumer
- Really new innovation a really new product results in a market discontinuity or a technological discontinuity but will not incorporate both, e.g., new product lines, product line extensions with new technology, or new markets with existing technology
- 3 Discontinuus innovations new technologies that don't lead to discontinuity in existing markets
- 2 Incremental innovations products that provide new features, benefits, or improvements to the existing technology in the existing market
- 1 Imitative innovations imitative products are frequently new to the firm, but not new to the market

**Product complexity** Degree of complexity for the developed product ranging from low complexity, e.g. a simple wooden chair, to high complexity, e.g. an aircraft or a nuclear power plant.

**Industry** Suitable industry from the list.

## **Tables**

±1:1.	SS	<u> </u>			ind	usti	ry		
title	innovativeness	complexity	Energy and Utilities						
	.i.		Energy an	:	:	:	:	:	:
3G Stoves	5	2	Х					İ	
Absorber Roof									
Abundant Water									
Agua Clara									
Akvo									
Always Innovating									
Touch Book									
Arduino									
Atari Coldfire									
Aurora OS Mixer									
AVR Butterfly									
Logger									
AVR Butterfly									
MP3									
AX84 Firefly									
Balloon									
Beagle Board									
Ben NanoNote									
Biobricks									
BitsFromBytes									
Brewtopia									
Canuckle									
Cfree OS Optics									
Chumby									
Contraptor									
Craftster									
Crypto Stick									
Cubespawn									
Daisy MP3									
diy_efi									
Elphel									
Ethernut									
Etherrape									
Fab Camera									
Fab@Home									
Flash-Plaice									
Fnordlicht									
Formica									
	l					l			

Tab. 11: product details of OIP entries treated by OSHWL (1/3)

	Ŋ				الد د.:				
title	innovativeness	complexity	δί	l	ind:	usti I	ry I	1	ı
	<u>≤</u> .	롈	itie						
	vat	ω	Œ						
	2		) p						
	.⊑		an						
			gy						
			Energy and Utilities			:	١.		
			Ш	:	:	:	:	:	:
Free Art Bureau									
Free Beer									
Freeduino									
Gumstix									
HD Video Capture									
Hexayurt									
Im-FFeeder									
IP04 4-Port									
IP-PBX									
IP08 8-Port									
IP-PBX									
iRobot									
K People									
LED Stripe									
Linux omap									
Local Motors									
MakerBot									
Mikrokopter									
Milkymist									
MISA									
MyOpenRouter									
Neuros Link									
Neuros OSD									
Niftymitter									
oBiCo									
OMFootCtrl									
OLPC									
O. Architecture									
Network									
O. Garments									
O. Moto X									
O. Pandora									
O. Prosthetics									
Project									
OS Cookbook									
OS Ecology									
OS Washing									
Machine									

Tab. 12: product details of OIP entries treated by OSHWL (2/3)  $\,$ 

	Ŋ		I		ال				
title	nes	complexity	S	ı	ind	usti '	ry I		
	<u>~</u>	əldı	Energy and Utilities						
	vat	no	Ei						
	2	O	٦						
	].⊑		an						
			gy						
			ner	١.					
			Ш	:	:	:	:	:	:
O. Waterbike									
Project									
OS BHKW									
OpenBeacon									
OpenCola									
OpenEEG									
openenergymonitor									
openEyes									
OpenMini									
650 Sailboat									
OpenMoko									
OpenPCD									
OpenRemote									
OpenServo									
OpenSpace									
OpenSPARC									
OpenWrt									
OScar project									
PC Engines									
Rallylog									
Ravelry									
RepRap									
RFID door opener									
RiverSimple									
RONJA									
Sanguino									
Semitone Dimmers									
Solar Cooking									
Archive									
solar tracking									
Spiffchorder									
SquidBee									
Stribe									
Stroblt Triggr									
Thingiverse									
Traxmod									
zeroclock									
Zoybar									
<u> </u>									ш

Tab. 13: product details of OIP entries treated by OSHWL (3/3)

title	innovativeness	complexity	Energy and Utilities	:	ind	ustr	· :	:	:

Tab. 14: product details of OSHWL projects not listed by OIP

## Institutional design and production

#### Legend

User Contribution Whether private persons or users are actively involved in the development.

Commercial Contribution Whether commercial companies are actively involved in the development.

Research contribution Whether research institutions are actively involved in the development.

