



Government of the District of Columbia
Office of the Chief Financial Officer
Office of Tax and Revenue

FR-399 Qualified High Technology Companies

QUALIFIED HIGH TECHNOLOGY COMPANIES TAX BENEFITS

The New E-Conomy Transformation Act of 2000 (the Act) granted certain tax benefits to DC Qualified High Technology Companies for tax years beginning after December 31, 2000.

A Qualified High Technology Company (QHTC) is one which –

- a) Is an individual or entity organized for profit;
- b) Maintains an office, headquarters, or base of operations in DC;
- c) Has 2 or more employees in DC;
- d) Receives at least 51% of its gross revenue from one or more of certain “permitted” activities* (DC Code Sec. 47-1817.1(5)(A)(iii));
- e) Does not receive 51% or more of its gross revenue from operating a retail store or electronic equipment facility in DC;
- f) Is registered with the DC Government as a business in DC; and
- g) Is current in all DC Government filing requirements and payment obligations.

If the accounting method used does not readily permit the verification of revenue for use in determining the status of a corporation as a QHTC, the corporation may petition for, or the Chief Financial Officer may use a performance method described in DC Code §47-1817.01a.

Permitted Activities include –

- Internet-related services and sales including website design, maintenance, hosting, or operation;
- Internet-related training, consulting, advertising, or promotion services; the development, rental, lease, or sale of Internet-related applications, connectivity, or digital content; or products and services that may be considered e-commerce;
- Information and communication technologies, equipment and systems that involve advanced computer software and hardware, data processing, visualization technologies, or human interface technologies, whether deployed on the Internet or other electronic or digital media;
- Advanced materials and processing technologies that involve the development, modification, or improvement of one or more materials or methods to produce devices and structures with improved performance characteristics or special functional attributes, or to activate, speed up, or otherwise alter chemical, biochemical, or medical processes;
- Engineering, production, biotechnology and defense technologies that involve knowledge-based control systems and architectures; advanced fabrication and design processes, equipment, and tools; or propulsion, navigation, guidance, nautical, aeronautical and astronautical ground and airborne systems, instruments and equipment; and
- Electronic and photonic devices and components for use in producing electronic, optoelectronic, mechanical equipment and products of electronic distribution with interactive media content.

*(See pages 29 and 30 for an expanded list of permitted activities.)

TAX BENEFITS

The various DC tax credits and other tax benefits available to a QHTC are –

Tax Credits for:

- Costs of retraining qualified disadvantaged employees;
- Wages paid to qualified disadvantaged employees (corporations only);
- Wages paid to qualified employees (corporations only); and
- Payments for or reimbursements of employee relocation costs (corporations only).

Other DC Tax Benefits:

- Exemption from sales and use tax;
- Reduction of the corporate franchise tax rate;
- Partial exemption from the personal property tax
- Exemption for 5 years from the DC corporate franchise tax when located in a designated high technology development zone;
- Deduction for Internal Revenue Code (IRC) section 179 expenses (up to \$40,000);
- Deductions for leasehold improvements made by a QHTC tenant;
- Exclusion of capital gains from taxation for qualified assets held more than 5 years;
- Rollover (deferral) of certain capital gains; and
- Reduction in Real Property Tax.

Claiming QHTC Tax Benefits

To be eligible to claim a tax credit or any of the other tax benefits available under the Act you must attach a QHTC-CERT form to the appropriate DC tax form: D-20; D-30; FP-31; FR-800A; or FR-800M. The QHTC-CERT form is a certification that you meet all of the conditions required of a QHTC. If the certification is not made in good faith a penalty may be imposed. Note: If the QHTC oval on the filed return is not filled in, QHTC status will not be recognized.

TAX CREDITS AVAILABLE TO QHTCS

Retraining Costs for Qualified Disadvantaged Employees (refundable credit)

Wages Paid to Qualified Disadvantaged Employees (nonrefundable credit – corporations only)

I. A Qualified Disadvantaged Employee is:

- a) A DC resident and
- b) A recipient of Temporary Assistance for Needy Families (TANF); or
- c) A recipient of TANF in the period immediately preceding employment; or
- d) A person released from incarceration within twenty four months before the date of employment by a QHTC; or
- e) An employee hired, or relocated to DC, after December 31, 2000, and for whom a QHTC is eligible to claim the Welfare to Work Tax Credit or the Work Opportunity Tax Credit under IRC sec. 51.

The term “qualified disadvantaged employee” does not include:

- a) A temporary or seasonal employee; or
- b) An employee employed as the result of:
 - 1) The displacement of another employee;
 - 2) A strike or lockout;
 - 3) A layoff in which other employees are awaiting recall;
 - 4) A reduction of the regular wages, benefits, or rights granted to other employees in similar jobs; or
 - 5) A key employee.

Retraining Expenses

For taxable years beginning after December 31, 2000, a QHTC may claim a credit against its DC corporate franchise tax for expenses it paid or incurred during the taxable year for retraining qualified disadvantaged employees. This dollar limited credit may be taken as a refundable credit for up to 50 percent of any unused portion in the year incurred or it may be carried forward for 10 years. For corporate filers this and other QHTC credits are taken on a Form D-20CR filed with the Form D-20 and the Form QHTC-CERT.

Noncorporate business filers eligible to claim the retraining credit may do so by filing Form FR-332 (together with a copy of the Form QHTC-CERT and Forms D-30 and D-30CR).

Expenditures eligible for tax credit and paid by a QHTC to retrain a qualified disadvantaged employee are:

- a) Tuition, costs, or fees for credit or noncredit courses leading to academic degrees or certification of professional, technical, or administrative skills taken at a District-based, accredited college or university;
- b) The cost of formally enrolling in training programs offered by non-profit training providers (including community or faith-based organizations) certified for providing training, or job-readiness preparation at skill levels suitable for immediate performance of entry-level jobs that are pre-qualified by the DC Department of Employment Services and which are in demand among technology companies in general, and among information and telecommunications companies in particular;
- c) Eligible training programs, other than those at a District-based accredited college or university, which are pre-qualified by the DC Department of Employment Services;
- d) Worker retraining programs taken through an apprenticeship agreement approved by the DC Apprenticeship Council.

