



# Storage Cost Calculator

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Knowledge Exchange



## Background


- Free!
- Model is an “Excel based” spreadsheet
  - Users must enable Macros & Content
- Assess your Total storage costs
- Assess each individual store
- Download from:

[potatoes.ahdb.org.uk/node/22093](http://potatoes.ahdb.org.uk/node/22093)



## User Guide

- 1 Orange, Yellow and Pink Cells are for data entry. Pink cells require negative numbers.
- 2 Complete the Orange cells to produce an 'Industry Costing' storage cost.
- 3 Complete the Yellow cells to produce a farm specific cost. Please note:
  - Graphs only show the 'automatic', rather than 'manual' route
  - Use the Depreciation tab to add capital investment.
- 4 Reset Button will restore the standard settings (macros must be enabled)



AHDB POTATOES - SBSCR Storage Calculator

**Store Name:** BP Special

**Crop Type (Ware/Processing/Seed):** Ware

**Store type (Bulkout/Edge):** Edge

**Row/Block:** 20

**Average Row Capacity (trench T):** 2000

**Number of boxes held (trenches if bulk)** 3,000

**Tonnage Stored:** 3,000

**Ex Field Yield (tonnes / Ha):** 47

**Interest Rate:** 3.50%

**First Month of Storage:** Sep

**Outloading Month:** Apr

**Price Timing:** ET

DT Field	25
Out	28
Nov	30
Dec	32
Jan	35
Feb	38
Mar	40
Apr	45
May	50
Jun	55
Jul	60

**Manual Sprout Suppressant costings**

No of Apps/ha	App (t/ha)	Total (t/ha)
CFC	0.05	0.05
Cyfluthrin	0.02	0.02
Mipro-QL	0.02	0.02
Chlor	0.02	0.02

**Cost before storage losses**

Industry Costings	Manual	
Labour & Power Costs	£ Total	
Labour/Machinery	£2,500	£ 20
Third Party Handling		
Electricity	21,240	30,620
F. Dues/Leads		13,300
Don'ts from Renewable Energy	658	0.20
Store Hygiene	5,200	2,800
Sprout Suppressant		0.00

**Property Costs**

Depreciation	Building	25,304	12,000	2,700
	Box & Fixed Equip.	11,040	5,500	2,100
Property Repairs incl. Servicing		6,474	3,200	
3rd Party Rent				

**Working Capital (Finance)**

Cost	3,900	1,100
Overhead Costs*	400	0.40
Building/Plant/Plant	2,624	2.30
<b>Total Finance</b>	<b>8,924</b>	<b>4,800</b>

**Total Storage Cost, based on Legal yield**

£ per Tonne Stored	30,557	45.30	4.30
£/t/ha	47.00	47.00	

**Calculated Storage Cost per Tonne Stored**

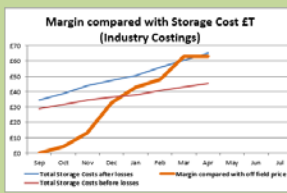
Estimated Storage Losses	£ Total	£ %	ET %	%
Storage and Chilling Out losses	11,960	5.30%	18.50%	0.00%
Losses from Repairs/Buildings	27,800	13.00%	41.00%	0.00%
Contract Allowances	0.00	0.00%	5.00%	0.00%
<b>Total</b>	<b>39,760</b>	<b>18.30%</b>	<b>64.50%</b>	<b>0.00%</b>

**Total Storage Cost, based on maximum Finance**

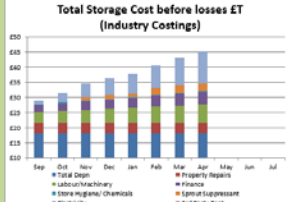
£ per tonne Stored	120,117	65.00	4.30
£/t/ha	39.25	47.00	