**Type of collaboration** Type of development according to:

- Collective development of...
  - one common product
    - if a community is commonly developing one product.
  - several common products
    - if a community is commonly developing several different products.
- Published knowledge...
  - with some collective development if instructions or ideas are published and others make comments and suggestions.
  - without collective development if information is purely revealed.

Activity Activity level in the community or developer group...

- from low (up to one interaction per month on average)
- to high (daily interaction)

Community communication Major communication channels used within the project community

Face-to-face People tend to interact in person.

Mailinglists At least one mailinglist is used frequently.

Chat The community has at least one active chat.

Board A board/discussion forum is used.

Other Other communication channels as wikis, blogs, etc. have been established.

**Degree of openness** Parts of the product which are freely available:

SW All software and other non-physical, content parts are open source.

HWI Hardware specifications and interfaces are layed open.

Case If applicable the case design is available, e.g. as CAD for download.

Mechanics Mechanical parts, circuits, designs, etc. are freely available.

Entirety The project is revealing all available information.

**Development driver** Main drivers of the development, i.e. the group(s) of people pushing forward the project. Related company or association refers to a company closely related to the project, for example the investing company.

**Production** Entity responsible for production. Related company or assoc. refers to an entity closely related to the project or with a production mandate. "Outsourced" is whenever an external party is paid for supplying components.

Member's position OIP's source personal relationship to the project.

# **Tables**

	lo	on	lon	ty	pe of	colla	b.	iţ	con	ımuni	ity co	mmu	nication	d	legree	of o	penne	SS
title	user/private contribution	commercial contribution	research contribution	c. d. 1 c. p.	c. d. s. c. p.	p. k. w/ c. d.	p. k. w/o c. d.	activity	Face-to-face	Mailinglists	Chat	Board	Other	Software	Hardware interfaces	Case Design	Mechanics/Schematics	Entirely open
3G Stoves	Yes	No	Yes			Х		3	х	Х		Х			Х		Х	
Absorber Roof																		
Abundant Water																		
Agua Clara																		
Akvo																		
Always Innovating																		
Touch Book																		
Arduino																		
Atari Coldfire																		
Aurora OS Mixer																		
AVR Butterfly																		
Logger																		
AVR Butterfly																		
MP3																		
AX84 Firefly																		
Balloon																		
Beagle Board																		
Ben NanoNote																		
Biobricks																		
BitsFromBytes																		
Brewtopia																		
Canuckle																		
Cfree OS Optics																		
Chumby																		
Contraptor																		
Craftster																		
Crypto Stick																		
Cubespawn																		
Daisy MP3																		
diy_efi																		
Elphel																		
Ethernut																		
Etherrape																		
Fab Camera																		
Fab@Home																		
Flash-Plaice																		
Fnordlicht																		
Formica																		

Tab. 15: institutional design and production details (1/2) of OIP entries treated by OSHWL (1/3)

title	d	legree	of o	penne	SS		deve	lopme	ent dr	ivers				produ	ıct pr	oduce	ed by		
titie		nterfaces	II.	Mechanics/Schematics	en	ler		ommunity	unity	Related Company or Association		ler		ommunity	unity	npany or Association			ar
	Software	Hardware interfaces	Case Design	Mechanics	Entirely open	Project leader	Core Team	Developer community	User community	Related Cor	Other	Project leader	Core Team	Developer community	User community	Related Company	Outsourced	Other	Not yet clear
3G Stoves		Х		Х		х			Х			Х			Х				
Absorber Roof																			
Abundant Water																			
Agua Clara																			
Akvo																			
Always Innovating																			
Touch Book																			
Arduino																			
Atari Coldfire																			
Aurora OS Mixer																			
AVR Butterfly																			
Logger																			<b>—</b>
AVR Butterfly																			
MP3																			<b>—</b>
AX84 Firefly																			<b>—</b>
Balloon																			<b>—</b>
Beagle Board																			
Ben NanoNote																			
Biobricks																			$\vdash$
BitsFromBytes																			<b>—</b>
Brewtopia																			
Canuckle																			
Cfree OS Optics																			
Chumby																			
Contraptor																			
Craftster																			
Crypto Stick																			
Cubespawn																			
Daisy MP3																			
diy_efi																			
Elphel																			
Ethernut																			
Etherrape																			
Fab Camera																			
Fab@Home																			
Flash-Plaice																			
Fnordlicht																			
Formica																			