Limitations on the retraining tax credit

The retraining credit is limited to \$20,000 for each qualified disadvantaged employee during the first 18 months of employment. If the amount of this credit exceeds the tax otherwise due from a QHTC, the unused amount of the credit may be carried forward but not beyond the tenth year following the first year the taxpayer files a return claiming the credit. The QHTC may also elect to take a refundable credit in an amount equal to fifty percent of the unused credit with no carryover to subsequent years.

II. Wages Paid to Qualified Disadvantaged Employees

A corporate QHTC is allowed a credit against its DC corporate franchise tax equal to fifty percent of the wages paid to a qualified disadvantaged employee, during the first 24 calendar months of employment.

This credit will not be allowed if:

- a) the QHTC grants the qualified employee lesser benefits or rights than it grants other employees in similar jobs; or
- b) the qualified employee was employed as the result of:
 - 1) The displacement of another employee;
 - 2) A strike or lockout;
 - 3) A layoff in which other employees are awaiting recall;
 - 4) A reduction of the regular wages, benefits, or rights of other employees in similar jobs; or
 - 5) The employee is a key employee.

Limitations on the credit for wages paid to qualified disadvantaged employees

The credit is limited to \$15,000 per year for each qualified disadvantaged employee.

If the amount of the wages credit exceeds the DC corporate franchise tax otherwise due from a QHTC, the unused amount of the credit may be carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

III. Wages Paid to Qualified Employees

For taxable years beginning after December 31, 2000, a corporate QHTC may claim a credit against its DC corporate franchise tax in an amount equal to ten percent of the wages paid to a qualified employee hired after December 31, 2000 and employed by it in DC in any of the listed permitted activities.

The credit will not be allowed if:

- a) The QHTC grants the qualified employee lesser benefits or rights than it grants other employees in similar jobs; or
- b) The qualified employee was employed as the result of:
 - 1) The displacement of another employee;
 - 2) A strike or lockout;
 - 3) A layoff in which other employees are awaiting recall;
 - 4) A reduction of the regular wages, benefits, or rights granted to other employees in similar jobs; or
 - 5) The employee is a key employee.

Limitations on the tax credit for wages paid to qualified employees

The wages must be paid during the first 24 calendar months of employment.

If the amount of the credit exceeds the DC corporate franchise tax otherwise due from the QHTC the unused amount may be

carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

The credit may not exceed \$5,000 in a taxable year for each qualified employee.

IV. Relocation Costs

For taxable years beginning after December 31, 2000, a corporate QHTC may claim a credit against its DC corporate franchise tax for each dollar reimbursed to or paid on behalf of each qualified employee for the cost of relocating the employee to DC. This credit is not available if the relocation costs are claimed as a deduction by the corporation.

Qualified Employee

A qualified employee is a person employed in DC by a QHTC for 35 hours or more per week in any of the permitted activities.

The relocation credit is not allowed:

- a) Until the QHTC relocates at least two qualified employees from employment outside DC to employment in DC;
- b) Until the QHTC has employed the qualified employee for at least six months in DC in a permitted activity;
- c) If the qualified employee works less than 35 hours per week;
- d) If the QHTC has claimed a deduction for the relocation costs; or
- e) If the employee is a Key Employee.

If the amount of the relocation credit allowable exceeds the DC corporate franchise tax otherwise due from a QHTC, the unused amount of the credit may be carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

Which Relocation Costs Qualify?

Qualifying relocation costs include amounts paid by a corporate QHTC to a qualified employee for reimbursement of:

- a) Moving expenses as defined in IRC section 217(b)(1); and
- b) Financial assistance in purchasing a residence, in paying a security deposit or in procuring a one-year lease for a residence in DC. The commencement date of the employee's move or financial assistance must be after December 31, 2000. Only costs related to one relocation per qualified employee are allowed.

Limitations on the tax credit for relocation costs

This credit may not exceed:

- a) \$5,000 for each employee who relocates his/her employment to DC but does not relocate his/her principal residence to DC. The total annual credit taken by a QHTC may not exceed \$250,000.
- b) \$7,500 for each employee who relocates his/her employment to DC and who also relocates his/her principal residence to DC. The total annual credit taken by a QHTC may not exceed \$1,000,000.

Principal residence is determined as of the last day of the first six months of employment in DC by a QHTC.

If the amount of the credit exceeds the DC corporate franchise tax liability, the unused amount may be carried forward but not beyond the tenth year following the first year the taxpayer filed a return claiming the credit.

Key Employee

A key employee is:

- a) A member of the board of directors of the QHTC; or
- b) Directly or indirectly the owner of a majority of the QHTC's stock; or
- c) Related to a member of the QHTC's board of directors or to a majority stockholder of the QHTC as a spouse or relative within the definition of "dependent" in IRC sec. 152.

DC TAXES AND QHTCs

V. Franchise Tax

For taxable years beginning after December 31, 2000, a QHTC filing a DC corporate franchise tax return is granted a reduced franchise tax rate (6%). In addition, if the QHTC is located in a high-technology development zone, there is no franchise tax imposed for five years after the QHTC begins business in that zone. The QHTC must continue to file a DC corporate franchise tax return during that period. Note: A QHTC that is not a corporation is not eligible for a DC franchise tax rate reduction.

The transfer of ownership of a QHTC will not affect eligibility for the franchise tax reduction.

VI. Personal Property Tax

Qualified personal property (within the meaning of DC Code §47-1521(4)) purchased and used or held for use by a QHTC (corporate and unincorporated) after December 31, 2000, is exempt from DC personal property tax for 10 years beginning with the year of purchase.

If the personal property is used or is available for use in the eleventh year and thereafter, the property must then be reported at 25% of the original cost or exchange value, unless the property is qualified technological equipment (see DC Code §47-1523(b)). In that case it must be reported at 10% of the original cost or exchange value. See pages 24-25 of this publication for information on refunds and exemptions.

VII. Sales Tax

Sales in DC by a QHTC of intangible property or services otherwise taxable as retail sales are exempt from DC sales tax. This exemption does not apply to telecommunication service providers. Sales to a QHTC of computer software or hardware, and visualization and human interface technology equipment, including operating and applications software, computers, terminals, display devices, printers, cable, fiber, storage media, networking hardware, peripherals, and modems when purchased for use in connection with the operation of the QHTC are also not subject to DC sales tax. To make tax-free purchases the QHTC must present a QHTC tax-exempt purchase certificate (Form FR-337) to the vendor.