\* including depreciation  
\*over and above contract allowance

**Margin compared with Storage Cost ET (Industry Costings)**



**Total Storage Cost before losses ET (Industry Costings)**



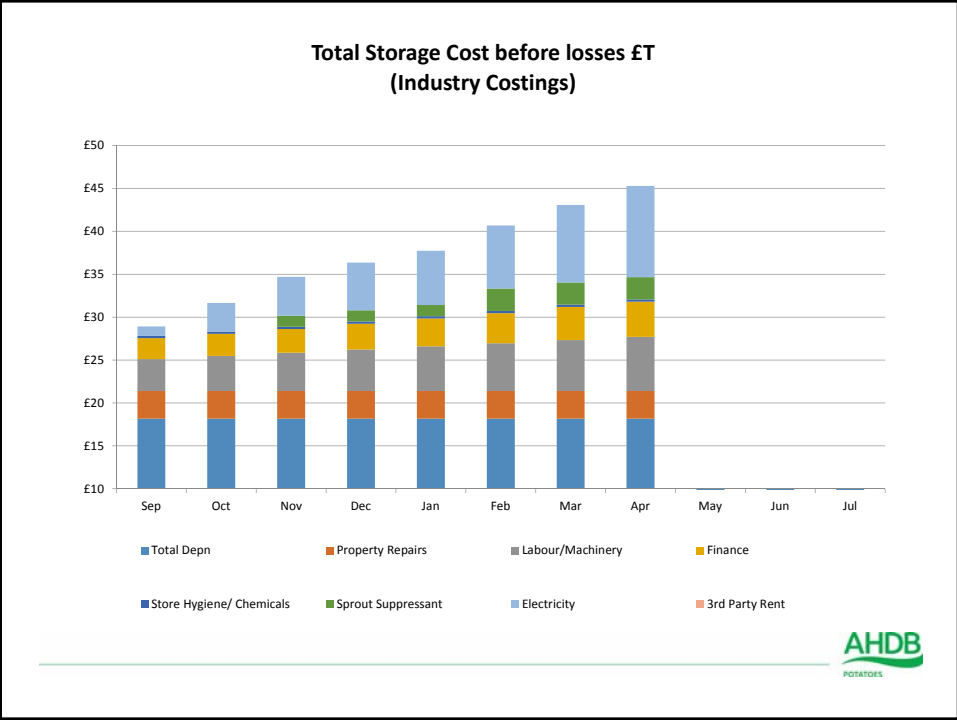
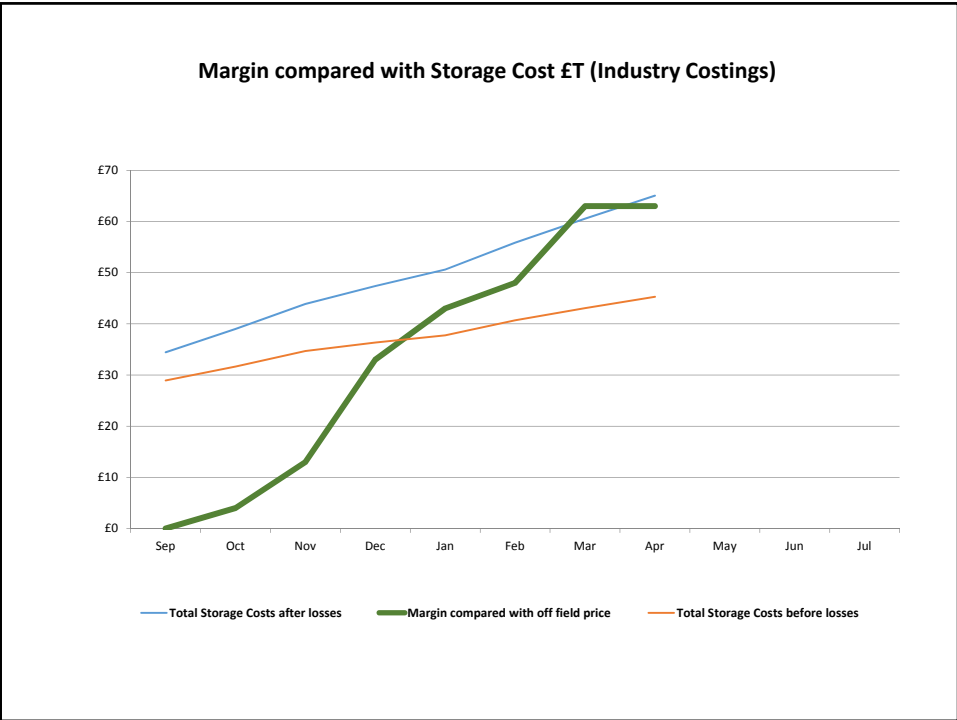