Tab. 16: institutional design and production details (2/2) of OIP entries treated by OSHWL (1/3)

Free Art Bureau   Free Beer   Freeduino	title	.i.	ion	.i.	ty	pe of	colla	b.	vity	con	nmuni	ity co	mmu	nication	d	legree	of o	penne	SS
Free Beer Freeduino Gumstix HD Video Capture Hexayurt Im-Freeder IP-PBX		user/private contribut	commercial contribut	research contribut	d. 1 c.	d. s. c.	k. w/ c.	k. w/o c.	acti	Face-to-face	Mailinglists	Chat	Board	Other	Software	Hardware interfaces	Case Design	Mechanics/Schematics	Entirely open
Freeduino   Gumstix   HD Video Capture   Hexayurt   Howard   Hexayurt   Howard   H	Free Art Bureau																		
Gumstix																			
HD Video Capture   Hexayurt   H																			
Hexayurt																			
Im-FFeeder   IP04 4-Port   IP-PBX   IP08 8-Port   IP-PBX   IR08 8-Port   IR08 8-P																			
IPO4 4-Port   IP-PBX   IPO8 8-Port   IP-PBX   IPO8 8-Port   IP-PBX   IRObot   IROb																			
IP-PBX   IP08 8-Port   IP-PBX   IP08 8-Port   IP-PBX   IP08 8-Port   IP-PBX   IP08 8-Port   IP09 8																			
IPO8 8-Port   IP-PBX   IRobot   IRobot   IRobot   IRope   IRobot   IRope   IRobot   IRope   IRobot   IRope																			
IP-PBX   IRobot   I																			
IRObot   K People   LED Stripe   LED Stripe   LIRUX omap   LOCAL Motors   MakerBot   Mikrokopter   Milkymist   MISA   MyOpenRouter   MuyOpenRouter   MuyOpen																			
K People  LED Stripe  Linux omap  Local Motors  MakerBot  Mikrokopter  Milkymist  MISA  MyOpenRouter  Neuros Link  Neuros OSD  Niftymitter  oBiCo  OMFootCtrl  OLPC  O. Architecture  Network  O. Garments  O. Moto X  O. Prosthetics  Project  OS Cookbook  OS Ecology  OS Washing																			
LED Stripe																			
Linux omap Local Motors  MakerBot  Mikrokopter  Milkymist  MISA  MyOpenRouter  Neuros Link  Neuros OSD  Niftymitter  oBiCo  OMFootCtrl  OLPC  O. Architecture  Network  O. Garments  O. Porsthetics  Project  OS Cookbook  OS Ecology  OS Washing																			
Local Motors																			
MakerBot         Mikrokopter           Milkymist         MISA           MyOpenRouter         MyOpenRouter           Neuros Link         Meuros OSD           Niftymitter         Mistoria           OBICO         Mistoria           OMFootCtrl         Metwork           O. Architecture         Metwork           O. Garments         Metwork           O. Pandora         Metwork           O. Prosthetics         Project           OS Cookbook         Metwork           O. Prosthetics         Metwork           O. Secology         Metwork           O. Prosthetics         Metwork           O. Secology         Metwork           O. Prosthetics         Metwork           O. Secology         Metwork           OS Washing         Metwork																			
Mikrokopter         Milkymist           MISA         MyOpenRouter           Neuros Link         Melican in the properties of t																			
Milkymist         MISA           MyOpenRouter         MyOpenRouter           Neuros Link         MyOpenRouter           Neuros OSD         MyOpenRouter           Neuros OSD         MyOpenRouter           Niftymitter         MyOpenRouter           OBICO         MyOpenRouter           OMFootCorl         MyOpenRouter           OMFootCorl         MyOpenRouter           OLPC         MyOpenRouter           O. Architecture         MyOpenRouter           Network         MyOpenRouter           O. Architecture         MyOpenRouter           Network         MyOpenRouter           O. Garments         MyOpenRouter           O. Moto X         MyOpenRouter           O. Prosthetics         MyOpenRouter           Project         MyOpenRouter           OS Cookbook         MyOpenRouter           OS Cookbook         MyOpenRouter           OS Washing         MyOpenRouter																			
MISA         MyOpenRouter           Neuros Link         Neuros OSD           Niftymitter         OBICO           OMFootCtrl         OLPC           O. Architecture         Network           O. Garments         O. Moto X           O. Pandora         O. Prosthetics           Project         OS Cookbook           OS Ecology         OS Washing																			
MyOpenRouter         Neuros Link           Neuros OSD         Niftymitter           oBiCo         OMFootCtrl           OLPC         O. Architecture           Network         Network           O. Garments         O. Moto X           O. Pandora         O. Prosthetics           Project         OS Cookbook           OS Ecology         OS Washing																			
Neuros OSD         Niftymitter           oBiCo         OMFootCtrl           OLPC         O. Architecture           Network         O. Garments           O. Moto X         O. Pandora           O. Prosthetics         Project           OS Cookbook         OS Ecology           OS Washing         OS Washing																			
Neuros OSD         Niftymitter           oBiCo         OMFootCtrl           OLPC         O. Architecture           Network         O. Garments           O. Moto X         O. Pandora           O. Prosthetics         Project           OS Cookbook         OS Ecology           OS Washing         OS Washing																			
Niftymitter         0BiCo           OMFootCtrl         0           OLPC         0           O. Architecture         0           Network         0           O. Moto X         0           O. Pandora         0           O. Prosthetics         0           Project         0           OS Cookbook         0           OS Ecology         0           OS Washing         0																			
oBiCo         OMFootCtrl           OLPC         O. Architecture           Network         O. Garments           O. Moto X         O. Pandora           O. Prosthetics         O. Project           OS Cookbook         OS Cookbook           OS Ecology         OS Washing																			
OMFootCtrl         OLPC         O. Architecture           O. Architecture         O. Garments         O. Garments           O. Moto X         O. Pandora         O. Prosthetics           Project         OS Cookbook         OS Cookbook           OS Ecology         OS Washing         OS Washing																			
OLPC         0. Architecture           Network         0. Garments           O. Moto X         0. Pandora           O. Prosthetics         0. Project           OS Cookbook         0. S Cookbook           OS Washing         0. Washing																			
O. Architecture         Network           Network         O. Garments           O. Moto X         O. Pandora           O. Prosthetics         O. Project           OS Cookbook         OS Cookbook           OS Ecology         OS Washing																			
Network         0. Garments           O. Moto X         0. Pandora           O. Prosthetics         0. Project           OS Cookbook         0. S Cookbook           OS Ecology         0. S Washing																			
O. Garments         0. Moto X           O. Pandora         0. Prosthetics           Project         0. S Cookbook           OS Ecology         0. S Washing																			
O. Moto X         0. Pandora           O. Prosthetics         0. Project           Project         0. S Cookbook           OS Ecology         0. OS Washing																			
O. Pandora																			
Project OS Cookbook OS Ecology OS Washing																			
OS Cookbook OS Ecology OS Washing	O. Prosthetics																		
OS Cookbook OS Ecology OS Washing	Project																		
OS Ecology OS Washing																			
OS Washing																			
, ··· <del></del> -····	Machine																		