BUSINESS ASSET DEDUCTIONS AND QHTCs

VIII. Deductions for Certain Depreciable Business Assets

A QHTC may deduct the lesser of \$40,000 or the actual cost of personal property described in IRC section 179(d)(1).

If the QHTC is a tenant, the cost of any real property and leasehold improvements may be deducted regardless of whether they become an integral part of the realty.

With respect to improvements, they must be substantial and made by the QHTC during any 24-month period beginning after December 31, 2000. They must also be:

- an addition to the basis of the property which exceeds the greater of an amount equal to the adjusted basis of the property at the beginning of the 24-month period or \$5,000;
- at least 51% of the cost of the additions are improvements which facilitate the business of the QHTC on the premises; and
- finished before January 1, 2003.

IX. Unincorporated Business Franchise Tax Exemption

A QHTC that is not a corporation is exempt from the unincorporated business franchise tax but not from the \$100 minimum tax. The QHTC-CERT form must be filed with a D-30, the unincorporated business franchise tax return.

X. Capital Gain and QHTCs

Qualified capital gain from the sale or exchange of a QHTC's capital assets held for more than 5 years is not includible in computing DC gross income. Qualified capital gain does not include:

- gain attributable to real property or an intangible asset not an integral part of a QHTC; and
- gain occurring before January 1, 2001 or after December 31, 2007.

The term "qualified capital gain" means gain recognized on the sale or exchange of a capital asset as defined or treated in the Internal Revenue Code (DC Code §47-1801.4(10)).

a) The term "qualified capital gain" does not include gain:

- 1) Treated as ordinary income under IRC sections 1245 or 1250 if IRC section 1250 applied to all depreciation rather than just to additional depreciation;
- 2) Attributable to real property or an intangible asset which is not an integral part of a QHTC's business operations in DC; or
- 3) Attributable, directly or indirectly, in whole or in part, to a transaction with a related person.

Rollover of capital gain from qualified stock to other qualified stock. Qualified stock is that which satisfies the requirement for small business stock under IRC section 1202(a) and is issued by a QHTC. Where gain is realized on the sale of qualified stock held by a taxpayer, other than a corporation, for more than six months the taxpayer may elect to defer recognition of gain unless it was previously deferred.

However, if a taxpayer purchases qualified stock within 60 days of selling other qualified stock, gain is recognized. Gain is recognized to the extent gain realized on the sale exceeds the cost of the qualified stock purchased.

The taxpayer's holding period is determined without regard to IRC section 1223. This treatment does not apply to gain considered ordinary income under IRC sections 1245 or 1250.

HIGH-TECHNOLOGY DEVELOPMENT ZONES AND QHTCs

A QHTC located in a high-technology development zone is exempt from DC corporate franchise tax for five years after the date it begins business in the zone.

The zones, also called priority development areas, are:

- Downtown East;
- Capital City Business and Industrial;
- Capital City Market;
- Georgia Avenue;
- Southeast Federal Center/Navy Yard;
- Any District-designated Foreign Trade or Free Trade Zone (19 U.S.C. 81a et. seq.);
- Any federally-approved enterprise or empowerment zone;
- Any federally-approved enterprise community;
- Any designated development zone (DC Code, Title 5, chap. 14);
- Any designated housing or development opportunity area or new or upgraded commercial center;
- Transit Impact area; and
- Minnesota Avenue.

For the exact boundaries of each of these zones refer to DC Code §1-2295.20 or call 202-442-6500.

Please note that a real property tax abatement benefit and various other financial incentives of a non-income/franchise tax nature are provided for QHTCs in the New E-Conomy Transformation Act of 2000.



Government of the District of Columbia
Office of Tax and Revenue

QHTC-CERT 200
Certification for Qualified High
Technology Company

Official Use:

Name of Business

FEIN or SSN

Taxable Year Ending

Real Property Eligible for Abatement

Square

Suffix

Lot

I certify that this business is a Qualified High Technology Company and that it (check all that apply):

1. ☐ Is an individual or entity organized for profit;
2. ☐ Maintains an office, headquarters, or base of operations in the District of Columbia;
3. ☐ Has two or more employees in the District of Columbia;
4. ☐ Derives at least 51% of its gross receipts from one or more of the following (check all that apply):
 - a. ☐ Internet-related services and sales;
 - b. ☐ Information and communication technologies, equipment and systems that involve advanced computer software and hardware, data processing, visualization technologies, or human interface technologies, whether deployed on the Internet or other electronic or digital media;
 - c. ☐ Advanced materials and processing technologies that involve the development, modification, or improvement of one or more materials or methods to produce devices and structures with improved performance characteristics or special functional attributes, or to activate, speed up, or otherwise alter chemical, biochemical, or medical processes;
 - d. ☐ Engineering, production, biotechnology and defense technologies that involve knowledge-based control systems and architectures; advanced fabrication and design processes, equipment and tools; or propulsion, navigation, guidance, nautical, aeronautical and astronautical ground and airborne systems, instruments and equipment; or
 - e. ☐ Electronic and photonic devices and components for use in producing electronic, optoelectronic, mechanical equipment and products of electronic distribution with interactive media content.
5. ☐ Does not derive 51% or more of its gross receipts from the operation in DC of a retail store of an electronic equipment facility as defined in DC Code section 47-1817.01 (5)(B)(i); and
6. ☐ Is appropriately registered as a business in DC and is current in all District Government filing requirements and payment obligations.
7. Please enter the principal business activity

Under penalty of perjury, I declare that I have examined this certificate and, to the best of my knowledge, it is correct.

Signature of Owner or Officer

Company Name

Date

Company Address

Telephone Number

Fax Number

e-mail address

INSTRUCTIONS FOR FORM QHTC-CERT, CERTIFICATION FOR QUALIFIED HIGH TECHNOLOGY COMPANY

WHO MAY USE THE CERTIFICATION FORM?

Any business which qualifies and wishes to be certified as a Qualified High Technology Company.

How should a company submit Form QHTC-CERT?

File the Form QHTC-CERT as an attachment to any of the DC tax returns shown below claiming tax benefits under the New E-Conomy Transformation Act of 2000.