Reset Form			
Store Name			Fridge Store
Crop Type (Ware/Processing/Seed)			Ware
Store type (Ambient/Fridge)			Fridge
Box/Bulk			Box
Average Box Capacity (fresh T)			2000
Number of boxes held (tonnes if bulk)			2,000
Tonnage Stored			2,000
Ex Field Yield (Tonnes / Ha)			47
Interest Rate			1.50%
First Month of Storage			Sep
Outloading Month			Apr

Price	Timing	£T
	Off Field	92
	Sep	92
	Oct	96
	Nov	105
	Dec	125
	Jan	135
	Feb	140
	Mar	145
	Apr	155
	May	160
	Jun	165
	Jul	170
Manual Sprout Suppressant costings		
	No of Apps	Cost/App (£/T)
CIPC		0.00
Ethylene		0.00
Mint Oil		0.00
Other		0.00

Cost before storage losses				Industry Costings		Manual
				£ Total	£T	£T
<b>Labour &amp; Power Costs</b>						
Labour/Machinery				12,590	6.30	
Third Party Handling						
Electricity				21,240	10.62	
Price p/kwh					10.50	
<b>Benefit from Renewable Energy</b>						
Store Hygiene				525	0.26	
Sprout Suppressant				5,200	2.60	0.00
<b>Property Costs</b>						
Depreciation						
Building				25,304	12.65	0.00
Box & Fixed Equip.				11,040	5.52	0.00
Property Repairs incl. Servicing				6,474	3.24	
3rd Party Rent						
<b>Working Capital (Finance)</b>						
Crop				3,100	1.55	
Overhead Costs*				460	0.23	
Building/Fixed Plant				4,624	2.31	
Total Finance				8,184	4.09	

<b>Total Storage Cost: based on Fresh yield</b>								
£ per Tonne Stored				90,557	45.28	4.10		
Fresh Yield t/ha					47.00	47.00		
<b>Calculated Storage Cost per Tonne Sold</b>								
Estimated Storage Losses				£ Total	£T	%	£T	%
Storage and Grading Out losses				11,960	5.98	6.50%	5.98	6.50%
Losses from Rejection/Packout				27,600	13.80	15.00%	13.80	15.00%
Contract Allowances					-4.60	-5.00%	-4.60	-5.00%
Total				30,360	15.18		15.18	
<b>Total Storage Cost: based on ex-store Tonnes</b>								
£ per tonne Sold				120,917	60.46		19.28	
Sold Tonnes t/ha					39.25		39.25	
* excluding depreciation								
**over and above contract allowance								



AHDB SUTTON BRIDGE  
Crop Storage Research

AHDB Potatoes - SBCSR Storage Calculator

**Storage Name:** SP Special

**Crop Type (Ware/Processing/Seed):** Ware  
**Storage type (Bulk/Box/Edge):** Edge

**Box/Bulk:** Box  
**Average Box Capacity (tresh T):** 2000  
**Number of boxes held (tonnes if bulk):** 2,000  
**Tonnage Stored:** 2,000

**Ex Field Yield (tonnes / Ha):** 47

**Interest Rate:** 1.50%

**First Month of Storage:** Sep  
**Outloading Month:** Apr

**Price Timing:** ET

Month	Price (€)
Off Field	35
Sep	52
Oct	38
Nov	37
Dec	37
Jan	37
Feb	38
Mar	45
Apr	45
May	50
Jun	39
Jul	37