Tab. 17: institutional design and production details (1/2) of OIP entries treated by OSHWL (2/3)

1:11-	d	legree	e of o	penne	SS		deve	lopme	ent dr	rivers				prodi	ıct pr	oduce	ed by		
title																			
	Software	Hardware interfaces	Case Design	Mechanics/Schematics	Entirely open	Project leader	Core Team	Developer community	User community	Related Company or Association	Other	Project leader	Core Team	Developer community	User community	Related Company or Association	Outsourced	Other	Not yet clear
Free Art Bureau																			
Free Beer																			
Freeduino																			
Gumstix																			
HD Video Capture																			
Hexayurt																			
Im-FFeeder																			
IP04 4-Port																			
IP-PBX																			
IP08 8-Port																			
IP-PBX																			
iRobot																			
K People																			
LED Stripe																			
Linux omap																			
Local Motors																			
MakerBot																			
Mikrokopter																			
Milkymist																			
MISA																			
MyOpenRouter																			
Neuros Link																			
Neuros OSD																			
Niftymitter																			
oBiCo																			
OMFootCtrl																			
OLPC																			
O. Architecture																			
Network																			
O. Garments																			
O. Moto X																			
O. Pandora																			
O. Prosthetics																			
Project																			
OS Cookbook																			
OS Ecology																			
OS Washing																			
Machine																			