Form D-20 – DC Corporate Franchise Tax Return
Form D-20CR – QHTC Corporate Business Tax Credits
Form FR-800A – DC Annual Sales and Use Tax Return
Form FR-800M – DC Monthly Sales and Use Tax Return
Form FP-31 – DC Personal Property Tax Return
Form D-30 – DC Unincorporated Business Franchise Tax Return
Form D-30CR – QHTC Unincorporated Business Tax Credits


Instructions for completing Form QHTC-CERT

Enter the business name, the Federal Employer Identification Number (FEIN) or the Social Security Number (SSN), and the ending date of the taxable year. For businesses claiming an abatement of real property tax, fill in the square, suffix and lot numbers identifying the real property eligible for abatement. If claiming an abatement for more than one property, please attach a detailed listing.

Lines 1 through 6. Place an X in each box that applies to your business.

The Form QHTC-CERT must be signed and dated by an Owner, General Partner or Officer of the business who is authorized to sign. Please provide the business' address, telephone, fax number and e-mail address.

NOTE: The boxes for lines 1, 2, 3; at least one box in line 4a through 4e; and lines 5 and 6 must be completed. If these boxes are not completed, the business is not a certified Qualified High Technology Company and is not entitled to any of the tax credits or other tax benefits of the New E-Conomy Transformation Act of 2000.

 <p>Government of the District of Columbia Office of Tax and Revenue</p>	<p>D-20CR 200 _____</p> <p>QHTC Corporate Business Tax Credits</p> <p>(File With Form D-20)</p>	<p>OFFICIAL USE:</p>
<p>For Tax Year beginning after December 31, 200 _____</p> <p>or Tax Year beginning _____, 200 _____ and ending _____, _____</p>		
<p>BUSINESS NAME AS SHOWN ON DC FORM D-20: _____</p> <p>FEDERAL EMPLOYER IDENTIFICATION NUMBER: _____</p>		
<p>PART A — REDUCTION IN DC CORPORATE FRANCHISE TAX FOR A QUALIFIED HIGH TECHNOLOGY COMPANY (QHTC)</p>		
		DOLLARS ONLY
1. Total District of Columbia Taxable Income (line 36 of Form D-20)	\$	
2. Regular DC Corporate Franchise Tax (multiply line 1 amt. by .09975). If less than \$100, enter \$100 . . .	\$	
3. QHTC TAX (multiply line 1 amt. by .06). If less than \$100, enter \$100	\$	
4. Amount of Tax Credit (line 2 minus line 3) (If located in a High Technology Development Zone, enter amount from line 2)	\$	
<p>PART B — TAX CREDIT FOR THE COSTS OF RETRAINING QUALIFIED DISADVANTAGED EMPLOYEES DURING THE FIRST 18 MONTHS OF EMPLOYMENT</p>		
<p>1. Number of employees eligible, first 12 months. </p>		
2. Total expenditures for retraining Qualified Disadvantaged Employees paid or incurred during this period .	\$	
3. Amount of Retraining Costs Tax Credit (Limited to \$20,000 per employee for retraining costs incurred during the first 18 months of employment beginning after December 31, 2000.)	\$	
<p>PART C — TAX CREDIT FOR 50% OF WAGES PAID TO QUALIFIED DISADVANTAGED EMPLOYEES DURING THE FIRST 24 MONTHS OF EMPLOYMENT</p>		
<p>1. Employees eligible in First year 2. Months in First year </p>		
3. Total Wages paid during tax year 200__ to Qualified Disadvantaged Employees	\$	
4. Tax credit (50% of line 3)	\$	
<p>The credit is 50% of qualified disadvantaged employee's wages paid during the first 24 months of employment beginning after December 31, 2000, not to exceed \$15,000 per employee per year.</p>		
<p>PART D — TAX CREDIT FOR RELOCATION COSTS</p>		
<p>1. Number of eligible employees who reside in DC </p>		
<p>2. Number of eligible employees who reside <u>outside</u> DC </p>		
3. Tax credit for employees residing <u>in</u> DC (limited to \$7,500 per employee, see instructions)	\$	
4. Tax credit for employees residing <u>outside</u> DC (limited to \$5,000 per employee, see instructions)	\$	
5. Total tax credit (add lines 3 and 4)	\$	

**PART E – TAX CREDIT FOR 10% OF WAGES PAID TO QUALIFIED EMPLOYEES DURING
THE FIRST 24 MONTHS OF EMPLOYMENT**

1. Number of eligible employees

2. Total Wages paid during this period to Qualified Employees \$

3. Tax credit – Line 2 x 0.10 (Limited to \$5,000 per employee in the tax year.) \$

PART F – SUMMARY OF TAX BENEFITS FOR A CORPORATE QHTC

ELECTION #1: Amount of Business Tax Credit

1. Regular DC Corporate Franchise Tax (Part A, Line 2) \$

2. Tax Credit (Part A, Line 4) \$

3. Retraining Costs Tax Credit (Part B, Line 3) \$

4. Qualified Disadvantaged Employee Wages Credit (Part C, Line 4) \$

5. Relocation Costs Credit (Part D, Line 5) \$

6. Qualified Employee Wages Credit (Part E, Line 3) \$

7. Total Tax Credits (add Lines 2 through 6) \$

8. Net Tax (Line 1 minus Line 7) If Line 7 is greater than Line 1 enter zero \$

9. Unused Business QHTC Tax Credit Carryover to 200____ (Line 7 minus line 1)

(If Line 1 is greater than Line 7 enter 0) \$

10. Used Business QHTC Tax Credit

(Line 7 minus Line 9) If Line 7 is greater than zero enter here and on Schedule UB, Line 2 \$

PART G – ELECTION TO RECEIVE REFUND FOR QHTC RETRAINING COSTS CREDIT

ELECTION #2: Amount of Refund of Retraining Costs Tax Credit

1. Amount of Unused Business QHTC Tax Credit Carryover to 200____ (Part F, Line 9) \$

2. Retraining Costs Tax Credit (Part B, Line 3) \$

3. Unused Business Tax Credit Carryover (Line 1 minus Line 2) \$

4. Amount from Line 1 or Line 2, whichever is smaller \$

5. Amount of Retraining Costs Tax Credit to be refunded (50% of Line 4)

enter here and on Schedule UB, Line 3 \$

INSTRUCTIONS FOR FORM D-20CR

Who may use Form D-20CR?