**Manual Sprout Suppressant costs:**

SPC	No of Apps/Cost/App (€)	Total €/T
Ethylene		0.00
Imazalil		0.00
Other		0.00

**Cost before storage losses:**

Category	€ Total	€ T
Labour & Power Costs	3,250	3.20
Third Party Handling	21,240	17.62
Electricity		3.10
Price adults		0.39
Default from Renewable Energy	5,200	2.60
Sprout Suppressor		0.00
<b>Property Costs</b>		
Depreciation	25,304	12.65
Building	11,640	5.82
Box & Fixed Equip.		2.10
Property Repairs incl. Servicing	6,474	3.24
Third Party Rent		
<b>Working Capital (Finance)</b>		
Overhead Costs	3,300	1.65
Building/Fixed Plant	4,824	2.41
<b>Total Finance</b>	<b>8,124</b>	<b>4.07</b>
<b>Total Storage Costs based on Fresh Yield (€/t)</b>	<b>30,557</b>	<b>45.59</b>
<b>€ per Tonne Stored</b>		<b>47.00</b>

**Estimated Storage Costs per Tonne Sold:**

Category	€ Total	€ T	%	€ T	%
Storage and Degrading Out losses	13,200	3.20	10.52%	0.00	0.00
Losses from Repairs/Outload	27,600	13.80	90.00%	0.00	0.00
Contract Allowance		0.00		0.00	0.00
<b>Total</b>	<b>33,568</b>	<b>13.78</b>		<b>0.00</b>	
<b>Total Storage Costs based on available Tonnage</b>	<b>130,117</b>	<b>35.06</b>		<b>4.70</b>	
<b>Sold Tonnage (t/ha)</b>		<b>19.25</b>		<b>47.00</b>	

\*including depreciation  
- based on above contract allowance

**Margin compared with Storage Cost ET (Industry Costings)**

**Total Storage Cost before losses ET (Industry Costings)**

Depreciation						<input type="button" value="Clear Page"/>
Building, Machinery and Box Depreciation			Store Capacity	2,000Tonnes		
Current Year		2015				
Descriptions	Purchase Price/Value (£)	Year Purchased/Valued	Depreciation Rate (years) Straight line	Current Year Depreciation (£)	Depn./Tonne (£)	
<b>Building</b>				0	0.00	
Original	160,000	2013	30	5,333	2.67	
				0	0.00	
				0	0.00	
				0	0.00	
				0	0.00	
				0	0.00	
				0	0.00	
If grant funding has been received, the benefit should be entered below (as negative)					0	0.00
Grant	-40,000	2013	30	-1,333	-0.67	
				0	0.00	
				0	0.00	
			<b>Total Depn.</b>	<b>4,000</b>	<b>2.00</b>	

Descriptions	Purchase Price/Value (£)	Year Purchased/Valued	Depreciation Rate % (Reducing Balance)	Proportion to be charged to the Potato Enterprise	Current Year Depreciation (£)	Depr./Tonne (£)
<b>Fixed Equipment/Machinery</b>						
				100%	0	0.00
Fans & Refrig	42,000	2013	9%	100%	3,130	1.57
				100%	0	0.00
				100%	0	0.00
				100%	0	0.00
				<b>Total Depn.</b>	<b>3,130</b>	<b>1.57</b>
<b>Boxes</b>						
				100%	0	0.00
Boxes 2000	14,400	2013	9%	100%	1,073	0.54
				100%	0	0.00
				100%	0	0.00
				100%	0	0.00
				100%	0	0.00
				100%	0	0.00
				100%	0	0.00
<b>Total</b>	<b>176,400</b>			<b>Total Depn.</b>	<b>1,073</b>	<b>0.54</b>

## 2017 Developments

- Model Update – June
- Greater emphasis on Energy costs
  - Segregate from Fixed Costs
- Accentuate benefits from Grants & Renewable Energy
- Graphs to be more dynamic
  - User data added