Tab. 18: institutional design and production details (2/2) of OIP entries treated by OSHWL (2/3)

title	ion	.io	ion	ty	pe of	colla	b.	vity	con	nmuni	ty co	mmu	nication	d	legree	of o	penne	SS
	user/private contribution	commercial contribution	research contribution					activity							Ş		Mechanics/Schematics	
	cont	cont	cont												Hardware interfaces		nen	
	ate	Cial H	- P	<u>ф</u>	р.	<del>ن</del>	ъ ::		e e	(0					nter	ج	/Scł	e
	þriv	mer	esea	ن	ن	ن _	w/o c.		Face-to-face	Mailinglists				e e	re i	esig	jcs,	do /
	ser/	E O	_	d. 1	d. s.	k. w/	.×. .×.		e-to	in g	يد	<u>7</u>	er	[war	фм	e D	char	irel
	_ =			G	С. О	고	ح		Fac	Mai	Chat	Board	Other	Software	Har	Case Design	Med	Entirely open
O. Waterbike																		
Project																		
OS BHKW																		
OpenBeacon																		
OpenCola																		
OpenEEG																		
openenergymonitor																		
openEyes																		
OpenMini																		
650 Sailboat																		
OpenMoko																		
OpenPCD																		
OpenRemote																		
OpenServo																		
OpenSpace OpenSPARC																		
OpenWrt																		
OScar project																		
PC Engines																		
Rallylog																		
Ravelry																		
RepRap																		
RFID door opener																		
RiverSimple																		
RONJA																		
Sanguino																		
Semitone Dimmers																		
Solar Cooking																		
Archive																		
solar tracking																		
Spiffchorder																		
SquidBee																		
Stribe																		
Stroblt Triggr																		
Thingiverse																		
Traxmod																		$\sqcup$
zeroclock																		$\vdash$
Zoybar																		

Tab. 19: institutional design and production details (1/2) of OIP entries treated by OSHWL (3/3)

title	ion	.io	ion	ty	pe of	colla	b.	vity	con	nmuni	ty co	mmu	nication	d	legree	of o	penne	SS
	user/private contribution	commercial contribution	research contribution					activity							Ş		Mechanics/Schematics	
	cont	cont	cont												Hardware interfaces		nen	
	ate	Cial H	- P	<u>ф</u>	р.	<del>ن</del>	ъ ::		e e	(0					nter	ج	/Scł	e
	þriv	mer	esea	ن	ن	ن _	w/o c.		Face-to-face	Mailinglists				e e	re i	esig	jcs,	do /
	ser/	E O	_	d. 1	d. s.	k. w/	.×. .×.		e-to	in g	يد	<u>7</u>	er	[war	фм	e D	char	irel
	_ =			G	С. О	고	ح		Fac	Mai	Chat	Board	Other	Software	Har	Case Design	Med	Entirely open
O. Waterbike																		
Project																		
OS BHKW																		
OpenBeacon																		
OpenCola																		
OpenEEG																		
openenergymonitor																		
openEyes																		
OpenMini																		
650 Sailboat																		
OpenMoko																		
OpenPCD																		
OpenRemote																		
OpenServo																		
OpenSpace OpenSPARC																		
OpenWrt																		
OScar project																		
PC Engines																		
Rallylog																		
Ravelry																		
RepRap																		
RFID door opener																		
RiverSimple																		
RONJA																		
Sanguino																		
Semitone Dimmers																		
Solar Cooking																		
Archive																		
solar tracking																		
Spiffchorder																		
SquidBee																		
Stribe																		
Stroblt Triggr																		
Thingiverse																		
Traxmod																		$\sqcup$
zeroclock																		$\vdash$
Zoybar																		

Tab. 20: institutional design and production details (2/2) of OIP entries treated by OSHWL (3/3)

title
user/private contribution
commercial contribution
research contribution
c. d. 1 c. p.
ype of d : o : o : o : o : o : o : o : o : o :
colla
p. k. w/o c. d.
activity
Face-to-face
Mailinglists n
Chat
Board
Other
Software
Hardware interfaces
Case Design of
Mechanics/Schematics a
Entirely open

Tab. 21: institutional design and production details (1/2) of OSHWL projects not listed by OIP

title	degree of openness					development drivers						product produced by							
title	Software	Hardware interfaces	Case Design	Mechanics/Schematics	Entirely open	Project leader	Core Team	Developer community	User community	Related Company or Association	Other	Project leader	Core Team	Developer community	User community	Related Company or Association	Outsourced	Other	Not yet clear

Tab. 22: institutional design and production details (2/2) of OSHWL projects not listed by OIP