A business which is a corporation, including a Limited Liability Company (LLC) which has elected to be treated as a corporation for Federal tax purposes and is certified as a QHTC may file a Form D-20CR to claim the applicable credits listed on Form D-20CR.

Should the certification of Gross Revenue be submitted with the Form D-20CR?

Yes, it must be submitted in the first year that the business is a QHTC for six or more months and in all subsequent years.

What is a QHTC?

A QHTC is an individual or entity organized for profit that:

- Maintains an office, headquarters, or base of operations in DC;
- Has 2 or more employees, employed in DC;
- Derives at least 51% of its gross revenue from one or more of the permitted activities listed in publication FR-399 and in DC Code sec. 47-1817.01(5)(A)(iii);
- Does not receive 51% or more of its gross revenue from operating a retail store or electronic equipment facility in DC; and
- Is appropriately registered as a business in DC, and is current in all DC Government filing requirements and payment obligations.

Which forms are required to claim QHTC credits?

A company must file a DC corporate franchise tax return (D-20) to claim the credits entered on the Form D-20CR. The Certification for Qualified High Technology Company, Form QHTC-CERT, must also be filed. (This is required even if the company has been previously certified as a QHTC.)

PART A - Reduction in the tax rate for a QHTC

This benefit reduces the corporate franchise tax rate for a QHTC from 9.975% to 6%.

A QHTC located in a high technology development zone is not subject to the DC corporate franchise tax imposed on taxable income for a period of five years after the date the QHTC commences business in that zone. However, in order to preserve the QHTC tax credit carryover, a QHTC in a high technology development zone must file a DC corporate franchise tax return for each year in which the QHTC is not subject to the DC corporate franchise tax.

Note: The transfer of ownership of a QHTC does not affect eligibility under this part.

Part B - Tax credit for the costs of retraining qualified disadvantaged employees during the first eighteen months of employment

A QHTC may claim a credit on its Form D-20 for expenditures paid or incurred during the taxable year for retraining qualified disadvantaged employee(s).

Part C - Tax credit for 50% of the wages paid to qualified disadvantaged employees during the first twenty-four months of employment

A QHTC is allowed a credit against its DC corporate franchise tax equal to 50% of the wages paid to each qualified disadvantaged employee during the first 24 calendar months of employment.

The credit claimed is limited to \$15,000 a year for each qualified disadvantaged employee.

Part D - Tax credit for relocation costs

A QHTC is allowed a credit (subject to a dollar limitation) against its DC corporate franchise tax for each dollar reimbursed to or paid on behalf of each qualified employee for relocation costs. The credit may not exceed:

- \$5,000 for each employee who relocates his or her employment to DC from outside DC but does not relocate his or her principal residence to DC. The total annual credit for a QHTC may not exceed \$250,000; and
- \$7,500 for each employee who relocates his or her employment to DC from outside DC and also relocates his or her principal residence to DC. The total annual credit for a QHTC may not exceed \$1,000,000. For purposes of this credit, the principal residence is determined as of the last day of the first six months of employment in DC by a QHTC.

Part E - Tax credit for wages paid to qualified employees during the first twenty-four months of employment

A QHTC is allowed a credit against the DC corporate franchise tax equal to 10% of the wages paid during the first 24 calendar months to a qualified employee. The qualified employee must be hired after December 31, 2000 and employed in DC by the QHTC in the "permitted activities."

Part F - Summary of tax benefits for a corporate QHTC

This is a summary of tax reductions and credits claimed in Parts A through E. Be careful to copy the correct lines when completing Part F. Enter the amount from line 10 of Part F on Schedule UB, line 2.

Part G - Election to receive a refund for QHTC retraining costs

Complete this section to receive a refund equal to 50% of the costs to retrain qualified disadvantaged employees. Enter this amount on Schedule UB, Line 3.

WORKSHEET

QUALIFIED HIGH TECHNOLOGY COMPANY Certification of Gross Revenue

(To be filed with Form D-20CR)


For Tax Year Beginning: _____, 200__ and Ending _____ 200__

Company Name: _____	FEIN: _____							
Column 1	Column 2					Column 3	Column 4	Column 5
DC Address	Gross Revenue from Permitted Activities					Gross Revenue from Permitted Activities (add column 2 A thru E)	Gross Revenue from Non-Permitted Activities	Total Gross Revenue from Permitted and Non-Permitted Activities (add cols. 3 & 4)
	A	B	C	D	E			
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
TOTAL								

Permitted Activities - DC Code § 47-1817.01(5)(A)(iii)

- Activity A – Internet related services and sales.
- Activity B – Information and communication technologies, equipment and systems.
- Activity C – Advance material and processing technologies.
- Activity D – Engineering, production, biotechnology and defense technologies.
- Activity E – Electronic and photonic devices and components.

NOTE: Activities A through E must **not** include gross revenue from a retail store or an electronic equipment facility (Data Hotel).

 <p>Government of the District of Columbia Office of Tax and Revenue</p>	D-30CR 200 QHTC Unincorporated Business Tax Credits Qualified High Technology Company	OFFICIAL USE:																
FOR TAX YEAR BEGINNING AFTER DECEMBER 31, 200__ or Tax Year beginning _____, _____ 200__ and ending _____, _____ 200__																		
BUSINESS NAME _____ FEDERAL EMPLOYER IDENTIFICATION NUMBER OR SOCIAL SECURITY NUMBER _____																		
TAX CREDIT FOR COSTS OF RETRAINING QUALIFIED DISADVANTAGED EMPLOYEES DURING THE FIRST 18 MONTHS OF EMPLOYMENT																		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 75%;">Retraining Costs Tax Credit to be Refunded</td> <td style="text-align: right; width: 25%; font-size: small;">DOLLARS ONLY</td> </tr> <tr> <td>1. Retraining costs (enter total from line 12, Column A, Form FP-332)</td> <td style="border: 1px solid black; text-align: center;">\$</td> </tr> <tr> <td>2. Maximum allowed total (from line 12, Column C, Form FP-332)</td> <td style="border: 1px solid black; text-align: center;">\$</td> </tr> <tr> <td>3. Line 1 or 2 whichever is less</td> <td style="border: 1px solid black; text-align: center;">\$</td> </tr> <tr> <td>4. Retraining costs claimed in prior years (line 12, Column D, Form FP-332)</td> <td style="border: 1px solid black; text-align: center;">\$</td> </tr> <tr> <td>5. Retraining costs allowable in current year (Line 3 minus Line 4)</td> <td style="border: 1px solid black; text-align: center;">\$</td> </tr> <tr> <td>6. Amount of Retraining Costs Tax Credit to be refunded (Line 5 times .50)</td> <td style="border: 1px solid black; text-align: center;">\$</td> </tr> <tr> <td colspan="2" style="text-align: center; padding-top: 5px;">Enter amount on D-30, Line 38(d)</td> </tr> </table>			Retraining Costs Tax Credit to be Refunded	DOLLARS ONLY	1. Retraining costs (enter total from line 12, Column A, Form FP-332)	\$	2. Maximum allowed total (from line 12, Column C, Form FP-332)	\$	3. Line 1 or 2 whichever is less	\$	4. Retraining costs claimed in prior years (line 12, Column D, Form FP-332)	\$	5. Retraining costs allowable in current year (Line 3 minus Line 4)	\$	6. Amount of Retraining Costs Tax Credit to be refunded (Line 5 times .50)	\$	Enter amount on D-30, Line 38(d)	
Retraining Costs Tax Credit to be Refunded	DOLLARS ONLY																	
1. Retraining costs (enter total from line 12, Column A, Form FP-332)	\$																	
2. Maximum allowed total (from line 12, Column C, Form FP-332)	\$																	
3. Line 1 or 2 whichever is less	\$																	
4. Retraining costs claimed in prior years (line 12, Column D, Form FP-332)	\$																	
5. Retraining costs allowable in current year (Line 3 minus Line 4)	\$																	
6. Amount of Retraining Costs Tax Credit to be refunded (Line 5 times .50)	\$																	
Enter amount on D-30, Line 38(d)																		

INSTRUCTIONS

Refundable Business Tax Credit for Retraining Costs Incurred By An Unincorporated Business Qualified High Technology Company

CREDIT

An unincorporated business that is a Qualified High Technology Company and has incurred retraining costs for disadvantaged employees may claim a refundable business tax credit equal to 50% of the cost to retrain such employees. The credit may not exceed \$20,000 per disadvantaged employee during the first 18 months of employment.

DUE DATE

File a Form D-30 along with this form and the Claim for Refund of Retraining Costs (Form FP-332) by the 15th day of the fourth month following the close of the business' accounting period.

FILING THE RETURN

Mail the completed Forms D-30, D-30CR and FP-332 to the Office of Tax and Revenue, PO Box 234, Washington, DC 20044-0234.

CERTIFICATION OF GROSS REVENUE WORKSHEET

File this worksheet with the Form D-20CR.

Title Line. Enter the beginning and ending dates of the tax year for which certification applies, the name of the business and the Federal Employer Identification Number.

Column 1. DC address or location of each business.

Column 2. For each business location, enter gross revenue from each permitted activity listed.

Column 3. Enter the total for columns A through E for each business location.

Column 4. Enter the gross revenue from the total of non-permitted activities for each location.

Column 5. Enter the total gross revenue (add columns 3 and 4) from permitted and non-permitted activities for each location.



Government of the District of Columbia
Office of Tax and Revenue

FP-332

CLAIM FOR REFUND OF RETRAINING COSTS

Qualified High Technology Company – Not a Corporation (File with Form D-30)

Company Name and Address: _____

200 _____

Federal Employer Identification Number or Social Security Number: _____

EMPLOYEE'S NAME	SOCIAL SECURITY NUMBER	DATE OF EMPLOYMENT	NUMBER OF MONTHS EMPLOYED	COLUMN A RETRAINING COSTS	COLUMN B MAXIMUM AMOUNT ALLOWABLE	COLUMN C AMOUNT IN COL. A OR COL. B, WHICH- EVER IS LESS	COLUMN D AMOUNT CLAIMED IN PRIOR YEAR	COLUMN E RETRAINING COSTS AVAILABLE FOR CREDIT IN CURRENT YEAR (COL. C MINUS COL. D)
1. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
2. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
3. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
4. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
5. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
6. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
7. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
8. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
9. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
10. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
11. _____	____-____-____	____/____/____	____	\$ _____	\$20,000.	\$ _____	\$ _____	\$ _____
12. TOTALS				\$ _____		\$ _____	\$ _____	\$ _____
13. CURRENT YEAR RETRAINING COSTS AVAILABLE FOR TAX CREDIT								\$ _____
14. AMOUNT OF REFUNDABLE RETRAINING COSTS TAX CREDIT (50% OF LINE 13)								\$ _____

Under penalty of perjury, I declare that I have examined this claim and, to the best of my knowledge, it is correct.

Signature of Owner or Officer

Company Name

Date

Company's Address

Telephone Number

E-Mail Address

INSTRUCTIONS FOR FORM FP-332

Enter the beginning and ending dates of the tax year, the company name and the Federal Employer Identification Number or the Social Security Number.

WHO MAY USE THE FORM FP-332?

A business which is not a corporation and which is a certified Qualified High Technology Company may claim a partial refund of the retraining costs tax credit.

You are a Qualified High Technology Company if:

- (a) You are an individual or entity organized for profit;
- (b) You maintain an office, headquarters, or base of operations in DC;
- (c) You have 2 or more employees in DC;
- (d) At least 51% of your gross revenue is derived from one or more of the permitted activities listed in Publication FR-399, Qualified High Technology Companies;

- (e) You do not receive 51% or more of gross revenue from operating a retail store or electronic equipment facility in DC;
- (f) You are registered as a business in DC; and
- (g) You are current in all District Government filing requirements and payment obligations.

HOW AND WHEN TO FILE

To claim the retraining costs tax credit, a Qualified High Technology Company that is not a corporation must attach the following to the Form D-30: Form QHTC-CERT, Certification for Qualified High Technology Company; Form D-30CR, QHTC Unincorporated Business Tax Credits; Schedule UB; and Form FP-332, Claim for Refund of Retraining Costs. Complete Lines 1-36 of the D-30; leave Line 37 blank. Fill in the QHTC oval.



FP-331
Year 200_____

CLAIM FOR REFUND
SALES AND USE TAX

NAME OF TAXPAYER

TRADE NAME

FEDERAL EMPLOYER IDENTIFICATION NO./SSN

STREET ADDRESS

CITY

STATE

ZIP CODE

PHONE #

FAX #

NOTE: FOR TAX PAID ON MORE THAN ONE RETURN, LIST EACH ON A SEPARATE LINE

PERIOD ENDED	TOTAL TAX PAID	DATE OF PAYMENT	AMOUNT OF REFUND CLAIMED	EXPLANATION OF OVERPAYMENT
	\$	←TOTAL→	\$	(FOR ADDITIONAL SPACE, USE OTHER SIDE)

Under penalties of law the duly authorized applicant(s) do solemnly swear or affirm that the foregoing statements are correct to the best of my (our) knowledge.

AUTHORIZED SIGNATURE

TITLE

DATE

OFFICIAL USE

	INITIAL	DATE	AMOUNT
APPROVED			
DENIED			

FP-331 Instructions

Sales and Use Tax

Section 47-2020(a) of the DC Sales Tax Act allows a refund of tax erroneously or illegally collected if a claim is filed within **three years** from the date you paid the tax. If the tax has been collected from the customer, it must be refunded by the seller to the customer in cash or credit before the vendor can apply for a refund. If the claim relates to a Qualified High Technology Company (QHTC) attach the certification Form QHTC-CERT. Send the original to the Office of Tax and Revenue and save a copy.

Attach your evidence to support the claim for refund. Include copies of original invoices, Certificates of Resale (OTR-368), Qualified High Technology Company Exempt Purchase Certificates (FP-337), tax exemption numbers of semipublic institutions, credit memos for returned sales or taxes refunded to customers and any other related documents.

Mail the claim to:

Office of Tax and Revenue
Audit Division
PO Box 556
Washington, DC 20044-0556

Questions? Call us at (202) 727-4829.



CERTIFICATE OF RESALE DISTRICT OF COLUMBIA SALES AND USE TAX

AUTHORIZED SIGNATURE	TITLE	DATE
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SELLER MUST KEEP THIS CERTIFICATE

INSTRUCTIONS

To be eligible to use this certificate, purchasers who are located inside or outside the District of Columbia must file DC Form FR-500, Combined Business Tax Registration Application, with the Office of Tax and Revenue, 941 North Capitol St NE Washington DC 20002-4259 (202-727-4829).

QUALIFIED HIGH TECHNOLOGY COMPANY—EXEMPT PURCHASE CERTIFICATE DISTRICT OF COLUMBIA SALES AND USE TAX

VENDOR	PURCHASER																				
VENDOR'S STREET ADDRESS	TRADE NAME (IF ANY)																				
CITY STATE ZIP CODE	PURCHASER'S STREET ADDRESS																				
NOTE: SELLER MUST KEEP THIS CERTIFICATE TO SUBSTANTIATE EXEMPT STATUS	CITY STATE ZIP CODE																				
FEIN <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;">-</td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> </tr> </table>			-								FEIN/SSN <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;">-</td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;">-</td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> <td style="width: 20px;"> </td> </tr> </table>			-			-				
		-																			
		-			-																

TYPES OF EXEMPTION

Sales to a Qualified High Technology Company of computer software or hardware, and visualization and human interface technology equipment, including operating and applications software, computers, terminals, display devices, printers, cable, fiber, storage media, networking hardware, peripherals and modems are exempt from sales and use tax when purchased for use in connection with the operation of the Qualified High Technology Company.

I certify that all items of the above mentioned property purchased from you are for use in connection with the operation of a Qualified High Technology Company as defined in DC Code §47-1817.1(5)(A).

This certificate shall be considered a part of each order we shall give, provided the order contains our District of Columbia Certificate of Registration number. It will continue in force until revoked by our written notice to you.

AUTHORIZED SIGNATURE	TITLE	DATE
----------------------	-------	------

INSTRUCTIONS

To use this certificate the purchaser (issuer) must be registered (Form FR-500) with DC for sales and use tax. This certificate is not valid unless it contains the purchaser's FEIN or SSN. Also, it must be dated and signed by the purchaser's owner or authorized officer.

If the purchaser buys items from the seller that do not qualify for tax exemption, the purchaser should advise the seller to charge the appropriate sales tax on such items. Otherwise, the purchaser is required to report and pay any use tax owed directly to the Office of Tax and Revenue using the appropriate Sales and Use Tax return (FR-800A annual or FR-800M monthly).

The seller must retain all QHTC Exempt Purchase Certificates to substantiate tax exemptions in case of an audit of its DC Sales and Use Tax returns.

QUALIFIED HIGH TECHNOLOGY COMPANY RETRAINING COSTS FOR
QUALIFIED DISADVANTAGED EMPLOYEES

TAX CREDIT WORKSHEET

	Employee 1	Employee 2	Employee 3	Employee 4	Employee 5	Employee 6	Employee 7
1. Employee's Name							
2. Employee's Social Security Number							
3. Date employed in District							
4. Training Expense (Note 1)							
5. Prior Year Credit (Note 2)							
6. Current Year Credit (Subtract line 5 from line 4)							

Note 1 – Total eligible retraining expenditures, not to exceed \$20,000, paid or incurred by a QHTC to retrain this Qualified Disadvantaged Employee in his or her first 18 months of employment in DC.

Note 2 – Qualified Disadvantaged Employee's Retraining Costs Tax Credit claimed for this employee in the prior year.

Qualified High Technology Companies Qualifying Tangible Personal Property Refunds and Exemptions

Refund of Personal Property Tax Paid on Qualifying Tangible Personal Property Acquired after December 31, 2000.

A certified DC Qualified High Technology Company (QHTC) which paid DC personal property tax on qualifying tangible personal property acquired after December 31, 2000, may claim a refund of the tax paid by filing an amended Form FP-31, personal property tax return.

The qualifying tangible personal property purchased by a certified DC QHTC and held for use in its trade or business must be reported in Schedule D-3 (included in this publication) and filed with Form FP-31.

Exemption from DC Personal Property Tax of Qualifying Tangible Personal Property Acquired after December 31, 2000

Qualifying tangible personal property purchased and used or held for use in a certified DC QHTC's business may be claimed as exempt from the DC personal property tax. The property must be reported in a Schedule D-3 filed with Form FP-31. A completed Schedule D-3 and a completed DC Form QHTC-CERT must be filed with Form FP-31.

Schedule D-3 of Form FP-31

A certified DC QHTC claiming exemption for qualifying tangible personal property which it purchased after December 31, 2000, or which is in its possession pursuant to a lease – purchase or security – purchase agreement (a capital lease – under which it is required to become the owner of the property) must report the property in a Schedule D-3 filed with Form FP-31.

All such property acquired or leased under a lease-purchase or security-purchase agreement prior to January 1, 2001, is not tax exempt. The property must be reported in Schedule A of Form FP-31.

Schedule D-4 of Form FP-31

A non QHTC which, after December 31, 2000, rents or leases qualifying tangible personal property to a certified DC QHTC under a lease-purchase or security-purchase agreement must report the property in a Schedule D-4 (included in this publication) filed with Form FP-31.

Note: A non QHTC lessor of such property acquired prior to January 1, 2001, under a similar lease arrangement must report the property in Schedule D-2 of Form FP-31.

Schedule A of Form FP-31

Qualifying tangible personal property leased by a non QHTC under an operating lease (no ownership implication for the lessee) to either a certified QHTC or a non QHTC is subject to the personal property tax. The property tax must be reported in Schedule A of Form FP-31.

Filing an Amended Personal Property Tax Return

Check the amended return box on the Form FP-31 filed for the year you are amending. If the Form FP-31 for the year being amended does not have an amended return box, please write “**Amended Return**” at the top of the Form FP-31 that you file.

When filing an amended personal property tax return, please attach the following to the return:

- **a completed DC Form QHTC-CERT;**
- **proof of payment of the personal property tax liability for the year being amended;**
- **a copy of the lease agreement, if relevant; and**
- **a copy of any purchase invoice(s).**

Form FP-31 Personal Property Schedules D-3 and D-4

SCHEDULE D-3—QUALIFYING TANGIBLE PERSONAL PROPERTY PURCHASED BY A CERTIFIED QHTC AND USED OR HELD FOR USE BY THE QHTC (OR LEASED UNDER A CAPITAL LEASE) TO A CERTIFIED QHTC.

PROPERTY TYPE	PURCHASE DATE	QHTC CERTIFICATION DATE	ORIGINAL COST	REMAINING COST	LESSOR'S NAME AND ADDRESS	MONTHLY RENT	DATE LEASE BEGAN
			\$	\$		\$	
			TOTAL: \$	TOTAL: \$			

SCHEDULE D-4—QUALIFYING TANGIBLE PERSONAL PROPERTY PURCHASED BY A NON QHTC AND LEASED TO A CERTIFIED QHTC UNDER A CAPITAL LEASE.

PROPERTY TYPE	PURCHASE DATE	LESSEE'S CERTIFICATION DATE	ORIGINAL COST	REMAINING COST	LESSOR'S NAME AND ADDRESS	MONTHLY RENT	DATE LEASE BEGAN
			\$	\$		\$	
			TOTAL: \$	TOTAL: \$			

QHTC High Technology Permitted Activities are:

1. Internet-related services and sales:
 - (a) Website design, maintenance, hosting, or operation;
 - (b) Internet-related training, consulting, advertising, or promotion services;
 - (c) The development, rental, lease, or sale of Internet-related applications, connectivity, or digital content; or
 - (d) Products and services that may be considered e-commerce;

2. Information and communication technologies, equipment and systems that involve advanced computer software and hardware, data processing, visualization technologies, or human interface technologies, whether deployed on the Internet or other electronic or digital media. Such technologies, whether deployed on the Internet or other electronic or digital media, shall include:
 - (a) Operating and application software;
 - (b) Internet-related services, including design, strategic planning, deployment, and management services and artificial intelligence;
 - (c) Computer modeling and simulation;
 - (d) High-level software languages;
 - (e) Neural networks;
 - (f) Processor architecture;
 - (g) Animation and full-motion video;
 - (h) Graphics hardware and software;
 - (i) Speech and optical character recognition;
 - (j) High volume information storage and retrieval;
 - (k) Data compression; and
 - (l) Multiplexing, digital signal processing and spectrum technologies.

3. Advanced materials and processing technologies that involve the development, modification, or improvement of one or more materials or methods to produce devices and structures with improved performance characteristics or special functional attributes, or to activate, speed up, or otherwise alter chemical, biochemical, or medical processes. Such materials and technologies shall include:
 - (a) Metal alloys;
 - (b) Metal matrix and ceramic composites;
 - (c) Advanced polymers;
 - (d) Thin films;
 - (e) Membranes;
 - (f) Superconductors;
 - (g) Electronic and photonic reduction;
 - (h) Pharmaceuticals; bioactive materials; bioprocessing; genetic engineering; catalysts; waste emissions reduction; and
 - (i) Waste processing technologies.

4. Engineering, production, biotechnology and defense technologies that involve knowledge-based control systems and architectures; advanced fabrication and design processes, equipment, and tools; propulsion, navigation, guidance, nautical, aeronautical and astronautical ground and airborne systems, instruments, and equipment. Such technologies include:

- (a) Computer-aided design and engineering;
- (b) Computer-integrated manufacturing;
- (c) Robotics and automated equipment;
- (d) Integrated circuit fabrication and test equipment;
- (e) Sensors;
- (f) Biosensors;
- (g) Signal and image processing;
- (h) Medical and scientific instruments;
- (i) Precision machining and forming;
- (j) Biological and genetic research equipment;
- (k) Environmental analysis, remediation, control and prevention equipment;
- (l) Defense command and control equipment;
- (m) Avionics and controls;
- (n) Guided missile and space vehicle propulsion units;
- (o) Military aircraft; space vehicles; and
- (p) Surveillance, tracking and defense warning systems.

5. Electronic and photonic devices and components for use in producing electronic, optoelectronic, mechanical equipment and products of electronic distribution with interactive media content. Such technologies include:

- (a) Microprocessors;
- (b) Logic chips;
- (c) Memory chips;
- (d) Lasers;
- (e) Printed circuit board technology;
- (f) Electroluminescent, liquid crystal, plasma and vacuum fluorescent displays;
- (g) Optical fibers;
- (h) Magnetic and optical information storage;
- (i) Optical instruments, lenses, filters;
- (j) Simplex and duplex data bases; and
- (k) Solar cells.

